

# ETSI TS 102 027-1 V4.1.1 (2006-07)

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*Technical Specification*

**Methods for Testing and Specification (MTS);  
Conformance Test Specification for SIP (IETF RFC 3261);  
Part 1: Protocol Implementation Conformance  
Statement (PICS) proforma**

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Reference

RTS/MTS-00097-1[2]

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Keywords

IP, PICS, SIP, telephony, testing, VoIP

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## Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Methods for Testing and Specification (MTS).

The present document is part 1 of a multi-part deliverable covering Conformance Test Specification for SIP (IETF RFC 3261), as identified below:

- Part 1: "Protocol Implementation Conformance Statement (PICS) proforma";**
- 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".

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## Introduction

To evaluate 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 an Implementation Conformance Statement (ICS).

---

# 1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for the Session Initiation Protocol (SIP) implementation in compliance with the relevant requirements specified in RFC 3261 "SIP: Session Initiation Protocol" [1], and in accordance with the relevant guidance given in ISO/IEC 9646-7 [7] and ETS 300 406 [5].

The present document is applicable to equipment performing the roles of user Agent, Registration server, proxy Application Server and Redirect server.

The present document is a new release of TS 102 027-1.

---

# 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] IETF RFC 3261: "SIP: Session Initiation Protocol".
- [2] IETF RFC 2327: "SDP: Session Description Protocol".
- [3] IETF RFC 2617: "HTTP Authentication: Basic and Digest Access Authentication".
- [4] IETF RFC 3264: "An Offer/Answer Model with Session Description Protocol (SDP)".
- [5] ETSI ETS 300 406: "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [6] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [7] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

---

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in RFC 3261 [1], ISO/IEC 9646-1 [6], ISO/IEC 9646-7 [7] and the following apply:

**Implementation Conformance Statement (ICS):** statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented

NOTE: The ICS can take several forms: protocol ICS, profile ICS, profile specific ICS, information object ICS, etc.



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

**Protocol ICS (PICS):** PICS for an implementation or system claimed to conform to a given protocol specification

## 3.2 Abbreviations

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

HTTP	HyperText Transfer Protocol
ICS	Implementation Conformance Statement
IP	Internet Protocol
IUT	Implementation Under Test
PICS	Protocol ICS
PIXIT	partial Protocol Implementation eXtra Information for Testing
SDP	Session Description Protocol
SIP	Session Initiation Protocol
SUT	System Under Test
UA	User Agent
UAC	User Agent Client
UAS	User Agent Server
URI	Uniform Resource Identifier

---

## 4 Conformance requirement

The supplier of a protocol implementation, which is claimed to conform to the requirements of RFC 3261 [1], shall verify that his protocol implementation meets the requirements described in the present document. All the requirements described in RFC 3261 [1] apply.

An ICS, which conforms to the present document, shall be a conforming ICS proforma completed in accordance with the guidance for completion given in clause 5.

---

## 5 Guidance for completing the PICS proforma

### 5.1 Purposes and structure

The purpose of this ICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in the Session Initiation Protocol RFC 3261 [1] document provides 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 protocol; and
- Global statement of conformance.

### 5.2 Abbreviations and conventions

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

**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 (for example parameters, timers, etc.). It implicitly means "is < item description > supported by the implementation?"

**Status column**

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

M or m	mandatory - the capability is required to be supported;
O or o	optional - the capability may be supported or not;
N/A or n/a	not applicable - in the given context, it is impossible to use the capability;
X or x	prohibited (excluded) - there is a requirement not to use this capability in the given context;
O <sub>i,j</sub> or o <sub>i,j</sub>	qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer identifying the table and "j" is an integer sequentially allocated inside the table. O <sub>i,j</sub> forms a unique optional status expression, which is defined immediately following the table;
C <sub>i,j</sub> or c <sub>i,j</sub>	conditional - the requirement on the capability ("m", "o", "x" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying the table and "j" is an integer sequentially allocated inside the table. C <sub>i,j</sub> forms a unique conditional status expression, which is defined immediately following the table;
I or i	irrelevant (out-of-scope) - the requirement on the capability is outside the scope of the reference specification. No answer is requested from the supplier.

NOTE 1: This use of "i" status is not to be confused with the suffix "i" to the "o" and "c" status above.

**Reference column**

The reference column makes reference to RFC 3261 [1], except where explicitly stated otherwise.

**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 [7], 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	no answer required (allowed only if the status is n/a, directly or after evaluation of a conditional status).

It is also possible to provide a comment to an answer in the space provided at the bottom of the table.

NOTE 2: As stated in ISO/IEC 9646-7 [7], support for a received Message requires the ability to parse all valid parameters of that Message. Supporting a Message while having no ability to parse a valid parameter is non-conformant. Support for a parameter on a Message means that the semantics of that parameter are supported.

### Values allowed column

The values allowed column contains the type, the list, the range, or the length of values allowed. The following notations are used:

Range of values:	< min value > .. < max value >:	Example: 5 .. 20.
List of values:	< value1 >, < value2 >, ....., < valueN >:	Example: 2, 4, 6, 8, 9; Example: "1101"B, "1011"B, "1111"B; Example: "0A"H, "34"H, "2F"H.
List of named values:	< name1 >(< val1 >), < name2 >(< val2 >), ....., < nameN >(< valN >):	Example: reject(1), accept(2).
Length:	size (< min size > .. < max size >):	Example: size (1 .. 8).

### Values supported column

The values supported 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, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a character "/", followed by the item number in the table. If there is more than one support column in a table, the columns are discriminated by letters (a, b, etc.), respectively.

EXAMPLE 1: A.5/4 is the reference to the answer of item 4 in table 5 of annex A.

EXAMPLE 2: A.6/3b is the reference to the second answer (i.e. in the second support column) of item 3 in table 6 of annex A.

### Prerequisite line

A prerequisite line takes the form: Prerequisite: < predicate >.

A prerequisite line after a clause or before a table header indicates that the whole clause or the whole table is not required to be completed if the predicate is FALSE.

---

## Annex A (normative): PICS Proforma for RFC 3261

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the PICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed PICS.

---

### A.1 Instructions for completing the PICS proforma

The supplier of the implementation shall complete the PICS proforma in each of the spaces provided. In particular, an explicit answer shall be entered, in each of the support or supported column boxes provided, using the notation described in clause 5.

If necessary, the supplier may provide additional comments in space at the bottom of the tables, or separately on sheets of paper.

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

---

### A.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 PICS should be named as the contact person.

#### A.2.1 Date of the statement

.....

#### A.2.2 Implementation Under Test (IUT) identification

IUT name:

.....

.....

IUT version:

.....

#### A.2.3 System Under Test (SUT) identification

SUT name:

.....

.....

Hardware configuration:

.....  
.....  
.....

Operating system:

.....

## A.2.4 Product supplier

Name:

.....

Address:

.....  
.....  
.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....  
.....  
.....

## A.2.5 Client (if different from product supplier)

Name:

.....

Address:

.....  
.....  
.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

## A.2.6 PICS contact person

(A person to contact if there are any queries concerning the content of the PICS)

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

---

## A.3 Identification of the protocol

This PICS proforma applies to: RFC 3261: "Session Initiation Protocol" [1].

---

## A.4 Global statement of conformance

Are all mandatory capabilities implemented? (Yes/No)NOTE: Answering "No" to this question indicates non-conformance to the RFC 3261 [1] specification. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conforming, on pages attached to the PICS proforma.

## A.5 General

This clause contains the PICS proforma tables related to the general information.

### A.5.1 Logical SIP entities

**Table A.1: Logical SIP entities**

Item	Logical SIP entities	Reference	Status	Support
1	User Agents (UA)	RFC 3261 [1], section 6	Oa1.01	
2	Registrar	RFC 3261 [1], section 6	Oa1.01	
3	Proxy server	RFC 3261 [1], section 6	Oa1.01	
4	Redirect Server	RFC 3261 [1], section 6	Oa1.01	
Oa1.01 It is mandatory to support at least one of those items.				
Comments:				

## A.6 User Agent

This clause contains the PICS proforma tables related to the SIP UA.

### A.6.1 Services

**Table A.2: Services**

Prerequisite: A.1/1				
Item	Services	Reference	Status	Support
1	Registration	RFC 3261 [1], section 10	O	
2	Call Control	RFC 3261 [1], section 13	O	
3	Querying for capabilities	RFC 3261 [1], section 11	O	
Comments:				

### A.6.2 Registration service

This clause contains the PICS proforma tables related to the registration operations for the UA that supports registration service.

## A.6.2.1 Registration procedures

**Table A.3: Registration procedures**

<b>Prerequisite: A.2/1 and A.1/1</b>				
<b>Item</b>	<b>Procedures</b>	<b>Reference</b>	<b>Status</b>	<b>Support</b>
<b>1</b>	Registration Discovery			
<b>1.1</b>	Configured registrar address	RFC 3261 [1], section 10.2.6	Oa3.01	
<b>1.2</b>	Using address-of-record	RFC 3261 [1], section 10.2.6	Oa3.01	
<b>1.3</b>	Multicasting	RFC 3261 [1], section 10.2.6	Oa3.01	
<b>2</b>	Adding Bindings	RFC 3261 [1], section 10.2.1	M	
<b>3</b>	Removing Bindings	RFC 3261 [1], section 10.2.2	O	
<b>4</b>	Refreshing Bindings	RFC 3261 [1], section 10.2.4	O	
<b>5</b>	Querying Bindings	RFC 3261 [1], section 10.2.1	O	
<b>6</b>	Setting Expiration interval for contact	RFC 3261 [1], section 10.2.1.1	O	
<b>7</b>	Ordering contacts	RFC 3261 [1], section 10.2.1.2	O	
<b>8</b>	Setting internal clock	RFC 3261 [1], section 10.2.5	O	
Oa3.01 It is mandatory to support at least one of those items.				
Comments:				

## A.6.2.2 Registration Messages

### A.6.2.2.1 Registration Request

**Table A.4: Registration Request**

<b>Prerequisite: A.2/1 and A.1/1</b>				
<b>Item</b>	<b>Method</b>	<b>Reference</b>	<b>Status sending</b>	<b>Support</b>
<b>1</b>	REGISTER	RFC 3261 [1], section 10.2	M	
Comments:				



## A.6.2.2.2 Registration Responses

Table A.5: Registration Responses

Prerequisite: A.2/1 and A.1/1				
Item	Status code	References	Status receiving	Support
<b>1</b>	<b>1XX</b>			
1.1	100	RFC 3261 [1], sections 21.1 and 8.1.3.2	M	
1.2	183	RFC 3261 [1], sections 21.1 and 8.1.3.2	M	
<b>2</b>	<b>2XX</b>			
2.1	200	RFC 3261 [1], section 21.2	M	
<b>3</b>	<b>3XX</b>			
3.1	300	RFC 3261 [1], sections 21.3.1 and 8.1.3.2	M	
3.2	301	RFC 3261 [1], section 21.3.2	O	
3.3	302	RFC 3261 [1], sections 21.3.3 and 10.3	O	
<b>4</b>	<b>4XX</b>			
4.1	400	RFC 3261 [1], section 21.4.1	M	
4.2	401	RFC 3261 [1], section 21.4.2	O	
4.3	403	RFC 3261 [1], section 21.4.4	O	
4.4	404	RFC 3261 [1], section 21.4.5	O	
4.5	405	RFC 3261 [1], section 21.4.6	O	
4.6	406	RFC 3261 [1], section 21.4.7	O	
4.7	407	RFC 3261 [1], section 21.4.8	O	
4.8	408	RFC 3261 [1], section 21.4.9	O	
4.9	410	RFC 3261 [1], section 21.4.10	O	
4.10	414	RFC 3261 [1], section 21.4.12	O	
4.11	416	RFC 3261 [1], section 21.4.14	O	
4.12	423	RFC 3261 [1], sections 21.4.17 and 10.2.8	O	
4.13	482	RFC 3261 [1], section 21.4.20	O	
4.14	483	RFC 3261 [1], section 21.4.21	O	
4.15	484	RFC 3261 [1], section 21.4.22	O	
<b>5</b>	<b>5XX</b>			
5.1	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	M	
5.2	502	RFC 3261 [1], section 21.5.3	O	
5.3	503	RFC 3261 [1], section 21.5.4	O	
5.4	504	RFC 3261 [1], section 21.5.5	O	
5.5	505	RFC 3261 [1], section 21.5.6	O	
<b>6</b>	<b>6XX</b>			
6.1	600	RFC 3261 [1], section 21.6.1	M	
6.2	604	RFC 3261 [1], section 21.6.3	O	
Comments:	<p>According to RFC 3261 [1], section 8.2.6.1, the registrar should not send provisional response.</p> <p>According to RFC 3261 [1], section 8.1.3.2: "A UAC MUST treat any final response it does not recognize as being equivalent to the x00 response code of that class".</p> <p>According to RFC 3261 [1], section 10.3, a Registrar must not generate 6xx response but an intermediate proxy can send one.</p>			

## A.6.2.2.3 REGISTER parameters

## A.6.2.2.3.1 REGISTER request parameters

Table A.6: REGISTER Request parameters

Prerequisite: A.2/1 and A.1/1				
Item	Parameters name	Reference	Status sending	Support
<b>1</b>	<b>Request-Line</b>			
1.1	Method	RFC 3261 [1], section 7.1	M (see note 1)	
1.2	Request-URI	RFC 3261 [1], section 7.1	M	
1.3	SIP-Version	RFC 3261 [1], section 7.1	M (see note 2)	
<b>2</b>	<b>Headers</b>			
2.1	Accept	RFC 3261 [1], section 20	O	
2.2	Accept-Encoding	RFC 3261 [1], section 20	O	
2.3	Accept-Language	RFC 3261 [1], section 20	O	
2.4	Allow	RFC 3261 [1], section 20	O	
2.5	Authorization	RFC 3261 [1], section 20	Oa6.01	
2.6	Call-ID	RFC 3261 [1], section 20	M	
2.7	Call-Info	RFC 3261 [1], section 20	O	
2.8	Contact	RFC 3261 [1], section 20	Ca6.01	
2.9	Content-Disposition	RFC 3261 [1], section 20	O	
2.10	Content-Encoding	RFC 3261 [1], section 20	O	
2.11	Content-Language	RFC 3261 [1], section 20	O	
2.12	Content-Length	RFC 3261 [1], section 20	Ca6.04	
2.13	Content-Type	RFC 3261 [1], section 20	Ca6.02	
2.14	CSeq	RFC 3261 [1], section 20	M	
2.15	Date	RFC 3261 [1], section 20	O	
2.16	Expires	RFC 3261 [1], section 20	Ca6.03	
2.17	From	RFC 3261 [1], section 20	M	
2.18	Max-Forwards	RFC 3261 [1], section 20	M	
2.19	MIME-Version	RFC 3261 [1], section 20	O	
2.20	Organization	RFC 3261 [1], section 20	O	
2.21	Proxy-Authorization	RFC 3261 [1], section 20	Oa6.01	
2.22	Poxy-Require	RFC 3261 [1], section 20	O	
2.23	Require	RFC 3261 [1], section 20	O	
2.24	Route	RFC 3261 [1], section 20	O	
2.25	Server	RFC 3261 [1], section 20	O	
2.26	Supported	RFC 3261 [1], section 20	O	
2.27	Timestamp	RFC 3261 [1], section 20	O	
2.28	To	RFC 3261 [1], section 20	M	
2.29	User-Agent	RFC 3261 [1], section 20	O	
2.30	Via	RFC 3261 [1], section 20	M	
2.29	Warning	RFC 3261 [1], section 20	O	
<b>3</b>	<b>Body</b>		RFC 3261 [1], section 7.4	O
Ca6.01	IF (A.3/2 OR A.3/4) THEN M ELSE O.			
Ca6.02	IF (A.6/3) THEN M ELSE O.			
Ca6.03	IF (contact/A.6/2.8 = *) THEN M ELSE O.			
Ca6.04	IF (A.12/2 OR A.6/3) THEN M ELSE O.			
Oa6.01	IF (A.8/1) THEN one at least shall be supported.			
NOTE 1: Set to "REGISTER" value in this case.				
NOTE 2: To be conform to RFC 3261 [1] shall be set to "SIP/2.0".				
Comments:				

## A.6.2.2.3.2 REGISTER response parameters

Table A.7: REGISTER Response parameters

Prerequisite: A.2/1 and A.1/1				
Item	Parameters name	Reference	Status receiving	Support
<b>1</b>	<b>Status-line</b>			
1.1	SIP-Version	RFC 3261 [1], section 7.1	M (see note)	
1.2	Status-Code	RFC 3261 [1], section 7.1	M	
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	M	
<b>2</b>	<b>Headers</b>			
2.1	Accept	RFC 3261 [1], section 20	O	
2.2	Accept-Encoding	RFC 3261 [1], section 20	O	
2.3	Accept-Language	RFC 3261 [1], section 20	O	
2.4	Allow	RFC 3261 [1], section 20	Ca7.01	
2.5	Authentication-Info	RFC 3261 [1], section 20	O	
2.6	Call-ID	RFC 3261 [1], section 20	M	
2.7	Call-Info	RFC 3261 [1], section 20	O	
2.8	Contact	RFC 3261 [1], section 20	Ca7.02	
2.9	Content-Disposition	RFC 3261 [1], section 20	O	
2.10	Content-Encoding	RFC 3261 [1], section 20	Ca7.11	
2.11	Content-Language	RFC 3261 [1], section 20	O	
2.12	Content-Length	RFC 3261 [1], section 20	O	
2.13	Content-Type	RFC 3261 [1], section 20	Ca7.03	
2.14	CSeq	RFC 3261 [1], section 20	M	
2.15	Date	RFC 3261 [1], section 20	O	
2.16	Error-Info	RFC 3261 [1], section 20	Ca7.04	
2.17	Expires	RFC 3261 [1], section 20	O	
2.18	From	RFC 3261 [1], section 20	M	
2.19	Min-Expires	RFC 3261 [1], section 20	Ca7.05	
2.20	MIME-Version	RFC 3261 [1], section 20	O	
2.21	Organization	RFC 3261 [1], section 20	O	
2.22	Proxy-Authenticate	RFC 3261 [1], section 20	Ca7.06	
2.23	Require	RFC 3261 [1], section 20	M	
2.24	Retry-After	RFC 3261 [1], section 20	Ca7.07	
2.25	Server	RFC 3261 [1], section 20	O	
2.26	Supported	RFC 3261 [1], section 20	Ca7.08	
2.27	Timestamp	RFC 3261 [1], section 20	O	
2.28	To	RFC 3261 [1], section 20	M	
2.29	Unsupported	RFC 3261 [1], section 20	Ca7.09	
2.30	User-Agent	RFC 3261 [1], section 20	O	
2.31	Via	RFC 3261 [1], section 20	M	
2.32	Warning	RFC 3261 [1], section 20	O	
2.33	WWW-Authenticate	RFC 3261 [1], section 20	Ca7.10	
<b>3</b>	<b>Body</b>	RFC 3261 [1], section 7.4	O	
Ca7.01	IF (status = 405) THEN M ELSE O.			
Ca7.02	IF (status = 1XX) THEN X ELSE (IF status= 2XX THEN M ELSE (IF (status=3XX OR status=485) THEN O ELSE X)).			
Ca7.03	IF (A.7/3) THEN M ELSE I.			
Ca7.04	IF (status=300-699) THEN O ELSE X.			
Ca7.05	IF (status= 423) THEN M ELSE X.			
Ca7.06	IF (status= 407) THEN M ELSE (IF (status= 401) THEN O ELSE X).			
Ca7.07	IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE X.			
Ca7.08	IF (status= 2XX) THEN O ELSE X.			
Ca7.09	IF (status= 420) THEN M ELSE X.			
Ca7.10	IF (status= 401) THEN M ELSE (IF (status= 407) THEN O ELSE X).			
Ca7.11	IF (A.7/3) THEN O ELSE X.			
NOTE:	To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".			
Comments:				

## A.6.2.3 Registration Security

### A.6.2.3.1 Registration Security capabilities

**Table A.8: Registration Security capabilities**

Prerequisite: A.2/1 and A.1/1				
Item	Security capabilities	Reference	Status	Support
1	HTTP Authentication	RFC 3261 [1], sections 22 and 26.2.3	Ca8.01	
2	S/MIME	RFC 3261 [1], sections 23 and 26.2.4	O	
3	TLS	RFC 3261 [1], section 26.2.1	O	
Ca8.01 IF (A.8/3) THEN M ELSE O.				
Comments:				

### A.6.2.3.2 HTTP parameters

**Table A.9: Access Authentication**

Prerequisite: A.2/1, A.8/1 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	Basic	RFC 2617 [3], section 2	X	
2	Digest	RFC 2617 [3], section 3	M	
Comments:				

**Table A.10: Authenticate header**

Prerequisite: A.2/1, A.8/1 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	realm	RFC 2617 [3], section 3.2.1	M	
2	domain	RFC 2617 [3], section 3.2.1	O	
3	nonce	RFC 2617 [3], section 3.2.1	M	
4	opaque	RFC 2617 [3], section 3.2.1	O	
5	stale	RFC 2617 [3], section 3.2.1	O	
6	algorithm	RFC 2617 [3], section 3.2.1	O	
7	qop-options	RFC 2617 [3], section 3.2.1	O	
8	auth-param	RFC 2617 [3], section 3.2.1	O	
NOTE: If a UAC receives a qop-options header in an Authenticate then message-quop is mandatory.				
Comments:				

Table A.11: Authorization header

Prerequisite: A.2/1, A.8/1 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	username	RFC 2617 [3], section 3.2.2	M	
2	realm	RFC 2617 [3], section 3.2.2	M	
3	nonce	RFC 2617 [3], section 3.2.2	M	
4	digest-uri	RFC 2617 [3], section 3.2.2	M	
5	response	RFC 2617 [3], section 3.2.2	M	
6	algorithm	RFC 2617 [3], section 3.2.2	O	
7	cnonce	RFC 2617 [3], section 3.2.2	O	
8	opaque	RFC 2617 [3], section 3.2.2	O	
9	message-qop	RFC 2617 [3], section 3.2.2	O (see note)	
10	nonce-count	RFC 2617 [3], section 3.2.2	O	
11	auth-param	RFC 2617 [3], section 3.2.2	O	
NOTE: If a UAC receives a qop-options header in an Authenticate then message-quop is mandatory.				
Comments:				

## A.6.2.4 Registration Transport

Table A.12: Registration transport

Prerequisite: A.2/1 and A.1/1				
Item	transport	Reference	Status	Support
1	UDP	RFC 3261 [1], section 18	M	
2	TCP	RFC 3261 [1], section 18	M	
3	Other transport	RFC 3261 [1], section 18	O	
Comments:				

## A.6.2.5 Registration Addressing

### A.6.2.5.1 URIs

Table A.13: Registration URI

Prerequisite: A.2/1 and A.1/1				
Item	URI scheme	Reference	Status	Support
1	SIP	RFC 3261 [1], section 19	M	
2	SIPS	RFC 3261 [1], section 19	Ca13.01	
Ca13.01 IF (A.8/3) THEN M ELSE O.				
Comments:				

### A.6.2.5.2 IP address

Table A.14: Registration IP Address

Prerequisite: A.2/1 and A.1/1				
Item	IP Address format	Reference	Status	Support
1	IPv4	RFC 3261 [1], section 19	M	
2	IPv6	RFC 3261 [1], section 19	O	
Comments:				

## A.6.2.6 Registration Timers

**Table A.15: Registration Timer**

Prerequisite: A.2/1 and A.1/1				
Item	Timer	Reference	Status	Support
1	T1	RFC 3261 [1], section 17.1.2.1, table 4	Ca15.01	
2	T2	RFC 3261 [1], section 17.1.2.1, table 4	Ca15.01	
3	T4	RFC 3261 [1], section 17.1.2.2, table 4	Ca15.01	
4	Timer E	RFC 3261 [1], section 17.1.2.2, table 4	Ca15.01	
5	Timer F	RFC 3261 [1], section 17.1.2.2, table 4	O	
6	Timer K	RFC 3261 [1], section 17.1.2.2, table 4	M (see note)	
Ca15.01 IF (A.12/1) THEN M ELSE N/A.				
NOTE: Set to zero for reliable transport.				
Comments:				

## A.6.3 Call Control service

This clause contains the PICS proforma tables related to the call control operations for the UA that supports call control service.

### A.6.3.1 Call Control procedures

**Table A.16: Call Control procedures**

Prerequisite: A.2/2 and A.1/1				
Item	procedures	Reference	Status	Support
1	establishing a session			
1.1	UAC procedures	RFC 3261 [1], section 13.2	Oa16.01	
1.2	UAS procedures	RFC 3261 [1], section 13.3	Oa16.01	
1.3	Based on Location server messages	RFC 3261 [1], section 8.1.3.4	O	
2	Modifying an existing session			
2.1	UAC procedures	RFC 3261 [1], section 14.1	O	
2.2	UAS procedures	RFC 3261 [1], section 14.2	O	
3	Terminating a session with BYE			
3.1	UAC procedures	RFC 3261 [1], section 15.1.1	M	
3.2	UAS procedures	RFC 3261 [1], section 15.1.2	M	
4	Cancelling a session			
4.1	UAC procedures	RFC 3261 [1], section 9.1	M	
4.2	UAS procedures	RFC 3261 [1], section 9.2	M	
Oa16.01 At least, one of those items shall be supported.				
Comments: The terminal sends again the request according to the contact(s) get in the 3XX response. According to RFC 3261 [1], section 13.1, a UA that supports INVITE method must also support ACK, CANCEL and BYE.				

## A.6.3.2 Call Control Messages

### A.6.3.2.1 Call Control Requests

**Table A.17: Call Control Requests**

Prerequisite: A.2/2 and A.1/1						
Item	Method	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	INVITE	RFC 3261 [1], section 13	Ca17.01	Ca17.02		
2	re-INVITE	RFC 3261 [1], section 14	Ca17.03	Ca17.04		
3	ACK	RFC 3261 [1], section 8	Ca17.01	Ca17.02		
4	BYE	RFC 3261 [1], section 15	M	M		
5	CANCEL	RFC 3261 [1], section 9	M	M		
Ca17.01 IF A.16/1.1 THEN M ELSE N/A. Ca17.02 IF A.16/1.2 THEN M ELSE N/A. Ca17.03 IF A.16/2.1 THEN M ELSE N/A. Ca17.04 IF A.16/2.2 THEN M ELSE N/A.						
Comments: According to RFC 3261 [1], section 13.1, a UA that supports INVITE method shall also support ACK, CANCEL and BYE methods.						

### A.6.3.2.2 Call Control Responses

#### A.6.3.2.2.1 Call Control INVITE Responses

**Table A.18: Call Control INVITE Responses**

Prerequisite: A.2/2 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	1XX					
1.1	100	RFC 3261 [1], sections 21.1.1 and 8.1.3.2	Ca18.04	Ca18.01		
1.2	180	RFC 3261 [1], section 21.1.2	Ca18.04	Ca18.03		
1.3	181	RFC 3261 [1], section 21.1.3	Ca18.04	Ca18.03		
1.4	182	RFC 3261 [1], section 21.1.4	Ca18.04	Ca18.03		
1.5	183	RFC 3261 [1], sections 21.1.5 and 8.1.3.2	Ca18.04	Ca18.01		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	Ca18.02	Ca18.01		
3	3XX					
3.1	300	RFC 3261 [1], sections 21.3.1 and 8.1.3.2	Ca18.04	Ca18.01		
3.2	301	RFC 3261 [1], section 21.3.2	Ca18.04	Ca18.03		
3.3	302	RFC 3261 [1], section 21.3.3	Ca18.04	Ca18.03		
3.4	305	RFC 3261 [1], section 21.3.4	Ca18.04	Ca18.03		
3.5	380	RFC 3261 [1], section 21.3.5	Ca18.04	Ca18.03		
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	Ca18.04	Ca18.01		
4.2	401	RFC 3261 [1], section 21.4.2	Ca18.04	Ca18.03		
4.3	402	RFC 3261 [1], section 21.4.3	Ca18.04	Ca18.03		
4.4	403	RFC 3261 [1], section 21.4.4	Ca18.04	Ca18.03		
4.5	404	RFC 3261 [1], section 21.4.5	Ca18.04	Ca18.03		
4.6	405	RFC 3261 [1], section 21.4.6	Ca18.06	Ca18.03		
4.7	406	RFC 3261 [1], section 21.4.7	Ca18.04	Ca18.03		
4.8	407	RFC 3261 [1], section 21.4.8	N/A	Ca18.03		
4.9	408	RFC 3261 [1], section 21.4.9	Ca18.04	Ca18.03		
4.10	410	RFC 3261 [1], section 21.4.10	Ca18.04	Ca18.03		
4.11	413	RFC 3261 [1], section 21.4.11	Ca18.04	Ca18.03		
4.12	414	RFC 3261 [1], section 21.4.12	Ca18.04	Ca18.03		
4.13	415	RFC 3261 [1], section 21.4.13	Ca18.02	Ca18.03		
4.14	416	RFC 3261 [1], section 21.4.14	Ca18.04	Ca18.03		
4.15	420	RFC 3261 [1], section 21.4.15	Ca18.02	Ca18.03		
4.16	421	RFC 3261 [1], section 21.4.16	Ca18.04	Ca18.03		

Prerequisite: A.2/2 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
4.17	480	RFC 3261 [1], section 21.4.18	Ca18.04	Ca18.03		
4.18	481	RFC 3261 [1], section 21.4.19	Ca18.04	Ca18.03		
4.19	482	RFC 3261 [1], section 21.4.20	Ca18.04	Ca18.03		
4.20	484	RFC 3261 [1], section 21.4.22	Ca18.04	Ca18.03		
4.21	485	RFC 3261 [1], section 21.4.23	Ca18.04	Ca18.03		
4.22	486	RFC 3261 [1], section 21.4.24	Ca18.04	Ca18.03		
4.23	487	RFC 3261 [1], section 21.4.25	Ca18.04	Ca18.03		
4.24	488	RFC 3261 [1], section 21.4.26	Ca18.04	Ca18.03		
4.25	491	RFC 3261 [1], section 21.4.27	Ca18.04	Ca18.03		
4.26	493	RFC 3261 [1], section 21.4.28	Ca18.05	Ca18.03		
5	5XX					
5.1	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	Ca18.02	Ca18.01		
5.2	501	RFC 3261 [1], section 21.5.2	Ca18.04	Ca18.03		
5.3	502	RFC 3261 [1], section 21.5.3	N/A	Ca18.03		
5.4	503	RFC 3261 [1], section 21.5.4	Ca18.04	Ca18.03		
5.5	504	RFC 3261 [1], section 21.5.5	Ca18.04	Ca18.03		
5.6	505	RFC 3261 [1], section 21.5.6	Ca18.04	Ca18.03		
5.7	513	RFC 3261 [1], section 21.5.7	Ca18.04	Ca18.03		
6	6XX					
6.1	600	RFC 3261 [1], section 21.6.1	Ca18.04	Ca18.01		
6.2	603	RFC 3261 [1], section 21.6.2	Ca18.04	Ca18.03		
6.3	604	RFC 3261 [1], section 21.6.3	Ca18.04	Ca18.03		
6.4	606	RFC 3261 [1], section 21.6.4	Ca18.04	Ca18.03		
Ca18.01	IF A.16/1.1 THEN M ELSE N/A -- UAC procedures.					
Ca18.02	IF A.16/1.2 THEN M ELSE N/A -- UAS procedures.					
Ca18.03	IF A.16/1.1 THEN O ELSE N/A -- UAC procedures.					
Ca18.04	IF A.16/1.2 THEN O ELSE N/A -- UAS procedures.					
Ca18.05	IF A.31/2 THEN M ELSE N/A -- S/MIME.					
Ca18.06	IF A.16/1.2 THEN X ELSE N/A -- UAS procedures.					
Comments:	In any case, according to RFC 3261 [1], section 8.1.3.2: "A UAC MUST treat any final response it does not recognize as being equivalent to the x00 response code of that class".					

## A.6.3.2.2.2 Call Control re-INVITE Responses

Table A.19: Call Control re-INVITE Responses

Prerequisite: A.2/2 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	1XX					
1.1	100	RFC 3261 [1], sections 21.1.1 and 8.1.3.2	Ca19.04	Ca19.01		
1.2	180	RFC 3261 [1], section 21.1.2	Ca19.04	Ca19.03		
1.3	181	RFC 3261 [1], section 21.1.3	Ca19.04	Ca19.03		
1.4	183	RFC 3261 [1], section 21.1.5, [1] and 8.1.3.2	Ca19.04	Ca19.01		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	Ca19.02	Ca19.01		
3	3XX					
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	Ca19.04	Ca19.01		
4.2	401	RFC 3261 [1], section 21.4.2	Ca19.04	Ca19.03		
4.3	402	RFC 3261 [1], section 21.4.3	Ca19.04	Ca19.03		
4.4	403	RFC 3261 [1], section 21.4.4	Ca19.04	Ca19.03		
4.5	404	RFC 3261 [1], section 21.4.5	Ca19.04	Ca19.03		
4.6	405	RFC 3261 [1], section 21.4.6	Ca19.06	Ca19.03		
4.7	406	RFC 3261 [1], section 21.4.7	Ca19.04	Ca19.03		
4.8	407	RFC 3261 [1], section 21.4.8	N/A	Ca19.03		
4.9	408	RFC 3261 [1], section 21.4.9	Ca19.04	Ca19.03		
4.10	410	RFC 3261 [1], section 21.4.10	Ca19.04	Ca19.03		
4.11	413	RFC 3261 [1], section 21.4.11	Ca19.04	Ca19.03		
4.12	414	RFC 3261 [1], section 21.4.12	Ca19.04	Ca19.03		



Prerequisite: A.2/2 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
4.13	415	RFC 3261 [1], section 21.4.13	Ca19.02	Ca19.03		
4.14	416	RFC 3261 [1], section 21.4.14	Ca19.04	Ca19.03		
4.15	420	RFC 3261 [1], section 21.4.15	Ca19.02	Ca19.03		
4.16	421	RFC 3261 [1], section 21.4.16	Ca19.04	Ca19.03		
4.17	480	RFC 3261 [1], section 21.4.18	Ca19.04	Ca19.03		
4.18	481	RFC 3261 [1], section 21.4.19	Ca19.04	Ca19.03		
4.19	482	RFC 3261 [1], section 21.4.20	Ca19.04	Ca19.03		
4.20	484	RFC 3261 [1], section 21.4.22	Ca19.04	Ca19.03		
4.21	485	RFC 3261 [1], section 21.4.23	Ca19.04	Ca19.03		
4.22	487	RFC 3261 [1], section 21.4.25	Ca19.02	Ca19.03		
4.23	488	RFC 3261 [1], section 21.4.26	Ca19.04	Ca19.03		
4.24	491	RFC 3261 [1], section 21.4.27	Ca19.02	Ca19.03		
4.25	493	RFC 3261 [1], section 21.4.28	Ca19.05	Ca19.03		
5	5XX					
5	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	Ca19.02	Ca19.01		
5.1	501	RFC 3261 [1], section 21.5.2	Ca19.04	Ca19.03		
5.2	502	RFC 3261 [1], section 21.5.3	N/A	Ca19.03		
5.3	503	RFC 3261 [1], section 21.5.4	Ca19.04	Ca19.03		
5.4	504	RFC 3261 [1], section 21.5.5	Ca19.04	Ca19.03		
5.5	505	RFC 3261 [1], section 21.5.6	Ca19.04	Ca19.03		
5.6	513	RFC 3261 [1], section 21.5.7	Ca19.04	Ca19.03		
6	6XX					
6.1	600	RFC 3261 [1], section 21.6.1	Ca19.04	Ca19.01		
6.2	603	RFC 3261 [1], section 21.6.2	Ca19.04	Ca19.03		
6.3	604	RFC 3261 [1], section 21.6.3	Ca19.04	Ca19.03		
6.4	606	RFC 3261 [1], section 21.6.4	Ca19.04	Ca19.03		
Ca19.01 IF A.16/2.1 THEN M ELSE N/A -- UAC procedures.						
Ca19.02 IF A.16/2.2 THEN M ELSE N/A -- UAS procedures.						
Ca19.03 IF A.16/2.1 THEN O ELSE N/A -- UAC procedures.						
Ca19.04 IF A.16/2.2 THEN O ELSE N/A -- UAS procedures.						
Ca19.05 IF A.31/2 THEN M ELSE N/A -- UAC procedures.						
Ca19.06 IF A.16/2.2 THEN X ELSE N/A -- UAS procedures.						
Comments: Only status codes that concern Call control service to modify a session have been detailed. In any case, according to RFC 3261 [1], section 8.1.3.2: "A UAC MUST treat any final response it does not recognize as being equivalent to the x00 response code of that class".						

## A.6.3.2.2.3 Call Control BYE Responses

Table A.20: Call Control BYE Responses

Prerequisite: A.2/2 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	1XX	RFC 3261 [1], sections 21.1 and 8.1.3.2	X	M		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	M	M		
3	3XX					
3.1	300	RFC 3261 [1], section 21.3.1 and 8.1.3.2	N/A	M		
3.2	301	RFC 3261 [1], section 21.3.2	O	O		
3.3	302	RFC 3261 [1], section 21.3.3	O	O		
3.4	305	RFC 3261 [1], section 21.3.4	O	O		
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	O	M		
4.2	401	RFC 3261 [1], section 21.4.2	O	O		
4.3	403	RFC 3261 [1], section 21.4.4	O	O		
4.4	404	RFC 3261 [1], section 21.4.5	O	O		
4.5	405	RFC 3261 [1], section 21.4.6	X	O		
4.6	406	RFC 3261 [1], section 21.4.7	O	O		
4.7	407	RFC 3261 [1], section 21.4.8	N/A	O		
4.8	408	RFC 3261 [1], section 21.4.9	O	O		

Prerequisite: A.2/2 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
4.9	413	RFC 3261 [1], section 21.4.11	O	O		
4.10	414	RFC 3261 [1], section 21.4.12	O	O		
4.11	481	RFC 3261 [1], section 21.4.19	O	O		
4.12	482	RFC 3261 [1], section 21.4.20	O	O		
4.13	484	RFC 3261 [1], section 21.4.22	O	O		
4.14	485	RFC 3261 [1], section 21.4.23	O	O		
4.15	487	RFC 3261 [1], section 21.4.25	O	O		
4.16	488	RFC 3261 [1], section 21.4.26				
5	5XX					
5.1	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	M	M		
5.2	502	RFC 3261 [1], section 21.5.3	N/A	O		
5.3	504	RFC 3261 [1], section 21.5.5	O	O		
5.4	513	RFC 3261 [1], section 21.5.7	O	O		
6	6XX					
6.1	604	RFC 3261 [1], section 21.6.3	O	O		
Comments: Only status codes that concern Call control service to terminate a session have been detailed. In any case, according to RFC 3261 [1], section 8.1.3.2: "A UAC MUST treat any final response it does not recognize as being equivalent to the x00 response code of that class". According to RFC 3261 [1], section 8.2.6.1 a UAS should not generate a provisional response for a non-INVITE request.						

#### A.6.3.2.2.4 Call Control CANCEL Responses

Table A.21: Call Control CANCEL Responses

Prerequisite: A.2/2 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	1XX	RFC 3261 [1], sections 21.1 and 8.1.3.2	X	M		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	M	M		
3	3XX					
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	O	M		
4.2	401	RFC 3261 [1], section 21.4.2	O	O		
4.3	403	RFC 3261 [1], section 21.4.4	O	O		
4.4	404	RFC 3261 [1], section 21.4.5	O	O		
4.5	405	RFC 3261 [1], section 21.4.6	X	O		
4.6	406	RFC 3261 [1], section 21.4.7	O	O		
4.7	407	RFC 3261 [1], section 21.4.8	N/A	O		
4.8	408	RFC 3261 [1], section 21.4.9	O	O		
4.9	413	RFC 3261 [1], section 21.4.11	O	O		
4.10	414	RFC 3261 [1], section 21.4.12	O	O		
4.11	481	RFC 3261 [1], section 21.4.19	O	O		
4.12	482	RFC 3261 [1], section 21.4.20	O	O		
4.13	484	RFC 3261 [1], section 21.4.22	O	O		
4.14	485	RFC 3261 [1], section 21.4.23	O	O		
4.15	487	RFC 3261 [1], section 21.4.25	O	O		
4.16	488	RFC 3261 [1], section 21.4.26				
5	5XX					
5.1	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	M	M		
5.2	502	RFC 3261 [1], section 21.5.3	N/A	O		
5.3	504	RFC 3261 [1], section 21.5.5	O	O		
5.4	513	RFC 3261 [1], section 21.5.7	O	O		

Prerequisite: A.2/2 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
<b>6</b>	6XX					
<b>6.1</b>	600	RFC 3261 [1], section 21.6.1	O	M		
<b>6.2</b>	604	RFC 3261 [1], section 21.6.3	O	O		
Comments: Only status codes that concern Call control service to cancel a session have been detailed. In any case, according to RFC 3261 [1], section 8.1.3.2: "A UAC MUST treat any final response it does not recognize as being equivalent to the x00 response code of that class". According to RFC 3261 [1], section 8.2.6.1 a UAS should not generate a provisional response for a non-INVITE request.						

### A.6.3.2.3 INVITE parameters

#### A.6.3.2.3.1 INVITE request parameters

**Table A.22: INVITE Request parameters**

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
<b>1</b>	<b>Request-Line</b>					
<b>1.1</b>	Method	RFC 3261 [1], section 7.1	Ca22.01 (see note 1)	Ca22.02		
<b>1.2</b>	Request-URI	RFC 3261 [1], section 7.1	Ca22.01	Ca22.02		
<b>1.3</b>	SIP-Version	RFC 3261 [1], section 7.1	Ca22.01	Ca22.02 (see note 2)		
<b>2</b>	<b>Headers</b>					
<b>2.1</b>	Accept	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.2</b>	Accept-Encoding	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.3</b>	Accept-Language	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.4</b>	Alert-Info	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.5</b>	Allow	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.6</b>	Authorization	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.7</b>	Call-ID	RFC 3261 [1], section 20	Ca22.01	Ca22.02		
<b>2.8</b>	Call-Info	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.9</b>	Contact	RFC 3261 [1], section 20	Ca22.01	Ca22.02		
<b>2.10</b>	Content-Disposition	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.11</b>	Content-Encoding	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.12</b>	Content-Language	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.13</b>	Content-Length	RFC 3261 [1], section 20	Ca22.05	Ca22.02		
<b>2.14</b>	Content-Type	RFC 3261 [1], section 20	Ca22.06	Ca22.02		
<b>2.15</b>	CSeq	RFC 3261 [1], section 20	Ca22.01	Ca22.02		
<b>2.16</b>	Date	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.17</b>	Expires	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.18</b>	From	RFC 3261 [1], section 20	Ca22.01	Ca22.02		
<b>2.19</b>	In-Reply-To	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.20</b>	Max-Forwards	RFC 3261 [1], section 20	Ca22.01	Ca22.04		
<b>2.21</b>	MIME-Version	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.22</b>	Organization	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.23</b>	Priority	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.24</b>	Proxy-Authorization	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.25</b>	Proxy-Require	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.26</b>	Record-Route	RFC 3261 [1], section 20	Ca22.03	Ca22.02		
<b>2.27</b>	Reply-To	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.28</b>	Require	RFC 3261 [1], section 20	Ca22.03	Ca22.02		
<b>2.29</b>	Route	RFC 3261 [1], section 20	Ca22.01	Ca22.02		
<b>2.30</b>	Server	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.31</b>	Subject	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.32</b>	Supported	RFC 3261 [1], section 20	Ca22.01	Ca22.02		
<b>2.33</b>	Timestamp	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
<b>2.34</b>	To	RFC 3261 [1], section 20	Ca22.01	Ca22.02		

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
2.35	User-Agent	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
2.36	Via	RFC 3261 [1], section 20	Ca22.01	Ca22.02		
2.37	Warning	RFC 3261 [1], section 20	Ca22.03	Ca22.04		
3	Body	RFC 3261 [1], section 7.4	Ca22.03	Ca22.02		
Ca22.01	IF A.16/1.1 THEN M ELSE N/A -- UAC procedures.					
Ca22.02	IF A.16/1.2 THEN M ELSE N/A -- UAS procedures.					
Ca22.03	IF A.16/1.1 THEN O ELSE N/A -- UAC procedures.					
Ca22.04	IF A.16/1.2 THEN O ELSE N/A -- UAS procedures.					
Ca22.05	IF (A.22/3 OR A.35/2) THEN M ELSE O.					
Ca22.05	IF A.22/3 THEN M ELSE O.					
NOTE 1: Set to "INVITE" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1], section shall be set to "SIP/2.0".						

## A.6.3.2.3.2 INVITE response parameters

Table A.23: INVITE response parameters

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	Ca23.02 (see note)	Ca23.01		
1.2	Status-code	RFC 3261 [1], section 7.1	Ca23.02	Ca23.01		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	Ca23.02	Ca23.01		
2	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	Ca23.05	Ca23.03		
2.2	Accept-Encoding	RFC 3261 [1], section 20	Ca23.05	Ca23.03		
2.3	Accept-Language	RFC 3261 [1], section 20	Ca23.05	Ca23.03		
2.4	Alert-Info	RFC 3261 [1], section 20	Ca23.06	Ca23.07		
2.5	Allow	RFC 3261 [1], section 20	Ca23.02	Ca23.01		
2.6	Authentication-Info	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.7	Call-ID	RFC 3261 [1], section 20	Ca23.02	Ca23.01		
2.8	Call-Info	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.9	Contact	RFC 3261 [1], section 20	Ca23.08	Ca23.01		
2.10	Content-Disposition	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.11	Content-Encoding	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.12	Content-Language	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.13	Content-Length	RFC 3261 [1], section 20	Ca23.09	Ca23.01		
2.14	Content-Type	RFC 3261 [1], section 20	Ca23.10	Ca23.01		
2.15	CSeq	RFC 3261 [1], section 20	Ca23.02	Ca23.01		
2.16	Date	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.17	Error-Info	RFC 3261 [1], section 20	Ca23.11	Ca23.12		
2.18	Expires	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.19	From	RFC 3261 [1], section 20	Ca23.02	Ca23.01		
2.20	MIME-Version	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.21	Organization	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.22	Proxy-Authenticate	RFC 3261 [1], section 20	Ca23.13	Ca23.14		
2.23	Record-Route	RFC 3261 [1], section 20	Ca23.15	Ca23.16		
2.24	Reply-To	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.25	Require	RFC 3261 [1], section 20	Ca23.04	Ca23.01		
2.26	Retry-After	RFC 3261 [1], section 20	Ca23.17	Ca23.18		
2.27	Server	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.28	Supported	RFC 3261 [1], section 20	Ca23.23	Ca23.24		
2.29	Timestamp	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.30	To	RFC 3261 [1], section 20	Ca23.02	Ca23.01		
2.31	Unsupported	RFC 3261 [1], section 20	Ca23.19	Ca23.20		
2.32	User-Agent	RFC 3261 [1], section 20	Ca23.04	Ca23.03		
2.33	Via	RFC 3261 [1], section 20	Ca23.02	Ca23.01		
2.34	Warning	RFC 3261 [1], section 20	Ca23.04	Ca23.03		

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
2.35	WWW-Authenticate	RFC 3261 [1], section 20	Ca23.21	Ca23.22		
3	Body	RFC 3261 [1], section 7.4	Ca23.04	Ca23.01		
Ca23.01	IF A.16/1.1 THEN M ELSE N/A -- UAC procedures.					
Ca23.02	IF A.16/1.2 THEN M ELSE N/A -- UAS procedures.					
Ca23.03	IF A.16/1.1 THEN O ELSE N/A -- UAC procedures.					
Ca23.04	IF A.16/1.2 THEN O ELSE N/A -- UAS procedures.					
Ca23.05	IF (A.16/1.2 AND status=415) THEN M ELSE (IF A.16/1.2 THEN O ELSE N/A).					
Ca23.06	IF (A.16/1.2 AND status=180) THEN O ELSE N/A.					
Ca23.07	IF (A.16/1.1 AND status=180) THEN O ELSE N/A.					
Ca23.08	IF (A.16/1.2 AND status=200) THEN M ELSE (IF A.16/1.2 THEN O ELSE N/A).					
Ca23.09	IF (A.16/1.2 AND (A.23/3 OR A.35/2)) THEN M ELSE (IF A.16/1.2 THEN O ELSE N/A).					
Ca23.10	IF (A.16/1.2 AND A.23/3) THEN M ELSE (IF A.16/1.2 THEN O ELSE N/A).					
Ca23.11	IF (A.16/1.2 AND status=300-699) THEN O ELSE N/A.					
Ca23.12	IF (A.16/1.1 AND status=300-699) THEN O ELSE N/A.					
Ca23.13	IF (A.16/1.2 AND status=407) THEN M ELSE IF ((A.16/1.2 AND status=401) THEN O ELSE N/A).					
Ca23.14	IF (A.16/1.1 AND status=407) THEN M ELSE IF ((A.16/1.1 AND status=401) THEN O ELSE N/A).					
Ca23.15	IF (A.16/1.2 AND status=18X-2XX) THEN O ELSE N/A.					
Ca23.16	IF (A.16/1.1 AND status=18X-2XX) THEN M ELSE N/A.					
Ca23.17	IF (A.16/1.2 AND status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.					
Ca23.18	IF (A.16/1.1 AND status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.					
Ca23.19	IF (A.16/1.2 AND status=420) THEN M ELSE N/A.					
Ca23.20	IF (A.16/1.1 AND status=420) THEN M ELSE N/A.					
Ca23.21	IF (A.16/1.2 AND status=401) THEN M ELSE IF ((A.16/1.2 AND status=407) THEN O ELSE N/A).					
Ca23.22	IF (A.16/1.1 AND status=401) THEN M ELSE IF ((A.16/1.1 AND status=407) THEN O ELSE N/A).					
Ca23.23	IF (A.16/1.2 AND status=2XX) THEN M ELSE N/A.					
Ca23.24	IF (A.16/1.1 AND status=2XX) THEN M ELSE N/A.					
NOTE: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

### A.6.3.2.4 re-INVITE parameters

#### A.6.3.2.4.1 re-INVITE request parameters

Table A.24: re-INVITE Request parameters

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	Request-Line					
1.1	Method	RFC 3261 [1], section 7.1	Ca24.01 (see note 1)	Ca24.02		
1.2	Request-URI	RFC 3261 [1], section 7.1	Ca24.01	Ca24.02		
1.3	SIP-Version	RFC 3261 [1], section 7.1	Ca24.01	Ca24.02 (see note 2)		
2	Headers					
2.1	Accept	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.2	Accept-Encoding	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.3	Accept-Language	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.4	Alert-Info	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.5	Allow	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.6	Authorization	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.7	Call-ID	RFC 3261 [1], section 20	Ca24.01	Ca24.02		
2.8	Call-Info	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.9	Contact	RFC 3261 [1], section 20	Ca24.01	Ca24.02		
2.10	Content-Disposition	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.11	Content-Encoding	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.12	Content-Language	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.13	Content-Length	RFC 3261 [1], section 20	Ca24.05	Ca24.02		
2.14	Content-Type	RFC 3261 [1], section 20	Ca24.06	Ca24.02		
2.15	CSeq	RFC 3261 [1], section 20	Ca24.01	Ca24.02		

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
2.16	Date	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.17	Expires	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.18	From	RFC 3261 [1], section 20	Ca24.01	Ca24.02		
2.19	In-Reply-To	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.20	Max-Forwards	RFC 3261 [1], section 20	Ca24.01	Ca24.04		
2.21	MIME-Version	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.22	Organization	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.23	Priority	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.24	Proxy-Authorization	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.25	Proxy-Require	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.26	Record-Route	RFC 3261 [1], section 20	Ca24.03	Ca24.02		
2.27	Reply-To	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.28	Require	RFC 3261 [1], section 20	Ca24.03	Ca24.02		
2.29	Route	RFC 3261 [1], section 20	Ca24.01	Ca24.02		
2.30	Server	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.31	Subject	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.32	Supported	RFC 3261 [1], section 20	Ca24.01	Ca24.02		
2.33	Timestamp	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.34	To	RFC 3261 [1], section 20	Ca24.01	Ca24.02		
2.35	User-Agent	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
2.36	Via	RFC 3261 [1], section 20	Ca24.01	Ca24.02		
2.37	Warning	RFC 3261 [1], section 20	Ca24.03	Ca24.04		
3	<b>Body</b>	RFC 3261 [1], section 7.4	Ca24.03	Ca24.02		
Ca24.01	IF A.16/2.1 THEN M ELSE N/A -- UAC procedures.					
Ca24.02	IF A.16/2.2 THEN M ELSE N/A -- UAS procedures.					
Ca24.03	IF A.16/2.1 THEN O ELSE N/A -- UAC procedures.					
Ca24.04	IF A.16/2.2 THEN O ELSE N/A -- UAS procedures.					
Ca24.05	IF (A.16/2.1 AND A.24/3 OR A.35/2) THEN M ELSE O.					
Ca24.05	IF (A.16/2.1 AND A.24/3) THEN M ELSE O.					
NOTE 1: Set to "INVITE" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

## A.6.3.2.4.2 re-INVITE response parameters

Table A.25: re-INVITE response parameters

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	Ca25.02 (see note)	Ca25.01		
1.2	Status-code	RFC 3261 [1], section 7.1	Ca25.02	Ca25.01		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	Ca25.02	Ca25.01		
2	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	Ca25.05	Ca25.03		
2.2	Accept-Encoding	RFC 3261 [1], section 20	Ca25.05	Ca25.03		
2.3	Accept-Language	RFC 3261 [1], section 20	Ca25.05	Ca25.03		
2.4	Alert-Info	RFC 3261 [1], section 20	Ca25.06	Ca25.07		
2.5	Allow	RFC 3261 [1], section 20	Ca25.02	Ca25.01		
2.6	Authentication-Info	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.7	Call-ID	RFC 3261 [1], section 20	Ca25.02	Ca25.01		
2.8	Call-Info	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.9	Contact	RFC 3261 [1], section 20	Ca25.08	Ca25.01		
2.10	Content-Disposition	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.11	Content-Encoding	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.12	Content-Language	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.13	Content-Length	RFC 3261 [1], section 20	Ca25.09	Ca25.01		
2.14	Content-Type	RFC 3261 [1], section 20	Ca25.10	Ca25.01		

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
2.15	CSeq	RFC 3261 [1], section 20	Ca25.02	Ca25.01		
2.16	Date	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.17	Error-Info	RFC 3261 [1], section 20	Ca25.11	Ca25.12		
2.18	Expires	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.19	From	RFC 3261 [1], section 20	Ca25.02	Ca25.01		
2.20	MIME-Version	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.21	Organization	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.22	Proxy-Authenticate	RFC 3261 [1], section 20	Ca25.13	Ca25.14		
2.23	Record-Route	RFC 3261 [1], section 20	Ca25.15	Ca25.16		
2.24	Reply-To	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.25	Require	RFC 3261 [1], section 20	Ca25.04	Ca25.01		
2.26	Retry-After	RFC 3261 [1], section 20	Ca25.17	Ca25.18		
2.27	Server	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.28	Supported	RFC 3261 [1], section 20	Ca25.23	Ca25.24		
2.29	Timestamp	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.30	To	RFC 3261 [1], section 20	Ca25.02	Ca25.01		
2.31	Unsupported	RFC 3261 [1], section 20	Ca25.19	Ca25.20		
2.32	User-Agent	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.33	Via	RFC 3261 [1], section 20	Ca25.02	Ca25.01		
2.34	Warning	RFC 3261 [1], section 20	Ca25.04	Ca25.03		
2.35	WWW-Authenticate	RFC 3261 [1], section 20	Ca25.21	Ca25.22		
3	<b>Body</b>	RFC 3261 [1], section 7.4	Ca25.04	Ca25.01		
Ca25.01	IF A.16/2.1 THEN M ELSE N/A -- UAC procedures.					
Ca25.02	IF A.16/2.2 THEN M ELSE N/A -- UAS procedures.					
Ca25.03	IF A.16/2.1 THEN O ELSE N/A -- UAC procedures.					
Ca25.04	IF A.16/2.2 THEN O ELSE N/A -- UAS procedures.					
Ca25.05	IF (A.16/2.2 AND status=415) THEN M ELSE (IF A.16/2.2 THEN O ELSE N/A).					
Ca25.06	IF (A.16/2.2 AND status=180) THEN O ELSE N/A.					
Ca25.07	IF (A.16/2.1 AND status=180) THEN O ELSE N/A.					
Ca25.08	IF (A.16/2.2 AND status=200) THEN M ELSE (IF A.16/2.2 THEN O ELSE N/A).					
Ca25.09	IF (A.16/2.2 AND (A.25/3 OR A.35/2)) THEN M ELSE (IF A.16/2.2 THEN O ELSE N/A).					
Ca25.10	IF (A.16/2.2 AND A.25/3) THEN M ELSE (IF A.16/2.2 THEN O ELSE N/A).					
Ca25.11	IF (A.16/2.2 AND status=300-699) THEN O ELSE N/A.					
Ca25.12	IF (A.16/2.1 AND status=300-699) THEN O ELSE N/A.					
Ca25.13	IF (A.16/2.2 AND status=407) THEN M ELSE IF ((A.16/2.2 AND status=401) THEN O ELSE N/A).					
Ca25.14	IF (A.16/2.1 AND status=407) THEN M ELSE IF ((A.16/2.1 AND status=401) THEN O ELSE N/A).					
Ca25.15	IF (A.16/2.2 AND status=18X-2XX) THEN O ELSE N/A.					
Ca25.16	IF (A.16/2.1 AND status=18X-2XX) THEN M ELSE N/A.					
Ca25.17	IF (A.16/2.2 AND status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.					
Ca25.18	IF (A.16/2.1 AND status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.					
Ca25.19	IF (A.16/2.2 AND status=420) THEN M ELSE N/A.					
Ca25.20	IF (A.16/2.1 AND status=420) THEN M ELSE N/A.					
Ca25.21	IF (A.16/2.2 AND status=401) THEN M ELSE IF ((A.16/1.2 AND status=407) THEN O ELSE N/A).					
Ca25.22	IF (A.16/2.1 AND status=401) THEN M ELSE IF ((A.16/1.1 AND status=407) THEN O ELSE N/A).					
Ca25.23	IF (A.16/2.2 AND status=2XX) THEN M ELSE N/A.					
Ca25.24	IF (A.16/2.1 AND status=2XX) THEN M ELSE N/A.					
NOTE: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

## A.6.3.2.5 ACK

## A.6.3.2.5.1 ACK request parameters

Table A.26: ACK Request parameters

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
<b>1</b>	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	Ca26.01 (see note 1)	Ca26.02		
1.2	Request-URI	RFC 3261 [1], section 7.1	Ca26.01	Ca26.02		
1.3	SIP-Version	RFC 3261 [1], section 7.1	Ca26.01	Ca26.02 (see note 2)		
<b>2</b>	<b>Headers</b>					
2.1	Authorization	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.2	Call-ID	RFC 3261 [1], section 20	Ca26.01	Ca26.02		
2.3	Contact	RFC 3261 [1], section 20	Ca26.03	Ca26.02		
2.4	Content-Disposition	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.5	Content-Encoding	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.6	Content-Language	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.7	Content-Length	RFC 3261 [1], section 20	Ca26.05	Ca26.02		
2.8	Content-Type	RFC 3261 [1], section 20	Ca26.06	Ca26.02		
2.9	CSeq	RFC 3261 [1], section 20	Ca26.01	Ca26.02		
2.10	Date	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.11	From	RFC 3261 [1], section 20	Ca26.01	Ca26.02		
2.12	Max-Forwards	RFC 3261 [1], section 20	Ca26.01	Ca26.02		
2.13	MIME-Version	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.14	Proxy-Authorization	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.15	Record-Route	RFC 3261 [1], section 20	Ca26.03	Ca26.02		
2.16	Route	RFC 3261 [1], section 20	Ca26.01	Ca26.02		
2.17	Timestamp	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.18	To	RFC 3261 [1], section 20	Ca26.01	Ca26.02		
2.19	User-Agent	RFC 3261 [1], section 20	Ca26.03	Ca26.04		
2.20	Via	RFC 3261 [1], section 20	Ca26.01	Ca26.02		
<b>3</b>	<b>Body</b>	RFC 3261 [1], section 7.4	Ca26.03	Ca26.02		
Ca26.01	IF A.16/1.1 THEN M ELSE N/A -- UAC procedures.					
Ca26.02	IF A.16/1.2 THEN M ELSE N/A -- UAS procedures.					
Ca26.03	IF A.16/1.1 THEN O ELSE N/A -- UAC procedures.					
Ca26.04	IF A.16/1.2 THEN O ELSE N/A -- UAS procedures.					
Ca26.05	IF (A.26/3 OR A.35/2) THEN M ELSE O.					
Ca26.05	IF A.26/3 THEN M ELSE O.					
NOTE 1: Set to "ACK" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

## A.6.3.2.6 BYE parameters

## A.6.3.2.6.1 BYE request parameters

Table A.27: BYE Request parameters

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
<b>1</b>	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	M (see note 1)	M		
1.2	Request-URI	RFC 3261 [1], section 7.1	M	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	M	M (see note 2)		



Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
<b>2</b>	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	O	O		
2.2	Accept-Encoding	RFC 3261 [1], section 20	O	O		
2.3	Accept-Language	RFC 3261 [1], section 20	O	O		
2.4	Allow	RFC 3261 [1], section 20	O	O		
2.5	Authorization	RFC 3261 [1], section 20	O	O		
2.6	Call-ID	RFC 3261 [1], section 20	M	M		
2.7	Content-Disposition	RFC 3261 [1], section 20	O	O		
2.8	Content-Encoding	RFC 3261 [1], section 20	O	O		
2.9	Content-Language	RFC 3261 [1], section 20	O	O		
2.10	Content-Length	RFC 3261 [1], section 20	Ca27.01	M		
2.11	Content-Type	RFC 3261 [1], section 20	Ca27.02	M		
2.12	CSeq	RFC 3261 [1], section 20	M	M		
2.13	Date	RFC 3261 [1], section 20	O	O		
2.14	From	RFC 3261 [1], section 20	M	M		
2.15	Max-Forwards	RFC 3261 [1], section 20	M	M		
2.16	MIME-Version	RFC 3261 [1], section 20	O	O		
2.17	Proxy-Authorization	RFC 3261 [1], section 20	O	O		
2.18	Proxy-Require	RFC 3261 [1], section 20	O	O		
2.19	Record-Route	RFC 3261 [1], section 20	O	M		
2.20	Require	RFC 3261 [1], section 20	O	M		
2.21	Route	RFC 3261 [1], section 20	M	M		
2.22	Server	RFC 3261 [1], section 20	O	O		
2.23	Supported	RFC 3261 [1], section 20	O	O		
2.24	Timestamp	RFC 3261 [1], section 20	O	O		
2.25	To	RFC 3261 [1], section 20	M	M		
2.26	User-Agent	RFC 3261 [1], section 20	O	O		
2.27	Via	RFC 3261 [1], section 20	M	M		
2.28	Warning	RFC 3261 [1], section 20	O	O		
<b>3</b>	<b>Body</b>	RFC 3261 [1], section 7.4	O	O		
Ca27.01 IF (A.27/3 OR A.35/2) THEN M ELSE O.						
Ca27.02 IF A.27/3 THEN M ELSE O.						
NOTE 1: Set to "BYE" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

## A.6.3.2.6.2 BYE response parameters

Table A.28: BYE response parameters

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
<b>1</b>	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	M (see note)	M		
1.2	Status-code	RFC 3261 [1], section 7.1	M	M		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	M	M		
<b>2</b>	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	O	O		
2.2	Accept-Encoding	RFC 3261 [1], section 20	O	O		
2.3	Accept-Language	RFC 3261 [1], section 20	O	O		
2.5	Allow	RFC 3261 [1], section 20	O	O		
2.6	Authentication-Info	RFC 3261 [1], section 20	Ca28.01	Ca28.01		
2.7	Call-ID	RFC 3261 [1], section 20	M	M		
2.8	Contact	RFC 3261 [1], section 20	Ca28.02	Ca28.02		
2.9	Content-Disposition	RFC 3261 [1], section 20	O	O		
2.10	Content-Encoding	RFC 3261 [1], section 20	O	O		
2.11	Content-Language	RFC 3261 [1], section 20	O	O		

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
2.12	Content-Length	RFC 3261 [1], section 20	Ca28.03	M		
2.13	Content-Type	RFC 3261 [1], section 20	Ca28.04	M		
2.14	CSeq	RFC 3261 [1], section 20	M	M		
2.15	Date	RFC 3261 [1], section 20	O	O		
2.16	Error-Info	RFC 3261 [1], section 20	Ca28.05	Ca28.05		
2.17	From	RFC 3261 [1], section 20	M	M		
2.18	MIME-Version	RFC 3261 [1], section 20	O	O		
2.19	Proxy-Authenticate	RFC 3261 [1], section 20	Ca28.06	Ca28.06		
2.20	Record-Route	RFC 3261 [1], section 20	Ca28.10	M		
2.21	Require	RFC 3261 [1], section 20	O	M		
2.22	Retry-After	RFC 3261 [1], section 20	Ca28.07	Ca28.07		
2.23	Server	RFC 3261 [1], section 20	O	O		
2.24	Supported	RFC 3261 [1], section 20	Ca28.08	Ca28.08		
2.25	Timestamp	RFC 3261 [1], section 20	O	O		
2.26	To	RFC 3261 [1], section 20	M	M		
2.27	Unsupported	RFC 3261 [1], section 20	Ca28.11	Ca28.11		
2.28	User-Agent	RFC 3261 [1], section 20	O	O		
2.29	Via	RFC 3261 [1], section 20	M	M		
2.30	Warning	RFC 3261 [1], section 20	O	O		
2.31	WWW-Authenticate	RFC 3261 [1], section 20	Ca28.09	Ca28.09		
3	<b>Body</b>	RFC 3261 [1], section 7.4	O	O		
Ca28.01	IF (status=180) THEN O ELSE N/A.					
Ca28.01	IF (status=485 OR status=3XX) THEN O ELSE N/A.					
Ca28.03	IF (A.28/3 OR A.35/2) THEN M ELSE O.					
Ca28.04	IF (A.28/4) THEN M ELSE O.					
Ca28.05	IF (status=300-699) THEN O ELSE N/A.					
Ca28.06	IF (status=407) THEN M ELSE(IF (status=401) THEN O ELSE N/A).					
Ca28.07	IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.					
Ca28.08	IF (status=2XX) THEN O ELSE N/A.					
Ca28.09	IF (status=401) THEN M ELSE(IF (status=407) THEN O ELSE N/A).					
Ca28.10	IF (status=2XX OR status=18X) THEN O ELSE N/A.					
Ca28.11	IF (status=420) THEN M ELSE N/A.					
NOTE:	To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".					
Comments:						

### A.6.3.2.7 CANCEL parameters

#### A.6.3.2.7.1 CANCEL request parameters

**Table A.29: CANCEL Request parameters**

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	M (see note 1)	M		
1.2	Request-URI	RFC 3261 [1], section 7.1	M	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	M	M (see note 2)		
2	<b>Headers</b>					
2.1	Authorization	RFC 3261 [1], section 20	O	O		
2.2	Call-ID	RFC 3261 [1], section 20	M	M		
2.3	Content-Length	RFC 3261 [1], section 20	Ca29.01	M		
2.4	CSeq	RFC 3261 [1], section 20	M	M		
2.5	Date	RFC 3261 [1], section 20	O	O		
2.6	From	RFC 3261 [1], section 20	M	M		
2.7	Max-Forwards	RFC 3261 [1], section 20	M	M		
2.8	Proxy-Require	RFC 3261 [1], section 20	X	X		

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
2.9	Record-Route	RFC 3261 [1], section 20	O	M		
2.10	Route	RFC 3261 [1], section 20	M	M		
2.11	Require	RFC 3261 [1], section 20	X	X		
2.12	Server	RFC 3261 [1], section 20	O	O		
2.13	Supported	RFC 3261 [1], section 20	O	O		
2.14	Timestamp	RFC 3261 [1], section 20	O	O		
2.15	To	RFC 3261 [1], section 20	M	M		
2.16	User-Agent	RFC 3261 [1], section 20	O	O		
2.17	Via	RFC 3261 [1], section 20	M	M		
2.18	Warning	RFC 3261 [1], section 20	O	O		
Ca29.01 IF A.35/2 THEN M ELSE O.						
NOTE 1: Set to "CANCEL" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

## A.6.3.2.7.2 CANCEL response parameters

Table A.30: CANCEL response parameters

Prerequisite: A.2/2 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
<b>1</b>	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	M (see note)	M		
1.2	Status-code	RFC 3261 [1], section 7.1	M	M		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	M	M		
<b>2</b>	<b>Headers</b>					
2.1	Call-ID	RFC 3261 [1], section 20	M	M		
2.2	Content-Length	RFC 3261 [1], section 20	Ca30.01	M		
2.3	CSeq	RFC 3261 [1], section 20	M	M		
2.4	Date	RFC 3261 [1], section 20	O	O		
2.5	Error-Info	RFC 3261 [1], section 20	Ca30.02	Ca30.02		
2.6	From	RFC 3261 [1], section 20	M	M		
2.7	Proxy-Authenticate	RFC 3261 [1], section 20	Ca30.03	Ca30.03		
2.8	Record-Route	RFC 3261 [1], section 20	Ca30.04	Ca30.04		
2.9	Require	RFC 3261 [1], section 20	X	X		
2.10	Retry-After	RFC 3261 [1], section 20	Ca30.05	Ca30.05		
2.11	Server	RFC 3261 [1], section 20	O	O		
2.12	Supported	RFC 3261 [1], section 20	Ca30.06	Ca30.06		
2.13	Timestamp	RFC 3261 [1], section 20	O	O		
2.14	To	RFC 3261 [1], section 20	M	M		
2.15	User-Agent	RFC 3261 [1], section 20	O	O		
2.16	Via	RFC 3261 [1], section 20	M	M		
2.17	Warning	RFC 3261 [1], section 20	O	O		
2.18	WWW-Authenticate	RFC 3261 [1], section 20	Ca30.07	Ca30.07		
Ca30.01 IF A.35/2 THEN M ELSE O.						
Ca30.02 IF (status=300-699) THEN O ELSE N/A.						
Ca30.03 IF (status=401) THEN O ELSE N/A.						
Ca30.04 IF (status=2XX OR status=18X) THEN O ELSE N/A.						
Ca30.05 IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.						
Ca30.06 IF (status=2XX) THEN O ELSE N/A.						
Ca30.07 IF (status=401) THEN M ELSE(IF (status=407) THEN O ELSE N/A).						
NOTE: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

### A.6.3.3 Call Control Security

#### A.6.3.3.1 Call Control Security capabilities

**Table A.31: Call Control Security capabilities**

Prerequisite: A.2/2 and A.1/1				
Item	Security capabilities	Reference	Status	Support
1	HTTP Authentication	RFC 3261 [1], sections 22 and 26.2.3	Ca31.01	
2	S/MIME	RFC 3261 [1], sections 23 and 26.2.4	O	
3	TLS	RFC 3261 [1], section 26.2.1	O	
Ca31.01 IF (A.31/3) THEN M ELSE O.				
Comments:				

#### A.6.3.3.2 HTTP parameters

**Table A.32: Access Authentication**

Prerequisite: A.31/1, A.2/2 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	Basic	RFC 2617 [3], section 2	X	
2	Digest	RFC 2617 [3], section 3	M	
Comments:				

**Table A.33: Proxy-Authenticate/Authenticate header**

Prerequisite: A.31/1, A.2/2 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	realm	RFC 2617 [3], section 3.2.1	M	
2	domain	RFC 2617 [3], section 3.2.1	O	
3	nonce	RFC 2617 [3], section 3.2.1	M	
4	opaque	RFC 2617 [3], section 3.2.1	O	
5	stale	RFC 2617 [3], section 3.2.1	O	
6	algorithm	RFC 2617 [3], section 3.2.1	O	
7	qop-options	RFC 2617 [3], section 3.2.1	O	
8	auth-param	RFC 2617 [3], section 3.2.1	O	
NOTE: If a UAC receives a qop-options header in an Authenticate then message-quop is mandatory.				
Comments:				

**Table A.34: Proxy- Authorization /Authorization header**

Prerequisite: A.31/1, A.2/2 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	username	RFC 2617 [3], section 3.2.2	M	
2	realm	RFC 2617 [3], section 3.2.2	M	
3	nonce	RFC 2617 [3], section 3.2.2	M	
4	digest-uri	RFC 2617 [3], section 3.2.2	M	
5	response	RFC 2617 [3], section 3.2.2	M	
6	algorithm	RFC 2617 [3], section 3.2.2	O	
7	cnonce	RFC 2617 [3], section 3.2.2	O	
8	opaque	RFC 2617 [3], section 3.2.2	O	
9	message-qop	RFC 2617 [3], section 3.2.2	O (see note)	
10	nonce-count	RFC 2617 [3], section 3.2.2	O	
11	auth-param	RFC 2617 [3], section 3.2.2	O	
NOTE: If a UAC receives a qop-options header in an Authenticate then message-quop is mandatory.				
Comments:				

### A.6.3.4 Call Control Transport

**Table A.35: Call Control transport**

Prerequisite: A.2/2 and A.1/1				
Item	Transport	Reference	Status	Support
1	UDP	RFC 3261 [1], section 18	M	
2	TCP	RFC 3261 [1], section 18	M	
3	Other transport	RFC 3261 [1], section 18	O	
Comments:				

### A.6.3.5 Call Control Addressing

#### A.6.3.5.1 URIs

**Table A.36: Call Control URI**

Prerequisite: A.2/1 and A.1/1				
Item	URI scheme	Reference	Status	Support
1	SIP	RFC 3261 [1], section 19	M	
2	SIPS	RFC 3261 [1], section 19	Ca36.01	
Ca36.01 IF (A.31/3) THEN M ELSE O.				
Comments:				

#### A.6.3.5.2 IP address

**Table A.37: Call Control IP Address**

Prerequisite: A.2/1 and A.1/1				
Item	IP Address format	Reference	Status	Support
1	IPv4	RFC 3261 [1], section 19	M	
2	IPv6	RFC 3261 [1], section 19	O	
Comments:				

### A.6.3.6 Call Control Timers

**Table A.38: Call Control Timer**

Prerequisite: A.2/2 and A.1/1				
Item	Timer	Reference	Status	Support
1	T1	RFC 3261 [1], sections 17.1, 17.2 and table 4	Ca38.01	
2	T2	RFC 3261 [1], section 17.1.2.1 and table 4	Ca38.02	
3	T4	RFC 3261 [1], section 17.1.2.2 and table 4	Ca38.01	
4	Timer A	RFC 3261 [1], section 17.1.1.1.2 and table 4	Ca38.03	
5	Timer B	RFC 3261 [1], section 17.1.1.1.2 and table 4	Ca38.04	
6	Timer D	RFC 3261 [1], section 17.1.1.1.2 and table 4	Ca38.05 (see note)	
7	Timer E	RFC 3261 [1], section 17.1.2.2 and table 4	Ca38.06	
8	Timer F	RFC 3261 [1], section 17.1.2.2 and table 4	Ca38.07	
9	Timer G	RFC 3261 [1], section 17.2.1 and table 4	Ca38.08	
10	Timer H	RFC 3261 [1], section 17.2.1 and table 4	Ca38.09	
11	Timer I	RFC 3261 [1], section 17.2.1 and table 4	M (see note)	
12	Timer J	RFC 3261 [1], section 17.2.2 and table 4	M (see note)	

Prerequisite: A.2/2 and A.1/1				
Item	Timer	Reference	Status	Support
13	Timer K	RFC 3261 [1], section 17.1.2.2 and table 4	M (see note)	
Ca38.01	IF (A.35/1) THEN M ELSE N/A -- UDP.			
Ca38.02	IF ((A.16/1.2 OR A.16/3.1 OR A.16/4.1) AND A.35/1) THEN M ELSE N/A -- INVITE response or Non-INVITE request plus UDP.			
Ca38.03	IF (A.16/1.1 AND A.35/1) THEN M ELSE N/A -- INVITE request plus UDP.			
Ca38.04	IF (A.16/1.1) THEN M ELSE N/A.			
Ca38.05	IF (A.16/1.1) THEN O ELSE N/A.			
Ca38.06	IF ((A.16/3.1 OR A.16/4.1) AND A.35/1) THEN M ELSE N/A -- Non-INVITE request plus UDP.			
Ca38.07	IF (A.16/3.1 OR A.16/4.1) THEN O ELSE N/A -- Non-INVITE request.			
Ca38.08	IF (A.16/1.2 AND A.35/1) THEN M ELSE N/A.			
Ca38.09	IF (A.16/1.2) THEN M ELSE N/A.			
NOTE:	Set to zero for reliable transport.			
Comments:				

## A.6.3.7 Call Control SDP description

### A.6.3.7.1 SDP types

Table A.39: SDP types

Prerequisite: A.2/2 and A.1/1				
Item	Types	Reference	Status	Support
<b>1</b>	<b>Session level description</b>			
1.1	v= (protocol version)	RFC 2327 [2], section 6	M	
1.2	o= (owner/creator and session identifier)	RFC 2327 [2], section 6	M	
1.3	s= (session name)	RFC 2327 [2], section 6	M	
1.4	i= (session information)	RFC 2327 [2], section 6	O	
1.5	u= (URI of description)	RFC 2327 [2], section 6	O	
1.6	e= (email address)	RFC 2327 [2], section 6	O	
1.7	p= (phone number)	RFC 2327 [2], section 6	O	
1.8	c= (connection information)	RFC 2327 [2], section 6	O	
1.9	b= (bandwidth information)	RFC 2327 [2], section 6	O	
1.10	z= (time zone adjustments)	RFC 2327 [2], section 6	O	
1.11	k= (encryption key)	RFC 2327 [2], section 6	O	
1.12	a= (zero or more session attribute lines)	RFC 2327 [2], section 6	O	
<b>2</b>	<b>Time description (one or more per description)</b>			
2.1	t= (time the session is active)	RFC 2327 [2], section 6	M	
2.2	r= (zero or more repeat times)	RFC 2327 [2], section 6	O	
<b>3</b>	<b>Media description (zero or more per description)</b>			
3.1	m= (media name and transport address)	RFC 2327 [2], section 6	M	
3.2	i= (media title)	RFC 2327 [2], section 6	O	
3.3	c= (connection information)	RFC 2327 [2], section 6	O	
3.4	b= (bandwidth information)	RFC 2327 [2], section 6	O	
3.5	k= (encryption key)	RFC 2327 [2], section 6	O	
3.6	a= (zero or more media attribute lines)	RFC 2327 [2], section 6	O	
Comments:	According to RFC 3264 [4], section 5, only one session description is allowed in SIP and parameter "s=" is always set to dash.			

## A.6.3.7.2 SDP types parameters

Table A.40: session identifier type (o=)

Prerequisite: A.2/2 and A.1/1				
Item	Parameters	Reference	Status	Support
1	Username	RFC 2327 [2], section 6	M	
2	Session id	RFC 2327 [2], section 6	M	
3	Version	RFC 2327 [2], section 6	M	
4	Network type	RFC 2327 [2], section 6	M	
5	Address type	RFC 2327 [2], section 6	M	
6	Address	RFC 2327 [2], section 6	M	
Comments:				

Table A.41: connection type (c=)

Prerequisite: A.2/2, A.1/1 and (A.39/1.8 OR A.39/3.3)				
Item	Parameters	Reference	Status	Support
1	Network type	RFC 2327 [2], section 6	M	
2	Address type	RFC 2327 [2], section 6	M	
3	Connection address	RFC 2327 [2], section 6	M	
Comments:				

Table A.42: bandwidth information type (b=)

Prerequisite: A.2/2, A.1/1 and (A.39/1.9 OR A.39/3.4)				
Item	Parameters	Reference	Status	Support
1	Modifier	RFC 2327 [2], section 6	M	
2	Bandwidth-value	RFC 2327 [2], section 6	M	
Comments:				

Table A.43: time zone adjustments type (z=)

Prerequisite: A.2/2, A.1/1 and A.39/1.10				
Item	Parameters	Reference	Status	Support
1	Adjustment time	RFC 2327 [2], section 6	M	
2	Offset	RFC 2327 [2], section 6	M	
Comments: <adjustment time> <offset> can be repeated.				

Table A.44: encryption key type (k=)

Prerequisite: A.2/2 and A.1/1 and A.39/1.11				
Item	Parameters	Reference	Status	Support
1	Method	RFC 2327 [2], section 6	M	
2	Encryption key	RFC 2327 [2], section 6	O	
Comments:				

Table A.45: media attribute lines (a=)

Prerequisite: A.2/2, A.1/1 and (A.39/1.12 OR A.39/3.6)				
Item	Parameters	Reference	Status	Support
1	Category (a=cat)	RFC 2327 [2], section 6	O	
2	Keywords (a=keywds)	RFC 2327 [2], section 6	O	
3	Name and version of tool (a=tool)	RFC 2327 [2], section 6	O	
4	Packet time (a=ptime)		O	
5	Maximum packet time (a=maxptime)	RFC 2327 [2], section 6	O	
6	Receive-only mode (a=recvonly)	RFC 2327 [2], section 6	O	
7	Send and receive mode (a=sendrecv)	RFC 2327 [2], section 6	O	
8	Send-only mode (a=sendonly)	RFC 2327 [2], section 6	O	
9	Whiteboard orientation (a=orient)	RFC 2327 [2], section 6	O	
10	Conference type (a=type)	RFC 2327 [2], section 6	O	
11	Character set (a=charset)	RFC 2327 [2], section 6	O	
12	Language tag (a=sdplang)	RFC 2327 [2], section 6	O	
13	Language tag (a=lang)	RFC 2327 [2], section 6	O	
14	Frame rate (a=framerate)	RFC 2327 [2], section 6	O	
15	Quality (a=quality)	RFC 2327 [2], section 6	O	
16	Format specific parameters (a=fmtp)	RFC 2327 [2], section 6	O	
17	Rtpmap attribute (a=rtpmap)	RFC 2327 [2], section 6	O	
Comments:				

Table A.46: time session type (t=)

Prerequisite: A.2/2 and A.1/1				
Item	Parameters	Reference	Status	Support
1	Start time	RFC 2327 [2], section 6	M	
2	Stop time	RFC 2327 [2], section 6	M	
Comments:				

Table A.47: repeat times type (r=)

Prerequisite: A.2/2, A.1/1 and A.39/2.2				
Item	Parameters	Reference	Status	Support
1	Repeat interval	RFC 2327 [2], section 6	M	
2	Active duration	RFC 2327 [2], section 6	M	
Comments:				

Table A.48: media Announcements type (m=)

Prerequisite: A.2/2, A.1/1 A.39/2.2				
Item	Parameters	Reference	Status	Support
1	Media	RFC 2327 [2], section 6	M	
2	Port	RFC 2327 [2], section 6	M	
3	Number of port	RFC 2327 [2], section 6	O	
4	Transport	RFC 2327 [2], section 6	M	
5	Fmt list	RFC 2327 [2], section 6	M	
Comments:				



## A.6.4 Querying for capabilities

This clause contains the PICS proforma tables related to the querying for capabilities operations for the UA that supports it.

### A.6.4.1 Querying for capabilities

**Table A.49: Querying for capabilities procedures**

Prerequisite: A.2/3 and A.1/1				
Item	procedures	Reference	Status	Support
1	Asking for capabilities	RFC 3261 [1], section 11	O	
2	Answering to a capabilities query	RFC 3261 [1], section 11	Ca49.01	
Ca49.01 IF A.16/1.2 THEN M ELSE O -- UA Server.				
Comments:				

### A.6.4.2 Querying for capabilities Messages

#### A.6.4.2.1 Querying for capabilities Requests

**Table A.50: Querying for capabilities Requests**

Prerequisite: A.2/3 and A.1/1						
Item	Method	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	OPTIONS	RFC 3261 [1], section 11	Ca50.01	M		
Ca50.01 IF A.49/1 THEN M ELSE N/A -- Client able to ask for capabilities.						
Comments:						

#### A.6.4.2.2 Querying for capabilities Responses

##### A.6.4.2.2.1 Querying for capabilities OPTIONS Responses

**Table A.51: Querying for capabilities OPTIONS Responses**

Prerequisite: A.2/3 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	1XX	RFC 3261 [1], section 21.1.1	X	Ca51.01		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	M	Ca51.01		
3	3XX					
3.1	300	RFC 3261 [1], section 21.3.1	O	Ca51.01		
3.2	301	RFC 3261 [1], section 21.3.2	O	Ca51.02		
3.3	302	RFC 3261 [1], section 21.3.3	O	Ca51.02		
3.4	305	RFC 3261 [1], section 21.3.4	O	Ca51.02		
3.5	380	RFC 3261 [1], section 21.3.5	O	Ca51.02		
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	O	Ca51.01		
4.2	401	RFC 3261 [1], section 21.4.2	O	Ca51.02		
4.3	402	RFC 3261 [1], section 21.4.3	O	Ca51.02		
4.4	403	RFC 3261 [1], section 21.4.4	O	Ca51.02		
4.5	404	RFC 3261 [1], section 21.4.5	O	Ca51.02		
4.6	405	RFC 3261 [1], section 21.4.6	X	Ca51.02		
4.7	406	RFC 3261 [1], section 21.4.7	O	Ca51.02		
4.8	407	RFC 3261 [1], section 21.4.8	N/A	Ca51.02		
4.9	408	RFC 3261 [1], section 21.4.9	O	Ca51.02		
4.10	410	RFC 3261 [1], section 21.4.10	O	Ca51.02		

Prerequisite: A.2/3 and A.1/1						
Item	Status code	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
4.11	413	RFC 3261 [1], section 21.4.11	O	Ca51.02		
4.12	414	RFC 3261 [1], section 21.4.12	O	Ca51.02		
4.13	415	RFC 3261 [1], section 21.4.13	O	Ca51.02		
4.14	416	RFC 3261 [1], section 21.4.14	O	Ca51.02		
4.15	420	RFC 3261 [1], section 21.4.15	O	Ca51.02		
4.16	421	RFC 3261 [1], section 21.4.16	O	Ca51.02		
4.17	423	RFC 3261 [1], section 21.4.17	O	Ca51.02		
4.18	480	RFC 3261 [1], section 21.4.18	O	Ca51.02		
4.19	481	RFC 3261 [1], section 21.4.19	O	Ca51.02		
4.20	482	RFC 3261 [1], section 21.4.20	O	Ca51.02		
4.21	484	RFC 3261 [1], section 21.4.22	O	Ca51.02		
4.22	485	RFC 3261 [1], section 21.4.23	O	Ca51.02		
4.23	486	RFC 3261 [1], section 21.4.24	O	Ca51.02		
4.24	487	RFC 3261 [1], section 21.4.25	O	Ca51.02		
4.25	488	RFC 3261 [1], section 21.4.26	O	Ca51.02		
4.26	491	RFC 3261 [1], section 21.4.27	O	Ca51.02		
4.27	493	RFC 3261 [1], section 21.4.28	Ca51.03	Ca51.03		
5	5XX					
5.1	500	RFC 3261 [1], section 21.5.1	O	Ca51.01		
5.2	501	RFC 3261 [1], section 21.5.2	O	Ca51.02		
5.3	502	RFC 3261 [1], section 21.5.3	N/A	Ca51.02		
5.4	503	RFC 3261 [1], section 21.5.4	O	Ca51.02		
5.5	504	RFC 3261 [1], section 21.5.5	O	Ca51.02		
5.6	505	RFC 3261 [1], section 21.5.6	O	Ca51.02		
5.7	513	RFC 3261 [1], section 21.5.7	O	Ca51.02		
6	6XX					
6.1	600	RFC 3261 [1], section 21.6.1	O	Ca51.01		
6.2	603	RFC 3261 [1], section 21.6.2	O	Ca51.02		
6.3	604	RFC 3261 [1], section 21.6.3	O	Ca51.02		
6.4	606	RFC 3261 [1], section 21.6.4	O	Ca51.02		
Ca51.01 IF A.49/1 THEN M ELSE N/A -- Client able to ask for capabilities.						
Ca51.02 IF A.49/1 THEN O ELSE N/A.						
Ca51.03 IF A.54/2 THEN M ELSE N/A -- S/MIME.						
Comments: In any case, according to RFC 3261 [1], section 8.1.3.2: "A UAC MUST treat any final response it does not recognize as being equivalent to the x00 response code of that class". According to RFC 3261 [1], section 8.2.6.1 a UAS should not generate a provisional response for a non-INVITE request.						

### A.6.4.2.3 OPTIONS parameters

#### A.6.4.2.3.1 OPTIONS request parameters

Table A.52: OPTIONS Request parameters

Prerequisite: A.2/3 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
1	Request-Line					
1.1	Method	RFC 3261 [1], section 7.1	Ca52.01 (see note 1)	M		
1.2	Request-URI	RFC 3261 [1], section 7.1	Ca52.01	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	Ca52.01 (see note 2)	M		
2	Headers					
2.1	Accept	RFC 3261 [1], section 20	Ca52.01	O		
2.2	Accept-Encoding	RFC 3261 [1], section 20	Ca52.02	O		
2.3	Accept-Language	RFC 3261 [1], section 20	Ca52.02	O		
2.4	Allow	RFC 3261 [1], section 20	Ca52.02	O		
2.5	Authorization	RFC 3261 [1], section 20	Ca52.03	Ca52.03		

Prerequisite: A.2/3 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
2.6	Call-ID	RFC 3261 [1], section 20	Ca52.01	M		
2.7	Call-Info	RFC 3261 [1], section 20	Ca52.02	O		
2.8	Contact	RFC 3261 [1], section 20	Ca52.02	O		
2.9	Content-Disposition	RFC 3261 [1], section 20	Ca52.02	O		
2.10	Content-Encoding	RFC 3261 [1], section 20	Ca52.02	O		
2.11	Content-Language	RFC 3261 [1], section 20	Ca52.02	O		
2.12	Content-Length	RFC 3261 [1], section 20	Ca52.04	M		
2.13	Content-Type	RFC 3261 [1], section 20	Ca52.05	M		
2.14	CSeq	RFC 3261 [1], section 20	Ca52.01	M		
2.15	Date	RFC 3261 [1], section 20	Ca52.02	O		
2.16	From	RFC 3261 [1], section 20	Ca52.01	M		
2.17	Max-Forwards	RFC 3261 [1], section 20	Ca52.01	M		
2.18	MIME-Version	RFC 3261 [1], section 20	Ca52.02	O		
2.19	Organization	RFC 3261 [1], section 20	Ca52.02	O		
2.20	Proxy-Authorization	RFC 3261 [1], section 20	Ca52.02	O		
2.21	Proxy-Require	RFC 3261 [1], section 20	Ca52.02	O		
2.22	Record-Route	RFC 3261 [1], section 20	Ca52.02	O		
2.23	Require	RFC 3261 [1], section 20	Ca52.02	O		
2.24	Route	RFC 3261 [1], section 20	Ca52.01	M		
2.25	Server	RFC 3261 [1], section 20	Ca52.02	O		
2.26	Supported	RFC 3261 [1], section 20	Ca52.02	O		
2.27	Timestamp	RFC 3261 [1], section 20	Ca52.02	O		
2.28	To	RFC 3261 [1], section 20	Ca52.01	M		
2.29	User-Agent	RFC 3261 [1], section 20	Ca52.02	O		
2.30	Via	RFC 3261 [1], section 20	Ca52.01	M		
2.31	Warning	RFC 3261 [1], section 20	Ca52.02	O		
3	<b>Body</b>	RFC 3261 [1], section 7.4	Ca52.02	O		
Ca52.01 IF A.49/1 THEN M ELSE N/A -- Client.						
Ca52.02 IF A. A.49/1 THEN O ELSE N/A.						
Ca52.03 IF A.54/1 THEN M ELSE N/A -- HTTP Authentication.						
Ca52.04 IF (A.52/3 OR A.58/2) THEN M ELSE O -- Body or TCP.						
Ca52.05 IF A.52/3 THEN M ELSE O.						
NOTE 1: Set to "OPTIONS" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

## A.6.4.2.3.2 OPTIONS response parameters

Table A.53: OPTIONS response parameters

Prerequisite: A.2/3 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
<b>1</b>	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	M (see note)	Ca53.01	M	
1.2	Status-code	RFC 3261 [1], section 7.1	M	Ca53.01	M	
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	M	Ca53.01	M	
<b>2</b>	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	M	Ca53.01		
2.2	Accept-Encoding	RFC 3261 [1], section 20	M	Ca53.01		
2.3	Accept-Language	RFC 3261 [1], section 20	M	Ca53.01		
2.4	Allow	RFC 3261 [1], section 20	M	Ca53.01		
2.5	Authentication-Info	RFC 3261 [1], section 20	Ca53.03	Ca53.02		
2.6	Call-ID	RFC 3261 [1], section 20	M	Ca53.01		
2.7	Call-Info	RFC 3261 [1], section 20	O	Ca53.02		
2.8	Contact	RFC 3261 [1], section 20	O	Ca53.02		
2.9	Content-Disposition	RFC 3261 [1], section 20	O	Ca53.02		
2.10	Content-Encoding	RFC 3261 [1], section 20	O	Ca53.02		
2.11	Content-Language	RFC 3261 [1], section 20	O	Ca53.02		

Prerequisite: A.2/3 and A.1/1						
Item	Parameters name	Reference	Status		Support	
			Sending	Receiving	Sending	Receiving
2.12	Content-Length	RFC 3261 [1], section 20	Ca53.04	Ca53.01		
2.13	Content-Type	RFC 3261 [1], section 20	Ca53.05	Ca53.01		
2.14	CSeq	RFC 3261 [1], section 20	M	Ca53.01		
2.15	Date	RFC 3261 [1], section 20	O	Ca53.02		
2.16	Error-Info	RFC 3261 [1], section 20	Ca53.06	Ca53.07		
2.17	From	RFC 3261 [1], section 20	M	Ca53.01		
2.18	MIME-Version	RFC 3261 [1], section 20	Ca53.04	Ca53.03		
2.19	Organization	RFC 3261 [1], section 20	Ca53.04	Ca53.03		
2.20	Proxy-Authenticate	RFC 3261 [1], section 20	Ca53.08	Ca53.09		
2.21	Record-Route	RFC 3261 [1], section 20	Ca53.10	Ca53.11		
2.22	Require	RFC 3261 [1], section 20	O	Ca53.02		
2.23	Retry-After	RFC 3261 [1], section 20	Ca53.12	Ca53.13		
2.24	Server	RFC 3261 [1], section 20	O	Ca53.02		
2.25	Supported	RFC 3261 [1], section 20	Ca53.14	Ca53.15		
2.26	Timestamp	RFC 3261 [1], section 20	O	Ca53.02		
2.27	To	RFC 3261 [1], section 20	M	Ca53.01		
2.28	Unsupported	RFC 3261 [1], section 20	Ca53.16	Ca53.17		
2.29	User-Agent	RFC 3261 [1], section 20	O	Ca53.02		
2.30	Via	RFC 3261 [1], section 20	M	Ca53.01		
2.31	Warning	RFC 3261 [1], section 20	O	Ca53.02		
2.32	WWW-Authenticate	RFC 3261 [1], section 20	Ca53.18	Ca53.19		
3	Body	RFC 3261 [1], section 7.4	O	Ca53.02		
Ca53.01 IF A.49/1 THEN M ELSE N/A -- Client.						
Ca53.02 IF A. A.49/1 THEN O ELSE N/A.						
Ca53.03 IF A.54/1 THEN M ELSE N/A -- HTTP Authentication.						
Ca53.04 IF (A.53/3 OR A.58/2) THEN M ELSE O --Body or TCP.						
Ca53.05 IF A.53/3 THEN M ELSE O -- Body.						
Ca53.06 IF (status=300-699) THEN O ELSE N/A.						
Ca53.07 IF (A.54/1 AND status=300-699) THEN O ELSE N/A.						
Ca53.08 IF (status=407) THEN M ELSE IF (status=401) THEN O ELSE N/A).						
Ca53.09 IF (A.54/1 AND status=407) THEN M ELSE IF ((A.54/1 AND status=401) THEN O ELSE N/A).						
Ca53.10 IF (status=18X-2XX) THEN O ELSE N/A.						
Ca53.11 IF (A.49/1 AND status=18X-2XX) THEN O ELSE N/A.						
Ca53.12 IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.						
Ca53.13 IF (A.49/1 AND status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.						
Ca53.14 IF (status=2XX) THEN M ELSE N/A.						
Ca53.15 IF (A.49/1 AND status=2XX) THEN M ELSE N/A.						
Ca53.16 IF (status=420) THEN M ELSE N/A.						
Ca53.17 IF (A.49/1 AND status=420) THEN M ELSE N/A.						
Ca53.18 IF (status=401) THEN M ELSE IF ((status=407) THEN O ELSE N/A).						
Ca53.19 IF (A.49/1 AND status=401) THEN M ELSE IF ((A.49/1 AND status=407) THEN O ELSE N/A).						
NOTE: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments:						

### A.6.4.3 Querying for capabilities Security

#### A.6.4.3.1 Querying for capabilities Security capabilities

Table A.54: Querying for capabilities Security capabilities

Prerequisite: A.2/3 and A.1/1				
Item	Security capabilities	Reference	Status	Support
1	HTTP Authentication	RFC 3261 [1], sections 22 and 26.2.3	Ca54.01	
2	S/MIME	RFC 3261 [1], sections 23 and 26.2.4	O	
3	TLS	RFC 3261 [1], section 26.2.1	O	
Ca54.01 IF (A.54/3) THEN M ELSE O.				
Comments:				

## A.6.4.3.2 HTTP parameters

Table A.55: Access Authentication

Prerequisite: A.54/1, A.2/3 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	Basic	RFC 2617 [3], section 2	X	
2	Digest	RFC 2617 [3], section 3	M	
Comments:				

Table A.56: Authenticate header

Prerequisite: A.54/1, A.2/3 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	realm	RFC 2617 [3], section 3.2.1	M	
2	domain	RFC 2617 [3], section 3.2.1	O	
3	nonce	RFC 2617 [3], section 3.2.1	M	
4	opaque	RFC 2617 [3], section 3.2.1	O	
5	stale	RFC 2617 [3], section 3.2.1	O	
6	algorithm	RFC 2617 [3], section 3.2.1	O	
7	qop-options	RFC 2617 [3], section 3.2.1	O	
8	auth-param	RFC 2617 [3], section 3.2.1	O	
NOTE: If a UAC receives a qop-options header in an Authenticate then message-quop is mandatory.				
Comments:				

Table A.57: Authorization header

Prerequisite: A.54/1, A.2/3 and A.1/1				
Item	Parameters name	Reference	Status	Support
1	username	RFC 2617 [3], section 3.2.2	M	
2	realm	RFC 2617 [3], section 3.2.2	M	
3	nonce	RFC 2617 [3], section 3.2.2	M	
4	digest-uri	RFC 2617 [3], section 3.2.2	M	
5	response	RFC 2617 [3], section 3.2.2	M	
6	algorithm	RFC 2617 [3], section 3.2.2	O	
7	cnonce	RFC 2617 [3], section 3.2.2	O	
8	opaque	RFC 2617 [3], section 3.2.2	O	
9	message-qop	RFC 2617 [3], section 3.2.2	O (see note)	
10	nonce-count	RFC 2617 [3], section 3.2.2	O	
11	auth-param	RFC 2617 [3], section 3.2.2	O	
NOTE: If a UAC receives a qop-options header in an Authenticate then message-quop is mandatory.				
Comments:				

## A.6.4.4 Querying for capabilities transport

Table A.58: Querying for capabilities transport

Prerequisite: A.2/3 and A.1/1				
Item	Transport	Reference	Status	Support
1	UDP	RFC 3261 [1], section 18	M	
2	TCP	RFC 3261 [1], section 18	O	
3	Other transport	RFC 3261 [1], section 18	O	
Comments:				

## A.6.4.5 Querying for capabilities Addressing

### A.6.4.5.1 URIs

**Table A.59: Call Control URI**

Prerequisite: A.2/3 and A.1/1				
Item	URI scheme	Reference	Status	Support
1	SIP	RFC 3261 [1], section 19	M	
2	SIPS	RFC 3261 [1], section 19	Ca59.01	
Ca59.01 IF (A.31/3) THEN M ELSE O.				
Comments:				

### A.6.4.5.2 IP address

**Table A.60: Call Control IP Address**

Prerequisite: A.2/3 and A.1/1				
Item	IP Address format	Reference	Status	Support
1	IPv4	RFC 3261 [1], section 19	M	
2	IPv6	RFC 3261 [1], section 19	O	
Comments:				

## A.6.4.6 Querying for capabilities Timers

**Table A.61: Querying for capabilities Timer**

Prerequisite: A.2/3 and A.1/1				
Item	Timer	Reference	Status	Support
1	T1	RFC 3261 [1], section 17.1.2.1 and table 4	Ca61.01	
2	T2	RFC 3261 [1], section 17.1.2.1 and table 4	Ca61.01	
3	T4	RFC 3261 [1], section 17.1.2.2 and table 4	Ca61.01	
4	Timer E	RFC 3261 [1], section 17.1.2.2 and table 4	Ca61.01	
5	Timer F	RFC 3261 [1], section 17.1.2.2 and table 4	O	
6	Timer J	RFC 3261 [1], section 17.2.2 and table 4	M (see note)	
7	Timer K	RFC 3261 [1], section 17.1.2.2 and table 4	M (see note)	
Ca61.01 IF A.58/1 THEN M ELSE X.				
NOTE: set to zero for reliable transport.				
Comments:				

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## A.7 Registrar

This clause contains the PICS proforma tables related to the SIP Registrar.

### A.7.1 Services

**Table A.62: Services**

Prerequisite: A.1/1				
Item	Services	Reference	Status	Support
1	Registration	RFC 3261 [1], section 10	M	
Comments:				

## A.7.2 Registration service

This clause contains the PICS proforma tables related to the registration operations for the Registrar server.

### A.7.2.1 Registration procedures

**Table A.63: Registration procedures**

Prerequisite: A.1/2				
Item	procedures	Reference	Status	Support
1	Maintaining Bindings	RFC 3261 [1], section 10.3	M	
2	Ordering contacts	RFC 3261 [1], section 10.2.1.2	O	
3	REGISTER redirection	RFC 3261 [1], section 10.3	O	
4	Unicast Registration	RFC 3261 [1], section 10.3	Oa63.01	
5	Multicast Registration	RFC 3261 [1], section 10.3	Oa63.01	
6	Third party Registration	RFC 3261 [1], sections 10.3 and 10.2	O	
Oa63.01 One at least shall be supported.				
Comments:				

### A.7.2.2 Registration Messages

#### A.7.2.2.1 Registration Requests

**Table A.64: Registration Request**

Prerequisite: A.1/2				
Item	Method	Reference	Status receiving	Support
1	REGISTER	RFC 3261 [1], section 10.3	M	
Comments:				

#### A.7.2.2.2 Registration Responses

**Table A.65: Registration Responses**

Prerequisite: A.1/2				
Item	Status code	Reference	Status sending	Support
1	1XX	RFC 3261 [1], sections 21.1 and 8.1.3.2	X	
2	2XX			
2.1	200	RFC 3261 [1], section 21.2	M	
3	3XX			
3.1	300	RFC 3261 [1], section 21.3.1	O	
3.2	301	RFC 3261 [1], section 21.3.2	O	
3.3	302	RFC 3261 [1], sections 21.3.3 and 10.3	O	
4	4XX			
4.1	400	RFC 3261 [1], section 21.4.1	M	
4.2	401	RFC 3261 [1], section 21.4.2	O	
4.3	403	RFC 3261 [1], sections 21.4.4 and 10.3	M	
4.4	404	RFC 3261 [1], section 21.4.5	M	
4.5	406	RFC 3261 [1], section 21.4.7	O	
4.6	407	RFC 3261 [1], section 21.4.8	O	
4.7	423	RFC 3261 [1], sections 21.4.17 and 10.2.8	O	
5	5XX			
5.1	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	M	
5.2	503	RFC 3261 [1], section 21.5.4	O	
6	6XX	RFC 3261 [1], section 21.6	X	
Comments: According to RFC 3261 [1], section 8.2.6.1, the registrar should not send provisional response. According to RFC 3261 [1], section 10.3, a Registrar must not generate 6xx response.				

## A.7.2.2.3 REGISTER parameters

## A.7.2.2.3.1 REGISTER request parameters

Table A.66: REGISTER Request parameters

Prerequisite: A.1/2				
Item	Parameters name	Reference	Status receiving	Support
<b>1</b>	<b>Request-Line</b>			
1.1	Method	RFC 3261 [1], section 7.1	M (see note 1)	
1.2	Request-URI	RFC 3261 [1], section 7.1	M	
1.3	SIP-Version	RFC 3261 [1], section 7.1	M (see note 2)	
<b>2</b>	<b>Headers</b>			
2.1	Accept	RFC 3261 [1], section 20	O	
2.2	Accept-Encoding	RFC 3261 [1], section 20	O	
2.3	Accept-Language	RFC 3261 [1], section 20	O	
2.4	Allow	RFC 3261 [1], section 20	O	
2.5	Authorization	RFC 3261 [1], section 20	Oa66.01	
2.6	Call-ID	RFC 3261 [1], section 20	M	
2.7	Call-Info	RFC 3261 [1], section 20	O	
2.8	Contact	RFC 3261 [1], section 20	M	
2.9	Content-Disposition	RFC 3261 [1], section 20	O	
2.10	Content-Encoding	RFC 3261 [1], section 20	O	
2.11	Content-Language	RFC 3261 [1], section 20	O	
2.12	Content-Length	RFC 3261 [1], section 20	Ca66.01	
2.13	Content-Type	RFC 3261 [1], section 20	Ca66.02	
2.14	CSeq	RFC 3261 [1], section 20	M	
2.15	Date	RFC 3261 [1], section 20	O	
2.16	Expires	RFC 3261 [1], section 20	M	
2.17	From	RFC 3261 [1], section 20	M	
2.18	Max-Forwards	RFC 3261 [1], section 20	O	
2.19	MIME-Version	RFC 3261 [1], section 20	O	
2.20	Organization	RFC 3261 [1], section 20	O	
2.21	Proxy-Authorization	RFC 3261 [1], section 20	Oa66.01	
2.22	Poxy-Require	RFC 3261 [1], section 20	O	
2.23	Require	RFC 3261 [1], section 20	M	
2.24	Route	RFC 3261 [1], section 20	M	
2.25	Server	RFC 3261 [1], section 20	O	
2.26	Supported	RFC 3261 [1], section 20	O	
2.27	Timestamp	RFC 3261 [1], section 20	O	
2.28	To	RFC 3261 [1], section 20	M	
2.29	User-Agent	RFC 3261 [1], section 20	O	
2.30	Via	RFC 3261 [1], section 20	M	
2.29	Warning	RFC 3261 [1], section 20	O	
<b>3</b>	<b>Body</b>	RFC 3261 [1], section 7.4	O	
Oa66.01 IF (A.68/1) THEN one at least shall be supported.				
Ca66.01 IF (A.72/2 OR A.66/3) THEN M ELSE O.				
Ca66.02 IF (A.66/3) THEN M ELSE O.				
NOTE 1: Set to "REGISTER" value in this case.				
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".				
Comments:				



## A.7.2.2.3.2 REGISTER response parameters

Table A.67: REGISTER Response parameters

Prerequisite: A.1/2				
Item	Parameters name	Reference	Status sending	Support
<b>1</b>	<b>Status-line</b>			
1.1	SIP-Version	RFC 3261 [1], section 7.1	M (see note 1)	
1.2	Status-Code	RFC 3261 [1], section 7.1	M (see note 2)	
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	M	
<b>2</b>	<b>Headers</b>			
2.1	Accept	RFC 3261 [1], section 20	O	
2.2	Accept-Encoding	RFC 3261 [1], section 20	O	
2.3	Accept-Language	RFC 3261 [1], section 20	O	
2.4	Allow	RFC 3261 [1], section 20	Ca67.01	
2.5	Authentication-Info	RFC 3261 [1], section 20	O	
2.6	Call-ID	RFC 3261 [1], section 20	M	
2.7	Call-Info	RFC 3261 [1], section 20	O	
2.8	Contact	RFC 3261 [1], section 20	M	
2.9	Content-Disposition	RFC 3261 [1], section 20	O	
2.10	Content-Encoding	RFC 3261 [1], section 20	Ca67.11	
2.11	Content-Language	RFC 3261 [1], section 20	O	
2.12	Content-Length	RFC 3261 [1], section 20	Ca67.02	
2.13	Content-Type	RFC 3261 [1], section 20	Ca67.03	
2.14	CSeq	RFC 3261 [1], section 20	M	
2.15	Date	RFC 3261 [1], section 20	O	
2.16	Error-Info	RFC 3261 [1], section 20	Ca67.04	
2.17	Expires	RFC 3261 [1], section 20	O	
2.18	From	RFC 3261 [1], section 20	M	
2.19	Min-Expires	RFC 3261 [1], section 20	Ca67.05	
2.20	MIME-Version	RFC 3261 [1], section 20	O	
2.21	Organization	RFC 3261 [1], section 20	O	
2.22	Proxy-Authenticate	RFC 3261 [1], section 20	Ca67.06	
2.23	Require	RFC 3261 [1], section 20	M	
2.24	Retry-After	RFC 3261 [1], section 20	Ca67.07	
2.25	Server	RFC 3261 [1], section 20	O	
2.26	Supported	RFC 3261 [1], section 20	Ca67.08	
2.27	Timestamp	RFC 3261 [1], section 20	O	
2.28	To	RFC 3261 [1], section 20	M	
2.29	Unsupported	RFC 3261 [1], section 20	Ca67.09	
2.30	User-Agent	RFC 3261 [1], section 20	O	
2.31	Via	RFC 3261 [1], section 20	M	
2.32	Warning	RFC 3261 [1], section 20	O	
2.33	WWW-Authenticate	RFC 3261 [1], section 20	Ca67.10	
<b>3</b>	<b>Body</b>			
Ca67.01	IF (status = 405) THEN M ELSE O.			
Ca67.02	IF (A.72/2 OR A.67/3) THEN M ELSE O.			
Ca67.03	IF (A.67/3) THEN M ELSE I.			
Ca67.04	IF (status=300-699) THEN O ELSE X.			
Ca67.05	IF (A.65/4.7) THEN M ELSE X.			
Ca67.06	IF (status= 407) THEN M ELSE (IF (status= 401) THEN O ELSE X).			
Ca67.07	IF (status=( 404,413,480,486,500,503,600,603)) THEN O ELSE X.			
Ca67.08	IF (status= 2XX) THEN O ELSE X.			
Ca67.09	IF (status= 420) THEN M ELSE X.			
Ca67.10	IF (status= 401) THEN M ELSE (IF (status= 407) THEN O ELSE X).			
Ca67.11	IF (A.67/3) THEN O ELSE X.			
NOTE 1: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".				
NOTE 2: Cannot be set to 6XX or 1XX.				
Comments:				

## A.7.2.3 Registration Security

### A.7.2.3.1 Registration Security capabilities

**Table A.68: Registration Security capabilities**

Prerequisite: A.1/2				
Item	Security capabilities	Reference	Status	Support
1	HTTP Authentication	RFC 3261 [1], sections 22 and 26.2.3	M	
2	S/MIME	RFC 3261 [1], sections 23 and 26.2.4	O	
3	TLS	RFC 3261 [1], section 26.3.1	M	
Comments:				

### A.7.2.3.2 HTTP parameters

**Table A.69: Access Authentication**

Prerequisite: A.1/2 and A.68/1				
Item	Parameters name	Reference	Status	Support
1	Basic	RFC 2617 [3], section 2	X	
2	Digest	RFC 2617 [3], section 3	M	
Comments:				

**Table A.70: Authenticate header**

Prerequisite: A.1/2 and A.68/1				
Item	Parameters name	Reference	Status	Support
1	realm	RFC 2617 [3], section 3.2.1	M	
2	domain	RFC 2617 [3], section 3.2.1	O	
3	nonce	RFC 2617 [3], section 3.2.1	M	
4	opaque	RFC 2617 [3], section 3.2.1	O	
5	stale	RFC 2617 [3], section 3.2.1	O	
6	algorithm	RFC 2617 [3], section 3.2.1	O	
7	qop-options	RFC 2617 [3], section 3.2.1	O	
8	auth-param	RFC 2617 [3], section 3.2.1	O	
Comments:				

**Table A.71: Authorization header**

Prerequisite: A.1/2 and A.68/1				
Item	Parameters name	Reference	Status	Support
1	username	RFC 2617 [3], section 3.2.2	M	
2	realm	RFC 2617 [3], section 3.2.2	M	
3	nonce	RFC 2617 [3], section 3.2.2	M	
4	digest-uri	RFC 2617 [3], section 3.2.2	M	
5	response	RFC 2617 [3], section 3.2.2	M	
6	algorithm	RFC 2617 [3], section 3.2.2	O	
7	cnonce	RFC 2617 [3], section 3.2.2	O	
8	opaque	RFC 2617 [3], section 3.2.2	O	
9	message-qop	RFC 2617 [3], section 3.2.2	O	
10	nonce-count	RFC 2617 [3], section 3.2.2	O	
11	auth-param	RFC 2617 [3], section 3.2.2	O	
Comments:				

## A.7.2.4 Registration Transport

**Table A.72: Registration transport**

Prerequisite: A.1/2				
Item	Transport	Reference	Status	Support
1	UDP	RFC 3261 [1], section 18	M	
2	TCP	RFC 3261 [1], section 18	O	
3	Other transport	RFC 3261 [1], section 18	O	
Comments:				

## A.7.2.5 Registration Addressing

### A.7.2.5.1 URIs

**Table A.73: Registration URI**

Prerequisite: A.1/2				
Item	URI scheme	Reference	Status	Support
1	SIP	RFC 3261 [1], section 19	M	
2	SIPS	RFC 3261 [1], section 19	M	
Comments:				

### A.7.2.5.2 IP address

**Table A.74: Registration IP Address**

Prerequisite: A.1/2				
Item	IP Address format	Reference	Status	Support
1	IPv4	RFC 3261 [1], section 19	M	
2	IPv6	RFC 3261 [1], section 19	O	
Comments:				

## A.7.2.6 Registration Timers

**Table A.75: Registration Timers**

Prerequisite: A.1/2				
Item	Timer	Reference	Status	Support
6	Timer J	RFC 3261 [1], section 17.2.2 and table 4	M (see note)	
NOTE: Set to zero for reliable transport.				
Comments:				

## A.8 Proxy

This clause contains the PICS proforma tables related to the SIP Proxy.

### A.8.1 Services

**Table A.76: Services**

Prerequisite: A.1/3				
Item	Services	Reference	Status	Support
1	Call Control	RFC 3261 [1], sections 16 and 8	M	
2	Querying for capabilities	RFC 3261 [1], sections 11 and 16	M	
Comments:				

### A.8.2 Call Control service

This clause contains the PICS proforma tables related to the call control operations for a proxy.

#### A.8.2.1 Call Control procedures

**Table A.77: Call Control procedures**

Prerequisite: A.1/3				
Item	Procedures	Reference	Status	Support
1	Establishment of a session			
1.1	Stateless procedures	RFC 3261 [1], section 16	Oa77.01	
1.2	Statefull procedures	RFC 3261 [1], sections 16 and 8.2	Oa77.01	
1.3	Based on Location server messages	RFC 3261 [1], sections 16 and 8.2	O (see note)	
1.4	Forking procedures	RFC 3261 [1], section 16	O	
2	Modifying an existing session			
2.1	Stateless procedures	RFC 3261 [1], section 16	O	
2.2	Statefull procedures	RFC 3261 [1], sections 16 and 8.2	O	
3	Termination of a session with BYE			
3.1	Stateless procedures	RFC 3261 [1], section 16	Oa77.02	
3.2	Statefull procedures	RFC 3261 [1], sections 16 and 8.2	Oa77.02	
4	Cancellation of a session			
4.1	Stateless procedures	RFC 3261 [1], section 16	Oa77.03	
4.2	Statefull procedures	RFC 3261 [1], sections 16 and 8.2	Oa77.03	
Oa77.01	At least, one of those items shall be supported.			
Oa77.02	At least, one of those items shall be supported.			
Oa77.03	At least, one of those items shall be supported.			
NOTE:	This procedure does not concern forwarding of the 3XX response but when the proxy forwards the request according to the contact(s) get in the 3XX response.			
Comments:				

## A.8.2.2 Call Control Messages

### A.8.2.2.1 Call Control Requests

**Table A.78: Call Control Requests**

Prerequisite: A.1/3						
Item	Method	Reference	Status		Support	
			Forwarding	Sending	Forwarding	Sending
1	INVITE	RFC 3261 [1], section 13	M	Ca78.03		
2	re-INVITE	RFC 3261 [1], section 14	M	N/A		
3	ACK	RFC 3261 [1], section 8	M	Ca78.01		
4	BYE	RFC 3261 [1], section 15	M	N/A		
5	CANCEL	RFC 3261 [1], section 9	M	Ca78.02		
Ca78.01 IF A.77/1.2 THEN M ELSE N/A -- Statefull.						
Ca78.02 IF A.77/4.2 THEN M ELSE N/A -- Statefull Cancellation.						
Ca78.03 IF A.77/1.3 THEN M ELSE N/A -- Based on Location message.						
Comments:						

### A.8.2.2.2 Call Control Responses

#### A.8.2.2.2.1 Call Control INVITE Responses

**Table A.79: Call Control INVITE Responses**

Prerequisite: A.1/3						
Item	Status code	Reference	Status		Support	
			Sending	Forwarding	Sending	Forwarding
1	1XX					
1.1	100	RFC 3261 [1], sections 21.1.1 and 16	Ca79.01	Ca79.02		
1.2	180	RFC 3261 [1], sections 21.1.2 and 16	Ca79.03	M		
1.3	181	RFC 3261 [1], sections 21.1.3 and 16	Ca79.03	M		
1.4	182	RFC 3261 [1], sections 21.1.4 and 16	Ca79.03	M		
1.5	183	RFC 3261 [1], sections 21.1.5 and 16	Ca79.03	M		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	N/A	M		
3	3XX					
3.1	300	RFC 3261 [1], sections 21.3.1 and 16	Ca79.07	Ca79.04		
3.2	301	RFC 3261 [1], sections 21.3.2 and 16	Ca79.07	Ca79.04		
3.3	302	RFC 3261 [1], sections 21.3.3 and 16	Ca79.07	Ca79.04		
3.4	305	RFC 3261 [1], sections 21.3.4 and 16	N/A	Ca79.04		
3.5	380	RFC 3261 [1], sections 21.3.5 and 16	Ca79.07	Ca79.04		
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	M	M		
4.2	401	RFC 3261 [1], section 21.4.2	X	M		
4.3	402	RFC 3261 [1], section 21.4.3	N/A	M		
4.4	403	RFC 3261 [1], section 21.4.4	Ca79.03	M		
4.5	404	RFC 3261 [1], section 21.4.5	M	M		
4.6	405	RFC 3261 [1], section 21.4.6	X	M		
4.7	406	RFC 3261 [1], section 21.4.7	Ca79.03	M		
4.8	407	RFC 3261 [1], section 21.4.8	Ca79.05	M		
4.9	408	RFC 3261 [1], section 21.4.9	Ca79.01	M		
4.10	410	RFC 3261 [1], section 21.4.10	Ca79.03	M		
4.11	413	RFC 3261 [1], section 21.4.11	Ca79.03	M		
4.12	414	RFC 3261 [1], section 21.4.12	Ca79.03	M		
4.13	415	RFC 3261 [1], section 21.4.13	Ca79.01	M		
4.14	416	RFC 3261 [1], section 21.4.14	O	M		
4.15	420	RFC 3261 [1], section 21.4.15	M	M		
4.16	421	RFC 3261 [1], section 21.4.16	Ca79.03	M		
4.17	480	RFC 3261 [1], section 21.4.18	O	M		
4.18	481	RFC 3261 [1], section 21.4.19	Ca79.03	M		

Prerequisite: A.1/3						
Item	Status code	Reference	Status		Support	
			Sending	Forwarding	Sending	Forwarding
4.19	482	RFC 3261 [1], section 21.4.20	O	M		
4.20	483	RFC 3261 [1], section 21.4.21	M	M		
4.21	484	RFC 3261 [1], section 21.4.22	O	M		
4.22	485	RFC 3261 [1], section 21.4.23	O	M		
4.23	486	RFC 3261 [1], section 21.4.24	Ca79.03	M		
4.24	487	RFC 3261 [1], section 21.4.25	Ca79.03	M		
4.25	488	RFC 3261 [1], section 21.4.26	Ca79.03	M		
4.26	491	RFC 3261 [1], section 21.4.27	Ca79.03	M		
4.27	493	RFC 3261 [1], section 21.4.28	Ca79.06	M		
5	5XX					
5.1	500	RFC 3261 [1], section 21.5.1	Ca79.01	M		
5.2	501	RFC 3261 [1], section 21.5.2	X	M		
5.3	502	RFC 3261 [1], section 21.5.3	O	M		
5.4	503	RFC 3261 [1], section 21.5.4	M	M		
5.5	504	RFC 3261 [1], section 21.5.5	Ca79.03	M		
5.6	505	RFC 3261 [1], section 21.5.6	Ca79.03	M		
5.7	513	RFC 3261 [1], section 21.5.7	Ca79.03	M		
6	6XX					
6.1	600	RFC 3261 [1], section 21.6.1	Ca79.03	M		
6.2	603	RFC 3261 [1], section 21.6.2	Ca79.03	M		
6.3	604	RFC 3261 [1], section 21.6.3	Ca79.03	M		
6.4	606	RFC 3261 [1], section 21.6.4	Ca79.03	M		
Ca79.01 IF A.77/1.2 THEN M ELSE N/A -- Statefull.						
Ca79.02 IF A.77/1.2 THEN X ELSE M -- Statefull.						
Ca79.03 IF A.77/1.2 THEN O ELSE N/A -- Statefull.						
Ca79.04 IF A.77/1.3 THEN N/A ELSE M -- Location service.						
Ca79.05 IF A.92/1.3 THEN M ELSE N/A -- HTTP Authentication.						
Ca79.06 IF A.92/2 THEN M ELSE N/A.						
Ca79.07 IF A.77/1.3 THEN N/A ELSE O --Based on Location message.						
Comments:						

## A.8.2.2.2 Call Control re-INVITE Responses

Table A.80: Call Control re-INVITE Responses

Prerequisite: A.1/3						
Item	Status code	Reference	Status		Support	
			Sending	Forwarding	Sending	Forwarding
1	1XX					
1.1	100	RFC 3261 [1], sections 21.1.1 and 16	Ca80.01	Ca80.02		
1.2	180	RFC 3261 [1], sections 21.1.2 and 16	N/A	M		
1.3	181	RFC 3261 [1], sections 21.1.3 and 16	Ca80.03	M		
1.4	182	RFC 3261 [1], sections 21.1.4 and 16	Ca80.03	M		
1.5	183	RFC 3261 [1], sections 21.1.5 and 16	Ca80.03	M		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	N/A	M		
3	3XX					
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	M	M		
4.2	401	RFC 3261 [1], section 21.4.2	X	M		
4.3	402	RFC 3261 [1], section 21.4.3	N/A	M		
4.4	403	RFC 3261 [1], section 21.4.4	Ca80.03	M		
4.5	404	RFC 3261 [1], section 21.4.5	M	M		
4.6	405	RFC 3261 [1], section 21.4.6	X	M		
4.7	406	RFC 3261 [1], section 21.4.7	Ca80.03	M		
4.8	407	RFC 3261 [1], section 21.4.8	Ca80.05	M		
4.9	408	RFC 3261 [1], section 21.4.9	Ca80.01	M		
4.10	410	RFC 3261 [1], section 21.4.10	Ca80.03	M		
4.11	413	RFC 3261 [1], section 21.4.11	Ca80.03	M		
4.12	414	RFC 3261 [1], section 21.4.12	Ca80.03	M		

Prerequisite: A.1/3						
Item	Status code	Reference	Status		Support	
			Sending	Forwarding	Sending	Forwarding
4.13	415	RFC 3261 [1], section 21.4.13	Ca80.01	M		
4.14	416	RFC 3261 [1], section 21.4.14	O	M		
4.15	420	RFC 3261 [1], section 21.4.15	M	M		
4.16	421	RFC 3261 [1], section 21.4.16	Ca80.03	M		
4.17	480	RFC 3261 [1], section 21.4.18	O	M		
4.18	481	RFC 3261 [1], section 21.4.19	Ca80.03	M		
4.19	483	RFC 3261 [1], section 21.4.21	M	M		
4.20	484	RFC 3261 [1], section 21.4.22	O	M		
4.21	485	RFC 3261 [1], section 21.4.23	O	M		
4.22	486	RFC 3261 [1], section 21.4.24	Ca80.03	M		
4.23	487	RFC 3261 [1], section 21.4.25	Ca80.03	M		
4.24	488	RFC 3261 [1], section 21.4.26	Ca80.03	M		
4.25	491	RFC 3261 [1], section 21.4.27	Ca80.01	M		
4.26	493	RFC 3261 [1], section 21.4.28	Ca80.06	M		
5	5XX					
5.1	500	RFC 3261 [1], section 21.5.1	Ca80.01	M		
5.2	501	RFC 3261 [1], section 21.5.2	X	M		
5.3	502	RFC 3261 [1], section 21.5.3	O	M		
5.4	503	RFC 3261 [1], section 21.5.4	M	M		
5.5	504	RFC 3261 [1], section 21.5.5	Ca80.03	M		
5.6	505	RFC 3261 [1], section 21.5.6	Ca80.03	M		
5.7	513	RFC 3261 [1], section 21.5.7	Ca80.03	M		
6	6XX					
6.1	600	RFC 3261 [1], section 21.6.1	Ca80.03	M		
6.2	603	RFC 3261 [1], section 21.6.2	Ca80.03	M		
6.3	604	RFC 3261 [1], section 21.6.3	Ca80.03	M		
6.4	606	RFC 3261 [1], section 21.6.4	Ca80.03	M		
Ca80.01	IF A.77/1.2 THEN M ELSE N/A -- Statefull.					
Ca80.02	IF A.77/1.2 THEN X ELSE M -- Statefull.					
Ca80.03	IF A.77/1.2 THEN O ELSE N/A -- Statefull.					
Ca80.04	IF A.77/1.3 THEN N/A ELSE M -- Location service.					
Ca80.05	IF A.92/1.3 THEN M ELSE N/A -- HTTP Authentication.					
Ca80.06	IF A.92/2 THEN M ELSE N/A.					
Comments:						

## A.8.2.2.2.3 Call Control BYE Responses

Table A.81: Call Control BYE Responses

Prerequisite: A.1/3						
Item	Status code	Reference	Status		Support	
			Sending	Forwarding	Sending	Forwarding
1	1XX					
1.1	100	RFC 3261 [1], sections 21.1.1 and 16	Ca81.01	Ca81.02		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	N/A	M		
3	3XX					
3.1	300	RFC 3261 [1], sections 21.3.1 and 16	Ca81.07	Ca81.04		
3.2	301	RFC 3261 [1], sections 21.3.2 and 16	Ca81.07	Ca81.04		
3.3	302	RFC 3261 [1], sections 21.3.3 and 16	Ca81.07	Ca81.04		
3.4	305	RFC 3261 [1], sections 21.3.4 and 16	Ca81.07	Ca81.04		
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	M	M		
4.2	401	RFC 3261 [1], section 21.4.2	X	M		
4.3	402	RFC 3261 [1], section 21.4.3	N/A	M		
4.4	403	RFC 3261 [1], section 21.4.4	Ca81.03	M		
4.5	404	RFC 3261 [1], section 21.4.5	M	M		
4.6	405	RFC 3261 [1], section 21.4.6	X	M		
4.7	406	RFC 3261 [1], section 21.4.7	Ca81.03	M		
4.8	407	RFC 3261 [1], section 21.4.8	Ca81.05	M		

Prerequisite: A.1/3						
Item	Status code	Reference	Status		Support	
			Sending	Forwarding	Sending	Forwarding
4.9	408	RFC 3261 [1], section 21.4.9	Ca81.01	M		
4.10	410	RFC 3261 [1], section 21.4.10	Ca81.03	M		
4.11	413	RFC 3261 [1], section 21.4.11	Ca81.03	M		
4.12	414	RFC 3261 [1], section 21.4.12	Ca81.03	M		
4.14	416	RFC 3261 [1], section 21.4.14	O	M		
4.15	420	RFC 3261 [1], section 21.4.15	M	M		
4.16	421	RFC 3261 [1], section 21.4.16	Ca81.03	M		
4.17	480	RFC 3261 [1], section 21.4.18	O	M		
4.18	481	RFC 3261 [1], section 21.4.19	Ca81.03	M		
4.19	482	RFC 3261 [1], section 21.4.20	O	M		
4.20	483	RFC 3261 [1], section 21.4.21	M	M		
4.21	484	RFC 3261 [1], section 21.4.22	O	M		
4.22	485	RFC 3261 [1], section 21.4.23	O	M		
4.23	487	RFC 3261 [1], section 21.4.25	Ca81.03	M		
4.24	488	RFC 3261 [1], section 21.4.26	Ca81.03	M		
4.25	491	RFC 3261 [1], section 21.4.27	Ca81.03	M		
4.26	493	RFC 3261 [1], section 21.4.28	Ca81.06	M		
5	5XX					
5.1	500	RFC 3261 [1], section 21.5.1	Ca81.01	M		
5.2	501	RFC 3261 [1], section 21.5.2	X	M		
5.3	502	RFC 3261 [1], section 21.5.3	O	M		
5.4	503	RFC 3261 [1], section 21.5.4	M	M		
5.5	504	RFC 3261 [1], section 21.5.5	Ca81.03	M		
5.6	505	RFC 3261 [1], section 21.5.6	Ca81.03	M		
5.7	513	RFC 3261 [1], section 21.5.7	Ca81.03	M		
6	6XX					
6.1	604	RFC 3261 [1], section 21.6.3	Ca81.03	M		
Ca81.01 IF A.77/1.2 THEN M ELSE N/A -- Statefull.						
Ca81.02 IF A.77/1.2 THEN X ELSE M -- Statefull.						
Ca81.03 IF A.77/1.2 THEN O ELSE N/A -- Statefull.						
Ca81.04 IF A.77/1.3 THEN N/A ELSE M -- Location service.						
Ca81.05 IF A.92/1.3 THEN O ELSE N/A -- HTTP Authentication.						
Ca81.06 IF A.92/2 THEN M ELSE N/A.						
Ca81.07 IF A.77/1.3 THEN N/A ELSE O -- Location service.						
Comments:						

## A.8.2.2.2.4 Call Control CANCEL Responses

Table A.82: Call Control CANCEL Responses

Prerequisite: A.1/3						
Item	Status code	Reference	Status		Support	
			Sending	Forwarding	Sending	Forwarding
1	1XX					
1.1	100	RFC 3261 [1], sections 21.1.1 and 16	X (see note)	Ca82.02		
2	2XX					
2.1	200	RFC 3261 [1], section 21.2	Ca82.01	Ca82.02		
3	3XX					
4	4XX					
4.1	400	RFC 3261 [1], section 21.4.1	M	M		
4.2	401	RFC 3261 [1], section 21.4.2	X	M		
4.3	403	RFC 3261 [1], section 21.4.4	Ca82.03	M		
4.4	404	RFC 3261 [1], section 21.4.5	M	M		
4.5	405	RFC 3261 [1], section 21.4.6	X	M		
4.6	406	RFC 3261 [1], section 21.4.7	Ca82.03	M		
4.7	407	RFC 3261 [1], section 21.4.8	Ca82.04	M		
4.8	408	RFC 3261 [1], section 21.4.9	Ca82.01	M		
4.9	410	RFC 3261 [1], section 21.4.10	Ca82.03	M		
4.10	413	RFC 3261 [1], section 21.4.11	Ca82.03	M		



Prerequisite: A.1/3						
Item	Status code	Reference	Status		Support	
			Sending	Forwarding	Sending	Forwarding
4.11	414	RFC 3261 [1], section 21.4.12	Ca82.03	M		
4.12	416	RFC 3261 [1], section 21.4.14	O	M		
4.13	420	RFC 3261 [1], section 21.4.15	M	M		
4.14	480	RFC 3261 [1], section 21.4.18	O	M		
4.15	481	RFC 3261 [1], section 21.4.19	X	M		
4.16	482	RFC 3261 [1], section 21.4.20	O	M		
4.17	483	RFC 3261 [1], section 21.4.21	M	M		
4.18	484	RFC 3261 [1], section 21.4.22	O	M		
4.19	485	RFC 3261 [1], section 21.4.23	O	M		
4.20	487	RFC 3261 [1], section 21.4.25	Ca82.03	M		
5	5XX					
5.1	500	RFC 3261 [1], section 21.5.1	Ca82.01	M		
5.2	501	RFC 3261 [1], section 21.5.2	X	M		
5.3	502	RFC 3261 [1], section 21.5.3	O	M		
5.4	503	RFC 3261 [1], section 21.5.4	M	M		
5.5	504	RFC 3261 [1], section 21.5.5	Ca82.03	M		
5.6	505	RFC 3261 [1], section 21.5.6	Ca82.03	M		
5.7	513	RFC 3261 [1], section 21.5.7	Ca82.03	M		
6	6XX					
6.1	604	RFC 3261 [1], section 21.6.3	Ca82.03	M		
Ca82.01	IF A.77/1.2 THEN M ELSE N/A -- Statefull.					
Ca82.02	IF A.77/1.2 THEN X ELSE M -- Statefull.					
Ca82.03	IF A.77/1.2 THEN O ELSE N/A -- Statefull.					
Ca82.04	IF A.92/1.3 THEN O ELSE N/A -- HTTP Authentication.					
NOTE:	Statefull proxy shall answer immediately with a 200 OK.					
Comments:						

### A.8.2.2.3 INVITE parameters

#### A.8.2.2.3.1 INVITE request parameters

**Table A.83: INVITE Request parameters**

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
1	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	N/A	M (see note 1)		
1.2	Request-URI	RFC 3261 [1], section 7.1	M	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	N/A	M (see note 2)		
2	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	N/A	Ca83.01		
2.2	Accept-Encoding	RFC 3261 [1], section 20	N/A	Ca83.01		
2.3	Accept-Language	RFC 3261 [1], section 20	N/A	Ca83.01		
2.4	Alert-Info	RFC 3261 [1], section 20	O	O		
2.5	Allow	RFC 3261 [1], section 20	N/A	Ca83.01		
2.6	Authorization	RFC 3261 [1], section 20	N/A	O		
2.7	Call-ID	RFC 3261 [1], section 20	N/A	M		
2.8	Call-Info	RFC 3261 [1], section 20	O	O		
2.9	Contact	RFC 3261 [1], section 20	N/A	Ca83.01		
2.10	Content-Disposition	RFC 3261 [1], section 20	N/A	Ca83.01		
2.11	Content-Encoding	RFC 3261 [1], section 20	N/A	Ca83.01		
2.12	Content-Language	RFC 3261 [1], section 20	N/A	Ca83.01		
2.13	Content-Length	RFC 3261 [1], section 20	M	M		
2.14	Content-Type	RFC 3261 [1], section 20	N/A	Ca83.01		
2.15	CSeq	RFC 3261 [1], section 20	N/A	M		
2.16	Date	RFC 3261 [1], section 20	O	O		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.17	Expires	RFC 3261 [1], section 20	N/A	Ca83.01		
2.18	From	RFC 3261 [1], section 20	N/A	M		
2.19	In-Reply-To	RFC 3261 [1], section 20	N/A	Ca83.01		
2.20	Max-Forwards	RFC 3261 [1], section 20	M	M		
2.21	MIME-Version	RFC 3261 [1], section 20	N/A	Ca83.01		
2.22	Organization	RFC 3261 [1], section 20	O	O		
2.23	Priority	RFC 3261 [1], section 20	O	O		
2.24	Proxy-Authorization	RFC 3261 [1], section 20	Ca83.02	Ca83.02		
2.25	Proxy-Require	RFC 3261 [1], section 20	O	M		
2.26	Record-Route	RFC 3261 [1], section 20	O	M		
2.27	Reply-To	RFC 3261 [1], section 20	N/A	Ca83.01		
2.28	Require	RFC 3261 [1], section 20	O	M		
2.29	Route	RFC 3261 [1], section 20	M	M		
2.30	Server	RFC 3261 [1], section 20	N/A	O		
2.31	Subject	RFC 3261 [1], section 20	N/A	Ca83.01		
2.32	Supported	RFC 3261 [1], section 20	N/A	Ca83.01		
2.33	Timestamp	RFC 3261 [1], section 20	N/A	O		
2.34	To	RFC 3261 [1], section 20	N/A	M		
2.35	User-Agent	RFC 3261 [1], section 20	N/A	O		
2.36	Via	RFC 3261 [1], section 20	M	M		
2.37	Warning	RFC 3261 [1], section 20	N/A	O		
3	<b>Body</b>	RFC 3261 [1], section 7.4	X	Ca83.01		
Ca83.01 IF A.77/1.2 THEN O ELSE N/A -- Statefull.						
Ca83.02 IF A.92/1.3 THEN M ELSE N/A -- HTTP Authentication.						
NOTE 1: Set to "INVITE" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments: Updating covers either addition or modification of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

## A.8.2.2.3.2 INVITE response parameters

Table A.84: INVITE response parameters

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
<b>1</b>	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	N/A	M		
1.2	Status-code	RFC 3261 [1], section 7.1	Ca84.03	M		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	Ca84.03	M		
<b>2</b>	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	N/A	Ca84.01		
2.2	Accept-Encoding	RFC 3261 [1], section 20	N/A	Ca84.01		
2.3	Accept-Language	RFC 3261 [1], section 20	N/A	Ca84.01		
2.4	Alert-Info	RFC 3261 [1], section 20	O	O		
2.5	Allow	RFC 3261 [1], section 20	N/A	Ca84.01		
2.6	Authentication-Info	RFC 3261 [1], section 20	N/A	O		
2.7	Call-ID	RFC 3261 [1], section 20	N/A	M		
2.8	Call-Info	RFC 3261 [1], section 20	O	O		
2.9	Contact	RFC 3261 [1], section 20	O	O		
2.10	Content-Disposition	RFC 3261 [1], section 20	N/A	Ca84.01		
2.11	Content-Encoding	RFC 3261 [1], section 20	N/A	Ca84.01		
2.12	Content-Language	RFC 3261 [1], section 20	N/A	Ca84.01		
2.13	Content-Length	RFC 3261 [1], section 20	M	M		
2.14	Content-Type	RFC 3261 [1], section 20	N/A	Ca84.01		
2.15	CSeq	RFC 3261 [1], section 20	N/A	M		
2.16	Date	RFC 3261 [1], section 20	O	O		
2.17	Error-Info	RFC 3261 [1], section 20	O	O		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.18	Expires	RFC 3261 [1], section 20	N/A	Ca84.01		
2.19	From	RFC 3261 [1], section 20	N/A	M		
2.20	MIME-Version	RFC 3261 [1], section 20	N/A	Ca84.01		
2.21	Organization	RFC 3261 [1], section 20	O	O		
2.22	Proxy-Authenticate	RFC 3261 [1], section 20	Ca84.04	M		
2.23	Record-Route	RFC 3261 [1], section 20	Ca84.05	Ca84.06		
2.24	Reply-To	RFC 3261 [1], section 20	N/A	Ca84.01		
2.25	Require	RFC 3261 [1], section 20	O	M		
2.26	Retry-After	RFC 3261 [1], section 20	N/A	Ca84.07		
2.27	Server	RFC 3261 [1], section 20	N/A	Ca84.01		
2.28	Supported	RFC 3261 [1], section 20	N/A	Ca84.08		
2.29	Timestamp	RFC 3261 [1], section 20	N/A	Ca84.01		
2.30	To	RFC 3261 [1], section 20	N/A	M		
2.31	Unsupported	RFC 3261 [1], section 20	N/A	Ca84.09		
2.32	User-Agent	RFC 3261 [1], section 20	N/A	Ca84.01		
2.33	Via	RFC 3261 [1], section 20	M	M		
2.34	Warning	RFC 3261 [1], section 20	N/A	Ca84.01		
2.35	WWW-Authenticate	RFC 3261 [1], section 20	N/A	M		
3	<b>Body</b>	RFC 3261 [1], section 7.4	X	Ca84.01		
Ca84.01 IF A.77/1.2 THEN O ELSE N/A -- Statefull.						
Ca84.02 IF A.92/1.3 THEN M ELSE N/A -- HTTP Authentication.						
Ca84.03 IF A.77/1.2 THEN M ELSE N/A -- Statefull.						
Ca84.04 IF (A.92/1.3 AND status=407) THEN M ELSE N/A).						
Ca84.05 IF (status=18X-2XX) THEN O ELSE N/A.						
Ca84.06 IF (status=18X-2XX) THEN M ELSE N/A.						
Ca84.07 IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.						
Ca84.08 IF (status=2XX) THEN O ELSE N/A.						
Ca84.09 IF (A.77/1.2 AND status=420) THEN M ELSE N/A.						
NOTE: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments: Updating covers either addition or modification of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

#### A.8.2.2.4 re-INVITE parameters

##### A.8.2.2.4.1 re-INVITE request parameters

**Table A.85: re-INVITE Request parameters**

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
1	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	N/A	M (see note 1)		
1.2	Request-URI	RFC 3261 [1], section 7.1	M	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	N/A	M (see note 2)		
2	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	N/A	Ca85.01		
2.2	Accept-Encoding	RFC 3261 [1], section 20	N/A	Ca85.01		
2.3	Accept-Language	RFC 3261 [1], section 20	N/A	Ca85.01		
2.4	Alert-Info	RFC 3261 [1], section 20	O	O		
2.5	Allow	RFC 3261 [1], section 20	N/A	Ca85.01		
2.6	Authorization	RFC 3261 [1], section 20	N/A	O		
2.7	Call-ID	RFC 3261 [1], section 20	N/A	M		
2.8	Call-Info	RFC 3261 [1], section 20	O	O		
2.9	Contact	RFC 3261 [1], section 20	N/A	Ca85.01		
2.10	Content-Disposition	RFC 3261 [1], section 20	N/A	Ca85.01		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.11	Content-Encoding	RFC 3261 [1], section 20	N/A	Ca85.01		
2.12	Content-Language	RFC 3261 [1], section 20	N/A	Ca85.01		
2.13	Content-Length	RFC 3261 [1], section 20	M	M		
2.14	Content-Type	RFC 3261 [1], section 20	N/A	Ca85.01		
2.15	CSeq	RFC 3261 [1], section 20	N/A	M		
2.16	Date	RFC 3261 [1], section 20	O	O		
2.17	Expires	RFC 3261 [1], section 20	N/A	Ca85.01		
2.18	From	RFC 3261 [1], section 20	N/A	M		
2.19	In-Reply-To	RFC 3261 [1], section 20	N/A	Ca85.01		
2.20	Max-Forwards	RFC 3261 [1], section 20	M	M		
2.21	MIME-Version	RFC 3261 [1], section 20	N/A	Ca85.01		
2.22	Organization	RFC 3261 [1], section 20	O	O		
2.23	Priority	RFC 3261 [1], section 20	O	O		
2.24	Proxy-Authorization	RFC 3261 [1], section 20	Ca85.02	M		
2.25	Proxy-Require	RFC 3261 [1], section 20	O	M		
2.26	Record-Route	RFC 3261 [1], section 20	O	M		
2.27	Reply-To	RFC 3261 [1], section 20	N/A	Ca85.01		
2.28	Require	RFC 3261 [1], section 20	O	M		
2.29	Route	RFC 3261 [1], section 20	M	M		
2.30	Server	RFC 3261 [1], section 20	N/A	O		
2.31	Subject	RFC 3261 [1], section 20	N/A	Ca85.01		
2.32	Supported	RFC 3261 [1], section 20	N/A	Ca85.01		
2.33	Timestamp	RFC 3261 [1], section 20	N/A	O		
2.34	To	RFC 3261 [1], section 20	N/A	M		
2.35	User-Agent	RFC 3261 [1], section 20	N/A	O		
2.36	Via	RFC 3261 [1], section 20	M	M		
2.37	Warning	RFC 3261 [1], section 20	N/A	O		
3	<b>Body</b>	RFC 3261 [1], section 7.4	X	Ca85.01		
Ca85.01 IF A.77/1.2 THEN O ELSE N/A -- Statefull.						
Ca85.02 IF A.92/1.3 THEN O ELSE N/A -- HTTP Authentication.						
NOTE 1: Set to "INVITE" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1], section shall be set to "SIP/2.0".						
Comments: Updating covers either addition or modification of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

## A.8.2.2.4.2 re-INVITE response parameters

Table A.86: re-INVITE response parameters

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
<b>1</b>	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	N/A	M		
1.2	Status-code	RFC 3261 [1], section 7.1	Ca86.03	M		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	Ca86.03	M		
<b>2</b>	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	N/A	Ca86.01		
2.2	Accept-Encoding	RFC 3261 [1], section 20	N/A	Ca86.01		
2.3	Accept-Language	RFC 3261 [1], section 20	N/A	Ca86.01		
2.4	Alert-Info	RFC 3261 [1], section 20	O	O		
2.5	Allow	RFC 3261 [1], section 20	N/A	Ca86.01		
2.6	Authentication-Info	RFC 3261 [1], section 20	N/A	O		
2.7	Call-ID	RFC 3261 [1], section 20	N/A	M		
2.8	Call-Info	RFC 3261 [1], section 20	O	O		
2.9	Contact	RFC 3261 [1], section 20	O	O		
2.10	Content-Disposition	RFC 3261 [1], section 20	N/A	Ca86.01		
2.11	Content-Encoding	RFC 3261 [1], section 20	N/A	Ca86.01		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.12	Content-Language	RFC 3261 [1], section 20	N/A	Ca86.01		
2.13	Content-Length	RFC 3261 [1], section 20	M	M		
2.14	Content-Type	RFC 3261 [1], section 20	N/A	Ca86.01		
2.15	CSeq	RFC 3261 [1], section 20	N/A	M		
2.16	Date	RFC 3261 [1], section 20	O	O		
2.17	Error-Info	RFC 3261 [1], section 20	O	O		
2.18	Expires	RFC 3261 [1], section 20	N/A	Ca86.01		
2.19	From	RFC 3261 [1], section 20	N/A	M		
2.20	MIME-Version	RFC 3261 [1], section 20	N/A	Ca86.01		
2.21	Organization	RFC 3261 [1], section 20	O	O		
2.22	Proxy-Authenticate	RFC 3261 [1], section 20	Ca86.04	M		
2.23	Record-Route	RFC 3261 [1], section 20	Ca86.05	Ca86.06		
2.24	Reply-To	RFC 3261 [1], section 20	N/A	Ca86.01		
2.25	Require	RFC 3261 [1], section 20	O	M		
2.26	Retry-After	RFC 3261 [1], section 20	N/A	Ca86.07		
2.27	Server	RFC 3261 [1], section 20	N/A	Ca86.01		
2.28	Supported	RFC 3261 [1], section 20	N/A	Ca86.08		
2.29	Timestamp	RFC 3261 [1], section 20	N/A	Ca86.01		
2.30	To	RFC 3261 [1], section 20	N/A	M		
2.31	Unsupported	RFC 3261 [1], section 20	N/A	Ca86.09		
2.32	User-Agent	RFC 3261 [1], section 20	N/A	Ca86.01		
2.33	Via	RFC 3261 [1], section 20	M	M		
2.34	Warning	RFC 3261 [1], section 20	N/A	Ca86.01		
2.35	WWW-Authenticate	RFC 3261 [1], section 20	N/A	M		
3	<b>Body</b>	RFC 3261 [1], section 7.4	X	Ca86.01		
Ca86.01	IF A.77/1.2 THEN O ELSE N/A -- Statefull.					
Ca86.02	IF A.92/1.3 THEN M ELSE N/A -- HTTP Authentication.					
Ca86.03	IF A.77/1.2 THEN M ELSE N/A -- Statefull.					
Ca86.04	IF (A.92/1.3 AND status=407) THEN M ELSE N/A).					
Ca86.05	IF (status=18X-2XX) THEN O ELSE N/A.					
Ca86.06	IF (status=18X-2XX) THEN M ELSE N/A.					
Ca86.07	IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.					
Ca86.08	IF (status=2XX) THEN O ELSE N/A.					
Ca86.09	IF (A.77/1.2 AND status=420) THEN M ELSE N/A.					
NOTE:	To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".					
Comments:	Updating covers either addition or modification of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.					

### A.8.2.2.5 ACK

#### A.8.2.2.5.1 ACK request parameters

**Table A.87: ACK Request parameters**

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
<b>1</b>	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	N/A	M (see note 1)		
1.2	Request-URI	RFC 3261 [1], section 7.1	M	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	N/A	M (see note 2)		
<b>2</b>	<b>Headers</b>					
2.1	Authorization	RFC 3261 [1], section 20	N/A	Ca87.01		
2.2	Call-ID	RFC 3261 [1], section 20	N/A	M		
2.3	Contact	RFC 3261 [1], section 20	N/A	Ca87.01		
2.4	Content-Disposition	RFC 3261 [1], section 20	N/A	Ca87.01		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.5	Content-Encoding	RFC 3261 [1], section 20	N/A	Ca87.01		
2.6	Content-Language	RFC 3261 [1], section 20	N/A	Ca87.01		
2.7	Content-Length	RFC 3261 [1], section 20	M	M		
2.8	Content-Type	RFC 3261 [1], section 20	N/A	Ca87.01		
2.9	CSeq	RFC 3261 [1], section 20	N/A	M		
2.10	Date	RFC 3261 [1], section 20	O	O		
2.11	From	RFC 3261 [1], section 20	N/A	M		
2.12	Max-Forwards	RFC 3261 [1], section 20	M	M		
2.13	MIME-Version	RFC 3261 [1], section 20	N/A	Ca87.01		
2.14	Proxy-Authorization	RFC 3261 [1], section 20	Ca87.02	M		
2.15	Record-Route	RFC 3261 [1], section 20	O	M		
2.16	Route	RFC 3261 [1], section 20	M	M		
2.17	Timestamp	RFC 3261 [1], section 20	N/A	O		
2.18	To	RFC 3261 [1], section 20	N/A	M		
2.19	User-Agent	RFC 3261 [1], section 20	N/A	O		
2.20	Via	RFC 3261 [1], section 20	M	M		
3	<b>Body</b>	RFC 3261 [1], section 7.4	X	Ca87.01		
Ca87.01 IF A.77/1.2 THEN O ELSE N/A --Statefull.						
Ca87.02 IF A.92/1.3 THEN O ELSE N/A -- HTTP Authentication.						
NOTE 1: Set to "ACK" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments: Updating covers either addition or modification of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

### A.8.2.2.6 BYE parameters

#### A.8.2.2.6.1 BYE request parameters

**Table A.88: BYE Request parameters**

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
<b>1</b>	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	N/A	M (see note 1)		
1.2	Request-URI	RFC 3261 [1], section 7.1	M	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	N/A	M (see note 2)		
<b>2</b>	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	N/A	Ca88.01		
2.2	Accept-Encoding	RFC 3261 [1], section 20	N/A	Ca88.01		
2.3	Accept-Language	RFC 3261 [1], section 20	N/A	Ca88.01		
2.4	Allow	RFC 3261 [1], section 20	N/A	Ca88.01		
2.5	Authorization	RFC 3261 [1], section 20	N/A	O		
2.6	Call-ID	RFC 3261 [1], section 20	N/A	M		
2.7	Content-Disposition	RFC 3261 [1], section 20	N/A	Ca88.01		
2.8	Content-Encoding	RFC 3261 [1], section 20	N/A	Ca88.01		
2.9	Content-Language	RFC 3261 [1], section 20	N/A	Ca88.01		
2.10	Content-Length	RFC 3261 [1], section 20	M	M		
2.11	Content-Type	RFC 3261 [1], section 20	N/A	Ca88.01		
2.12	CSeq	RFC 3261 [1], section 20	N/A	M		
2.13	Date	RFC 3261 [1], section 20	O	O		
2.14	From	RFC 3261 [1], section 20	N/A	M		
2.15	Max-Forwards	RFC 3261 [1], section 20	M	M		
2.16	MIME-Version	RFC 3261 [1], section 20	N/A	Ca88.01		
2.17	Proxy-Authorization	RFC 3261 [1], section 20	Ca88.02	M		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.18	Proxy-Require	RFC 3261 [1], section 20	O	M		
2.19	Record-Route	RFC 3261 [1], section 20	O	M		
2.20	Require	RFC 3261 [1], section 20	O	M		
2.21	Route	RFC 3261 [1], section 20	M	M		
2.22	Server	RFC 3261 [1], section 20	N/A	Ca88.01		
2.23	Supported	RFC 3261 [1], section 20	N/A	Ca88.01		
2.24	Timestamp	RFC 3261 [1], section 20	N/A	O		
2.25	To	RFC 3261 [1], section 20	N/A	M		
2.26	User-Agent	RFC 3261 [1], section 20	N/A	O		
2.27	Via	RFC 3261 [1], section 20	M	M		
2.28	Warning	RFC 3261 [1], section 20	N/A	O		
3	<b>Body</b>	RFC 3261 [1], section 7.4	X	Ca88.01		
Ca88.01 IF A.77/1.2 THEN O ELSE N/A -- Statefull.						
Ca88.02 IF A.92/1.3 THEN O ELSE N/A -- HTTP Authentication.						
NOTE 1: Set to "BYE" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments: Updating covers either addition or modification of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

## A.8.2.2.6.2 BYE response parameters

Table A.89: BYE response parameters

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
1	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	N/A	M		
1.2	Status-code	RFC 3261 [1], section 7.1	Ca89.02	M		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	Ca89.02	M		
2	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	N/A	Ca89.01		
2.2	Accept-Encoding	RFC 3261 [1], section 20	N/A	Ca89.01		
2.3	Accept-Language	RFC 3261 [1], section 20	N/A	Ca89.01		
2.5	Allow	RFC 3261 [1], section 20	N/A	Ca89.01		
2.6	Authentication-Info	RFC 3261 [1], section 20	N/A	O		
2.7	Call-ID	RFC 3261 [1], section 20	N/A	M		
2.8	Contact	RFC 3261 [1], section 20	O	O		
2.9	Content-Disposition	RFC 3261 [1], section 20	N/A	Ca89.01		
2.10	Content-Encoding	RFC 3261 [1], section 20	N/A	Ca89.01		
2.11	Content-Language	RFC 3261 [1], section 20	N/A	Ca89.01		
2.12	Content-Length	RFC 3261 [1], section 20	M	M		
2.13	Content-Type	RFC 3261 [1], section 20	N/A	Ca89.01		
2.14	CSeq	RFC 3261 [1], section 20	N/A	M		
2.15	Date	RFC 3261 [1], section 20	O	O		
2.16	Error-Info	RFC 3261 [1], section 20	O	O		
2.17	From	RFC 3261 [1], section 20	N/A	M		
2.18	MIME-Version	RFC 3261 [1], section 20	N/A	Ca89.01		
2.19	Proxy-Authenticate	RFC 3261 [1], section 20	Ca89.03	M		
2.20	Record-Route	RFC 3261 [1], section 20	Ca89.04	Ca89.05		
2.21	Require	RFC 3261 [1], section 20	O	M		
2.22	Retry-After	RFC 3261 [1], section 20	N/A	Ca89.06		
2.23	Server	RFC 3261 [1], section 20	N/A	O		
2.24	Supported	RFC 3261 [1], section 20	N/A	Ca89.07		
2.25	Timestamp	RFC 3261 [1], section 20	N/A	Ca89.01		
2.26	To	RFC 3261 [1], section 20	N/A	M		
2.27	Unsupported	RFC 3261 [1], section 20	N/A	Ca89.08		
2.28	User-Agent	RFC 3261 [1], section 20	N/A	Ca89.01		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.29	Via	RFC 3261 [1], section 20	M	M		
2.30	Warning	RFC 3261 [1], section 20	N/A	Ca89.01		
2.31	WWW-Authenticate	RFC 3261 [1], section 20	N/A	M		
3	Body	RFC 3261 [1], section 7.4	X	Ca89.01		
Ca89.01	IF A.77/1.2 THEN O ELSE N/A -- Statefull.					
Ca89.02	IF A.77/1.2 THEN M ELSE N/A -- Statefull.					
Ca89.03	IF (A.92/1.3 AND status=407) THEN M ELSE N/A).					
Ca89.04	IF (status=18X-2XX) THEN O ELSE N/A.					
Ca89.05	IF (status=18X-2XX) THEN M ELSE N/A.					
Ca89.06	IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.					
Ca89.07	IF (status=2XX) THEN O ELSE N/A.					
Ca89.08	IF (A.77/1.2 AND status=420) THEN M ELSE N/A.					
Comments:	To be conformed to RFC 3261 [1] shall be set to "SIP/2.0". Updating covers either addition or modification of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.					

### A.8.2.2.7 CANCEL parameters

#### A.8.2.2.7.1 CANCEL request parameters

Table A.90: CANCEL Request parameters

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
1	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	Ca90.03	M (see note 1)		
1.2	Request-URI	RFC 3261 [1], section 7.1	M	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	Ca90.03	M (see note 2)		
2	<b>Headers</b>					
2.1	Authorization	RFC 3261 [1], section 20	Ca90.01	O		
2.2	Call-ID	RFC 3261 [1], section 20	Ca90.03	M		
2.3	Content-Length	RFC 3261 [1], section 20	Ca90.03	M		
2.4	CSeq	RFC 3261 [1], section 20	Ca90.03	M		
2.5	Date	RFC 3261 [1], section 20	O	O		
2.6	From	RFC 3261 [1], section 20	Ca90.03	M		
2.7	Max-Forwards	RFC 3261 [1], section 20	M	M		
2.1	Proxy-Authorization	RFC 3261 [1], section 20	Ca90.01	Ca90.01		
2.8	Proxy-Require	RFC 3261 [1], section 20	O	M		
2.9	Record-Route	RFC 3261 [1], section 20	O	M		
2.10	Route	RFC 3261 [1], section 20	M	M		
2.11	Require	RFC 3261 [1], section 20	X	X		
2.12	Server	RFC 3261 [1], section 20	Ca90.01	O		
2.13	Supported	RFC 3261 [1], section 20	Ca90.01	Ca90.01		
2.14	Timestamp	RFC 3261 [1], section 20	Ca90.01	O		



Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.15	To	RFC 3261 [1], section 20	Ca90.03	M		
2.16	User-Agent	RFC 3261 [1], section 20	Ca90.01	O		
2.17	Via	RFC 3261 [1], section 20	M	M		
2.18	Warning	RFC 3261 [1], section 20	Ca90.01	O		
Ca90.01	IF A.77/1.2 THEN O ELSE N/A -- Statefull.					
Ca90.02	IF A.92/1.3 THEN O ELSE N/A -- HTTP Authentication.					
Ca90.03	IF A.77/1.2 THEN M ELSE N/A -- Statefull.					
NOTE 1: Set to "BYE" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1], section shall be set to "SIP/2.0".						
Comments: Updating covers either sending, addition or modification before forwarding of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

## A.8.2.2.7.2 CANCEL response parameters

Table A.91: CANCEL response parameters

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
<b>1</b>	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	Ca91.03	M		
1.2	Status-code	RFC 3261 [1], section 7.1	Ca91.03	M		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	Ca91.03	M		
<b>2</b>	<b>Headers</b>					
2.1	Call-ID	RFC 3261 [1], section 20	Ca91.03	M		
2.2	Content-Length	RFC 3261 [1], section 20	M	M		
2.3	CSeq	RFC 3261 [1], section 20	Ca91.03	M		
2.4	Date	RFC 3261 [1], section 20	O	O		
2.5	Error-Info	RFC 3261 [1], section 20	O	O		
2.6	From	RFC 3261 [1], section 20	Ca91.03	M		
2.7	Proxy-Authenticate	RFC 3261 [1], section 20	Ca91.04	M		
2.8	Record-Route	RFC 3261 [1], section 20	Ca91.05	Ca91.06		
2.9	Require	RFC 3261 [1], section 20	X	X		
2.10	Retry-After	RFC 3261 [1], section 20	Ca91.01	Ca91.07		
2.11	Server	RFC 3261 [1], section 20	Ca91.01	Ca91.01		
2.12	Supported	RFC 3261 [1], section 20	Ca91.01	Ca91.08		
2.13	Timestamp	RFC 3261 [1], section 20	Ca91.01	Ca91.01		
2.14	To	RFC 3261 [1], section 20	Ca91.03	M		
2.15	User-Agent	RFC 3261 [1], section 20	Ca91.01	Ca91.01		
2.16	Via	RFC 3261 [1], section 20	M	M		
2.17	Warning	RFC 3261 [1], section 20	Ca91.01	Ca91.01		
2.18	WWW-Authenticate	RFC 3261 [1], section 20	N/A	M		
Ca91.01	IF A.77/1.2 THEN O ELSE N/A -- Statefull.					
Ca91.02	IF A.92/1.3 THEN M ELSE N/A -- HTTP Authentication.					
Ca91.03	IF A.77/1.2 THEN M ELSE N/A -- Statefull.					
Ca91.04	IF (A.92/1.3 AND status=407) THEN M ELSE N/A).					
Ca91.05	IF (status=18X-2XX) THEN O ELSE N/A.					
Ca91.06	IF (status=18X-2XX) THEN M ELSE N/A.					
Ca91.07	IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A.					
Ca91.08	IF (status=2XX) THEN O ELSE N/A.					
Comments: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0". Updating covers either sending, addition or modification before forwarding of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

## A.8.2.3 Call Control Security

### A.8.2.3.1 Call Control Security capabilities

**Table A.92: Call Control Security capabilities**

Prerequisite: A.1/3				
Item	Security capabilities	Reference	Status	Support
1	HTTP Authentication	RFC 3261 [1], sections 22 and 26.2.3	M	
2	S/MIME	RFC 3261 [1], sections 23 and 26.2.4	O	
3	TLS	RFC 3261 [1], section 26.3.1	M	
Comments:				

### A.8.2.3.2 HTTP parameters

**Table A.93: Access Authentication**

Prerequisite: A.1/3				
Item	Parameters name	Reference	Status	Support
1	Basic	RFC 2617 [3], section 2	X	
2	Digest	RFC 2617 [3], section 3	M	
Comments:				

**Table A.94: Proxy-Authenticate header**

Prerequisite: A.1/3				
Item	Parameters name	Reference	Status	Support
1	realm	RFC 2617 [3], section 3.2.1	M	
2	domain	RFC 2617 [3], section 3.2.1	O	
3	nonce	RFC 2617 [3], section 3.2.1	M	
4	opaque	RFC 2617 [3], section 3.2.1	O	
5	stale	RFC 2617 [3], section 3.2.1	O	
6	algorithm	RFC 2617 [3], section 3.2.1	O	
7	qop-options	RFC 2617 [3], section 3.2.1	O	
8	auth-param	RFC 2617 [3], section 3.2.1	O	
Comments: If a proxy sends a qop-options header in a proxy-Authenticate then message-quop is mandatory.				

**Table A.95: Proxy-Authorization header**

Prerequisite: A.1/3				
Item	Parameters name	Reference	Status	Support
1	username	RFC 2617 [3], section 3.2.2	M	
2	realm	RFC 2617 [3], section 3.2.2	M	
3	nonce	RFC 2617 [3], section 3.2.2	M	
4	digest-uri	RFC 2617 [3], section 3.2.2	M	
5	response	RFC 2617 [3], section 3.2.2	M	
6	algorithm	RFC 2617 [3], section 3.2.2	O	
7	cnonce	RFC 2617 [3], section 3.2.2	O	
8	opaque	RFC 2617 [3], section 3.2.2	O	
9	message-qop	RFC 2617 [3], section 3.2.2	O (see note)	
10	nonce-count	RFC 2617 [3], section 3.2.2	O	
11	auth-param	RFC 2617 [3], section 3.2.2	O	
Comments: If a proxy sends a qop-options header in a proxy-Authenticate then message-quop is mandatory.				

## A.8.2.4 Call Control Transport

**Table A.96: transport**

Prerequisite: A.1/3				
Item	Transport		Status	Support
1	UDP	RFC 3261 [1], section 18	M	
2	TCP	RFC 3261 [1], section 18	M	
3	Other transport	RFC 3261 [1], section 18	O	
Comments:				

## A.8.2.5 Call Control Addressing

### A.8.2.5.1 URIs

**Table A.97: Call Control URI**

Prerequisite: A.1/3				
Item	URI scheme	Reference	Status	Support
1	SIP	RFC 3261 [1], section 19	M	
2	SIPS	RFC 3261 [1], section 19	M	
Comments:				

### A.8.2.5.2 IP address

**Table A.98: Call Control IP Address**

Prerequisite: A.1/3				
Item	IP Address format	Reference	Status	Support
1	IPv4	RFC 3261 [1], section 19	M	
2	IPv6	RFC 3261 [1], section 19	O	
Comments:				

## A.8.2.6 Call Control Timers

This table applies only for statefull proxy.

**Table A.99: Call Control Timer**

Prerequisite: A.1/3 and A.77/1.2				
Item	Timer	Reference	Status	Support
1	T1	RFC 3261 [1], section 17.1.2.1 and table 4	M	
2	T2	RFC 3261 [1], section 17.1.2.1 and table 4	M	
3	T4	RFC 3261 [1], section 17.1.2.2 and table 4	M	
4	Timer A	RFC 3261 [1], section 17.1.1.1.2 and table 4	M	
5	Timer B	RFC 3261 [1], section 17.1.1.1.2 and table 4	M	
6	Timer C	RFC 3261 [1], section 16 and table 4	M	
7	Timer D	RFC 3261 [1], section 17.1.1.1.2 and table 4	O	
8	Timer E	RFC 3261 [1], section 17.1.2.2 and table 4	M	
9	Timer F	RFC 3261 [1], section 17.1.2.2 and table 4	O	
10	Timer G	RFC 3261 [1], section 17.2.1 and table 4	M	
11	Timer H	RFC 3261 [1], section 17.2.1 and table 4	M	
12	Timer I	RFC 3261 [1], section 17.2.1 and table 4	M (see note)	
13	Timer J	RFC 3261 [1], section 17.2.2 and table 4	M (see note)	
14	Timer K	RFC 3261 [1], section 17.1.2.2 and table 4	M (see note)	

Prerequisite: A.1/3 and A.77/1.2				
Item	Timer	Reference	Status	Support
NOTE: Set to zero for reliable transport.				
Comments:				

## A.8.3 Querying for capabilities

This clause contains the PICS proforma tables related to the querying for capabilities operations for a proxy.

### A.8.3.1 Querying for capabilities

**Table A.100: Querying for capabilities procedures**

Prerequisite: A.1/3				
Item	procedures	Reference	Status	Support
1	Answering to a capabilities query	RFC 3261 [1], section 11	M	
Comments:				

### A.8.3.2 Querying for capabilities Messages

#### A.8.3.2.1 Querying for capabilities Requests

**Table A.101: Querying for capabilities Requests**

Prerequisite: A.1/3						
Item	Method	Reference	Status		Support	
			Forwarding	Answering	Forwarding	Answering
1	OPTIONS	RFC 3261 [1], section 11	M	M		
Comments:						

#### A.8.3.2.2 Querying for capabilities Responses

##### A.8.3.2.2.1 Querying for capabilities OPTIONS Responses

**Table A.102: Querying for capabilities OPTIONS Responses**

Prerequisite: A.1/3				
Item	Status code	Reference	Status	Support
1	1XX			
1.1	100	RFC 3261 [1], section 21.1.1	O	
1.2	180	RFC 3261 [1], section 21.1.2	O	
1.3	181	RFC 3261 [1], section 21.1.3	O	
1.4	182	RFC 3261 [1], section 21.1.4	O	
1.5	183	RFC 3261 [1], section 21.1.5	O	
2	2XX			
2.1	200	RFC 3261 [1], section 21.2	M	
3	3XX			
3.1	300	RFC 3261 [1], section 21.3.1	O	
3.2	301	RFC 3261 [1], section 21.3.2	O	
3.3	302	RFC 3261 [1], section 21.3.3	O	
3.4	305	RFC 3261 [1], section 21.3.4	O	
3.5	380	RFC 3261 [1], section 21.3.5	O	
4	4XX			
4.1	400	RFC 3261 [1], section 21.4.1	O	
4.2	401	RFC 3261 [1], section 21.4.2	X	
4.3	402	RFC 3261 [1], section 21.4.3	O	

Prerequisite: A.1/3				
Item	Status code	Reference	Status	Support
4.4	403	RFC 3261 [1], section 21.4.4	O	
4.5	404	RFC 3261 [1], section 21.4.5	O	
4.6	405	RFC 3261 [1], section 21.4.6	X	
4.7	406	RFC 3261 [1], section 21.4.7	O	
4.8	407	RFC 3261 [1], section 21.4.8	O	
4.9	408	RFC 3261 [1], section 21.4.9	O	
4.10	410	RFC 3261 [1], section 21.4.10	O	
4.11	413	RFC 3261 [1], section 21.4.11	O	
4.12	414	RFC 3261 [1], section 21.4.12	O	
4.13	415	RFC 3261 [1], section 21.4.13	O	
4.14	416	RFC 3261 [1], section 21.4.14	O	
4.15	420	RFC 3261 [1], section 21.4.15	O	
4.16	421	RFC 3261 [1], section 21.4.16	O	
4.17	423	RFC 3261 [1], section 21.4.17	O	
4.18	480	RFC 3261 [1], section 21.4.18	O	
4.19	481	RFC 3261 [1], section 21.4.19	O	
4.20	482	RFC 3261 [1], section 21.4.20	O	
4.21	484	RFC 3261 [1], section 21.4.22	O	
4.22	485	RFC 3261 [1], section 21.4.23	O	
4.23	486	RFC 3261 [1], section 21.4.24	O	
4.24	487	RFC 3261 [1], section 21.4.25	O	
4.25	488	RFC 3261 [1], section 21.4.26	O	
4.26	491	RFC 3261 [1], section 21.4.27	O	
4.27	493	RFC 3261 [1], section 21.4.28	Ca102.01	
5	5XX			
5.1	500	RFC 3261 [1], section 21.5.1	O	
5.2	501	RFC 3261 [1], section 21.5.2	O	
5.4	503	RFC 3261 [1], section 21.5.4	O	
5.5	504	RFC 3261 [1], section 21.5.5	O	
5.6	505	RFC 3261 [1], section 21.5.6	O	
5.7	513	RFC 3261 [1], section 21.5.7	O	
6	6XX			
6.1	600	RFC 3261 [1], section 21.6.1	O	
6.2	603	RFC 3261 [1], section 21.6.2	O	
6.3	604	RFC 3261 [1], section 21.6.3	O	
6.4	606	RFC 3261 [1], section 21.6.4	O	
Ca102.031	IF A.105/2 THEN M ELSE N/A –S/MIME.			
Comments:	All server shall be able to answer to an OPTIONS request.			

### A.8.3.2.3 OPTIONS parameters

#### A.8.3.2.3.1 OPTIONS request parameters

Table A.103: OPTIONS Request parameters

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
<b>1</b>	<b>Request-Line</b>					
1.1	Method	RFC 3261 [1], section 7.1	N/A	M (see note 1)		
1.2	Request-URI	RFC 3261 [1], section 7.1	M	M		
1.3	SIP-Version	RFC 3261 [1], section 7.1	N/A	M (see note 2)		
<b>2</b>	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	N/A	O		
2.2	Accept-Encoding	RFC 3261 [1], section 20	N/A	O		
2.3	Accept-Language	RFC 3261 [1], section 20	N/A	O		
2.4	Allow	RFC 3261 [1], section 20	N/A	O		
2.5	Authorization	RFC 3261 [1], section 20	N/A	O		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.6	Call-ID	RFC 3261 [1], section 20	N/A	M		
2.7	Call-Info	RFC 3261 [1], section 20	N/A	O		
2.8	Contact	RFC 3261 [1], section 20	N/A	O		
2.9	Content-Disposition	RFC 3261 [1], section 20	N/A	O		
2.10	Content-Encoding	RFC 3261 [1], section 20	N/A	O		
2.11	Content-Language	RFC 3261 [1], section 20	N/A	O		
2.12	Content-Length	RFC 3261 [1], section 20	M	M		
2.13	Content-Type	RFC 3261 [1], section 20	N/A	O		
2.14	CSeq	RFC 3261 [1], section 20	N/A	M		
2.15	Date	RFC 3261 [1], section 20	O	O		
2.16	From	RFC 3261 [1], section 20	N/A	M		
2.17	Max-Forwards	RFC 3261 [1], section 20	M	M		
2.18	MIME-Version	RFC 3261 [1], section 20	N/A	O		
2.19	Organization	RFC 3261 [1], section 20	O	O		
2.20	Proxy-Authorization	RFC 3261 [1], section 20	N/A	Ca103.01		
2.21	Proxy-Require	RFC 3261 [1], section 20	N/A	O		
2.22	Record-Route	RFC 3261 [1], section 20	O	O		
2.23	Require	RFC 3261 [1], section 20	O	O		
2.24	Route	RFC 3261 [1], section 20	M	M		
2.25	Server	RFC 3261 [1], section 20	N/A	O		
2.26	Supported	RFC 3261 [1], section 20	N/A	O		
2.27	Timestamp	RFC 3261 [1], section 20	N/A	O		
2.28	To	RFC 3261 [1], section 20	N/A	M		
2.29	User-Agent	RFC 3261 [1], section 20	N/A	O		
2.30	Via	RFC 3261 [1], section 20	M	M		
2.31	Warning	RFC 3261 [1], section 20	N/A	O		
3	<b>Body</b>	RFC 3261 [1], section 7.4	X	O		
Ca103.01 IF A.92/1.3 THEN M ELSE N/A -- HTTP Authentication.						
NOTE 1: Set to "OPTIONS" value in this case.						
NOTE 2: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0".						
Comments: Updating covers either addition or modification of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

## A.8.3.2.3.2 OPTIONS response parameters

Table A.104: OPTIONS response parameters

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
1	<b>Status-Line</b>					
1.1	SIP-Version	RFC 3261 [1], section 7.1	M	M		
1.2	Status-code	RFC 3261 [1], section 7.1	M	M		
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	M	M		
2	<b>Headers</b>					
2.1	Accept	RFC 3261 [1], section 20	M	Ca104.01		
2.2	Accept-Encoding	RFC 3261 [1], section 20	M	Ca104.01		
2.3	Accept-Language	RFC 3261 [1], section 20	M	Ca104.01		
2.4	Allow	RFC 3261 [1], section 20	X	Ca104.01		
2.5	Authentication-Info	RFC 3261 [1], section 20	N/A	O		
2.6	Call-ID	RFC 3261 [1], section 20	M	M		
2.7	Call-Info	RFC 3261 [1], section 20	O	O		
2.8	Contact	RFC 3261 [1], section 20	O	O		
2.9	Content-Disposition	RFC 3261 [1], section 20	O	Ca104.01		
2.10	Content-Encoding	RFC 3261 [1], section 20	O	Ca104.01		
2.11	Content-Language	RFC 3261 [1], section 20	O	Ca104.01		
2.12	Content-Length	RFC 3261 [1], section 20	M	M		
2.13	Content-Type	RFC 3261 [1], section 20	Ca84.04	Ca104.01		

Prerequisite: A.1/3						
Item	Parameters name	Reference	Status		Support	
			Updating	Receiving	Updating	Receiving
2.14	CSeq	RFC 3261 [1], section 20	M	M		
2.15	Date	RFC 3261 [1], section 20	O	O		
2.16	Error-Info	RFC 3261 [1], section 20	O	O		
2.17	From	RFC 3261 [1], section 20	M	M		
2.18	MIME-Version	RFC 3261 [1], section 20	O	Ca104.01		
2.19	Organization	RFC 3261 [1], section 20	O	O		
2.20	Proxy-Authenticate	RFC 3261 [1], section 20	Ca84.02	M		
2.21	Record-Route	RFC 3261 [1], section 20	Ca104.05	Ca104.06		
2.22	Require	RFC 3261 [1], section 20	O	M		
2.23	Retry-After	RFC 3261 [1], section 20	Ca104.07	Ca104.07		
2.24	Server	RFC 3261 [1], section 20	O	O		
2.25	Supported	RFC 3261 [1], section 20	Ca104.08	Ca104.09		
2.26	Timestamp	RFC 3261 [1], section 20	O	Ca104.02		
2.27	To	RFC 3261 [1], section 20	M	Ca104.01		
2.28	Unsupported	RFC 3261 [1], section 20	Ca104.10	Ca104.11		
2.29	User-Agent	RFC 3261 [1], section 20	O	Ca104.01		
2.30	Via	RFC 3261 [1], section 20	M	M		
2.31	Warning	RFC 3261 [1], section 20	O	O		
2.32	WWW-Authenticate	RFC 3261 [1], section 20	N/A	M		
3	<b>Body</b>	RFC 3261 [1], section 7.4	O	Ca104.01		
Ca104.01 IF A.77/1.2 THEN O ELSE N/A -- Statefull. Ca104.02 IF (A.92/1.3 AND status=407) THEN M ELSE N/A). Ca104.03 IF A.77/1.2 THEN M ELSE N/A -- Statefull. Ca84.04 IF A.104/3 THEN M ELSE O -- Body. Ca104.05 IF (status=18X-2XX) THEN O ELSE N/A. Ca104.06 IF (status=18X-2XX) THEN M ELSE N/A. Ca104.07 IF (status= (404,413,480,486,500,503,600,603)) THEN O ELSE N/A. Ca104.08 IF (status=2XX) THEN M ELSE N/A. Ca104.09 IF (status=2XX) THEN O ELSE N/A. Ca104.10 IF (status=420) THEN M ELSE N/A. Ca104.11 IF (status=420) THEN O ELSE N/A.						
Comments: To be conformed to RFC 3261 [1] shall be set to "SIP/2.0". Updating covers either sending, addition or modification before forwarding of the header field. Receiving covers the ability of the proxy to read it. Except Via, Contact, Route and Proxy-Authorization headers, proxy shall not remove before forwarding any header field, even if it does not understand it.						

### A.8.3.3 Querying for capabilities Security

#### A.8.3.3.1 Querying for capabilities Security capabilities

**Table A.105: Querying for capabilities Security capabilities**

Prerequisite: A.1/3				
Item	Security capabilities	Reference	Status	Support
1	HTTP Authentication	RFC 3261 [1], sections 22 and 26.2.3	M	
2	S/MIME	RFC 3261 [1], sections 23 and 26.2.4	O	
3	TLS	RFC 3261 [1], section 26.2.1	M	
Comments:				

## A.8.3.3.2 HTTP parameters

Table A.106: Access Authentication

Prerequisite: A.1/3				
Item	Parameters name	Reference	Status	Support
1	Basic	RFC 2617 [3], section 2	X	
2	Digest	RFC 2617 [3], section 3	M	
Comments:				

Table A.107: Proxy-Authenticate header

Prerequisite: A.1/3				
Item	Parameters name	Reference	Status	Support
1	realm	RFC 2617 [3], section 3.2.1	M	
2	domain	RFC 2617 [3], section 3.2.1	O	
3	nonce	RFC 2617 [3], section 3.2.1	M	
4	opaque	RFC 2617 [3], section 3.2.1	O	
5	stale	RFC 2617 [3], section 3.2.1	O	
6	algorithm	RFC 2617 [3], section 3.2.1	O	
7	qop-options	RFC 2617 [3], section 3.2.1	O	
8	auth-param	RFC 2617 [3], section 3.2.1	O	
NOTE: If a UAC receives a qop-options header in an Authenticate then message-quop is mandatory.				
Comments:				

Table A.108: Proxy-Authorization header

Prerequisite: A.1/3				
Item	Parameters name	Reference	Status	Support
1	username	RFC 2617 [3], section 3.2.2	M	
2	realm	RFC 2617 [3], section 3.2.2	M	
3	nonce	RFC 2617 [3], section 3.2.2	M	
4	digest-uri	RFC 2617 [3], section 3.2.2	M	
5	response	RFC 2617 [3], section 3.2.2	M	
6	algorithm	RFC 2617 [3], section 3.2.2	O	
7	cnonce	RFC 2617 [3], section 3.2.2	O	
8	opaque	RFC 2617 [3], section 3.2.2	O	
9	message-qop	RFC 2617 [3], section 3.2.2	O (see note)	
10	nonce-count	RFC 2617 [3], section 3.2.2	O	
11	auth-param	RFC 2617 [3], section 3.2.2	O	
NOTE: If a UAC receives a qop-options header in an Authenticate then message-quop is mandatory.				
Comments:				

## A.8.3.4 Querying for capabilities transport

Table A.109: Querying for capabilities transport

Prerequisite: A.2/3 and A.1/1				
Item	Transport	Reference	Status	Support
1	UDP	RFC 3261 [1], section 18	M	
2	TCP	RFC 3261 [1], section 18	M	
3	Other transport	RFC 3261 [1], section 18	O	
Comments:				



### A.8.3.5 Querying for capabilities addressing

#### A.8.3.5.1 URIs

**Table A.110: Call Control URI**

Prerequisite: A.1/3				
Item	URI scheme	Reference	Status	Support
1	SIP	RFC 3261 [1], section 19	M	
2	SIPS	RFC 3261 [1], section 19	M	
Comments:				

#### A.8.3.5.2 IP address

**Table A.111: Call Control IP Address**

Prerequisite: A.1/3				
Item	IP Address format	Reference	Status	Support
1	IPv4	RFC 3261 [1], section 19	M	
2	IPv6	RFC 3261 [1], section 19	O	
Comments:				

### A.8.3.6 Querying for capabilities Timers

**Table A.112: Querying for capabilities Timer**

Prerequisite: A.1/3				
Item	Timer	Reference	Status	Support
1	Timer C	RFC 3261 [1], section 16 and table 4	Ca112.01	
2	Timer J	RFC 3261 [1], section 17.2.2 and table 4	M (see note)	
Ca112.01 IF A.77/1.2 THEN M ELSE N/A -- Statefull.				
NOTE: Set to zero for reliable transport.				
Comments:				

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## A.9 Redirect server

This clause contains the PICS proforma tables related to the SIP Redirect server.

### A.9.1 Services

**Table A.113: Services**

Prerequisite: A.1/4				
Item	Services	Reference	Status	Support
1	Redirection service	RFC 3261 [1], section 8.3	M	
Comments:				

## A.9.2 Redirection service

This clause contains the PICS proforma tables related to the redirection operations for the redirect server.

### A.9.2.1 Redirection Messages

#### A.9.2.1.1 Redirection Requests

**Table A.114: Call Control Requests**

Prerequisite: A.1/4				
Item	Method	Reference	Status	Support
			Receiving	Receiving
1	INVITE	RFC 3261 [1], section 13	Oa114.01	
2	BYE	RFC 3261 [1], section 15	Oa114.01	
3	CANCEL	RFC 3261 [1], section 9	Ca114.01	
4	OTPION	RFC 3261 [1], section 11	Oa114.01	
Oa114.01	It is mandatory to support at least one of those items.			
Ca114.01	IF A. 114/1 THEN M ELSON/A.			
Comments:				

#### A.9.2.1.2 Redirection Responses

##### A.9.2.1.2.1 Redirection INVITE Responses

**Table A.115: Redirection INVITE Responses**

Prerequisite: A.1/4 and A.114/1				
Item	Status code	Reference	Status	Support
			Sending	Sending
1	1XX			
1.1	100	RFC 3261 [1], sections 21.1.1 and 8.1.3.2	O	
1.2	183	RFC 3261 [1], sections 21.1.5 and 8.1.3.2	O	
3	3XX			
3.1	300	RFC 3261 [1], sections 21.3.1 and 8.1.3.2	Oa115.01	
3.2	301	RFC 3261 [1], section 21.3.2	Oa115.01	
3.3	302	RFC 3261 [1], section 21.3.3	Oa115.01	
3.4	305	RFC 3261 [1], section 21.3.4	Oa115.01	
3.5	380	RFC 3261 [1], section 21.3.5	Oa115.01	
4	4XX			
4.1	400	RFC 3261 [1], section 21.4.1	O	
4.2	401	RFC 3261 [1], section 21.4.2	O	
4.3	402	RFC 3261 [1], section 21.4.3	O	
4.4	403	RFC 3261 [1], section 21.4.4	O	
4.5	404	RFC 3261 [1], section 21.4.5	O	
4.6	405	RFC 3261 [1], section 21.4.6	O	
4.7	407	RFC 3261 [1], section 21.4.8	O	
4.8	408	RFC 3261 [1], section 21.4.9	O	
4.9	410	RFC 3261 [1], section 21.4.10	O	
4.10	413	RFC 3261 [1], section 21.4.11	O	
4.11	414	RFC 3261 [1], section 21.4.12	O	
4.12	416	RFC 3261 [1], section 21.4.14	O	
4.13	480	RFC 3261 [1], section 21.4.18	O	
4.14	484	RFC 3261 [1], section 21.4.22	O	
4.15	485	RFC 3261 [1], section 21.4.23	O	
4.16	486	RFC 3261 [1], section 21.4.24	O	
4.17	488	RFC 3261 [1], section 21.4.26	O	
4.18	491	RFC 3261 [1], section 21.4.27	O	

Prerequisite: A.1/4 and A.114/1				
Item	Status code	Reference	Status	Support
			Sending	Sending
<b>5</b>	5XX			
<b>5.1</b>	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	O	
<b>5.2</b>	503	RFC 3261 [1], section 21.5.4	O	
<b>5.3</b>	504	RFC 3261 [1], section 21.5.5	O	
<b>5.4</b>	505	RFC 3261 [1], section 21.5.6	O	
<b>5.5</b>	513	RFC 3261 [1], section 21.5.7	O	
<b>6</b>	6XX			
<b>6.1</b>	600	RFC 3261 [1], section 21.6.1		
<b>6.2</b>	603	RFC 3261 [1], section 21.6.2		
<b>6.3</b>	604	RFC 3261 [1], section 21.6.3		
Oa115.01	It is mandatory to support at least one of those items.			
Comments:				

## A.9.2.1.2.2 Redirection BYE Responses

Table A.116: Redirection BYE Responses

Prerequisite: A.1/4 and A.114/2				
Item	Status code	Reference	Status	Support
			Sending	Sending
<b>1</b>	1XX			
<b>1.1</b>	100	RFC 3261 [1], sections 21.1.1 and 8.1.3.2	O	
<b>1.2</b>	183	RFC 3261 [1], sections 21.1.5 and 8.1.3.2	O	
<b>3</b>	3XX			
<b>3.1</b>	300	RFC 3261 [1], sections 21.3.1 and 8.1.3.2	Oa116.01	
<b>3.2</b>	301	RFC 3261 [1], section 21.3.2	Oa116.01	
<b>3.3</b>	302	RFC 3261 [1], section 21.3.3	Oa116.01	
<b>3.4</b>	305	RFC 3261 [1], section 21.3.4	Oa116.01	
<b>3.5</b>	380	RFC 3261 [1], section 21.3.5	Oa116.01	
<b>4</b>	4XX			
<b>4.1</b>	400	RFC 3261 [1], section 21.4.1	O	
<b>4.2</b>	401	RFC 3261 [1], section 21.4.2	O	
<b>4.3</b>	402	RFC 3261 [1], section 21.4.3	O	
<b>4.4</b>	403	RFC 3261 [1], section 21.4.4	O	
<b>4.5</b>	404	RFC 3261 [1], section 21.4.5	O	
<b>4.6</b>	405	RFC 3261 [1], section 21.4.6	O	
<b>4.7</b>	407	RFC 3261 [1], section 21.4.8	O	
<b>4.8</b>	408	RFC 3261 [1], section 21.4.9	O	
<b>4.9</b>	410	RFC 3261 [1], section 21.4.10	O	
<b>4.10</b>	413	RFC 3261 [1], section 21.4.11	O	
<b>4.11</b>	414	RFC 3261 [1], section 21.4.12	O	
<b>4.12</b>	416	RFC 3261 [1], section 21.4.14	O	
<b>4.13</b>	480	RFC 3261 [1], section 21.4.18	O	
<b>4.14</b>	484	RFC 3261 [1], section 21.4.22	O	
<b>4.15</b>	485	RFC 3261 [1], section 21.4.23	O	
<b>4.16</b>	486	RFC 3261 [1], section 21.4.24	O	
<b>4.17</b>	488	RFC 3261 [1], section 21.4.26	O	
<b>4.18</b>	491	RFC 3261 [1], section 21.4.27	O	
<b>5</b>	5XX			
<b>5.1</b>	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	O	
<b>5.2</b>	503	RFC 3261 [1], section 21.5.4	O	
<b>5.3</b>	504	RFC 3261 [1], section 21.5.5	O	
<b>5.4</b>	505	RFC 3261 [1], section 21.5.6	O	
<b>5.5</b>	513	RFC 3261 [1], section 21.5.7	O	

Prerequisite: A.1/4 and A.114/2				
Item	Status code	Reference	Status	Support
			Sending	Sending
6	6XX			
6.1	600	RFC 3261 [1], section 21.6.1		
6.2	603	RFC 3261 [1], section 21.6.2		
6.3	604	RFC 3261 [1], section 21.6.3		
Oa116.01	It is mandatory to support at least one of those items.			
Comments:				

## A.9.2.1.2.3 Redirection CANCEL Responses

Table A.117: Redirection CANCEL Responses

Prerequisite: A.1/4 and A.114/3				
Item	Status code	Reference	Status	Support
			Sending	Sending
1	1XX	RFC 3261 [1], sections 21.1 and 8.1.3.2	X	
2	2XX			
2.1	200	RFC 3261 [1], section 21.2	M	
3	3XX			
4	4XX			
4.1	400	RFC 3261 [1], section 21.4.1	O	
4.2	401	RFC 3261 [1], section 21.4.2	O	
4.3	403	RFC 3261 [1], section 21.4.4	O	
4.4	404	RFC 3261 [1], section 21.4.5	O	
4.5	406	RFC 3261 [1], section 21.4.7	O	
4.6	408	RFC 3261 [1], section 21.4.9	O	
4.7	413	RFC 3261 [1], section 21.4.11	O	
4.8	414	RFC 3261 [1], section 21.4.12	O	
4.9	481	RFC 3261 [1], section 21.4.19	O	
4.10	482	RFC 3261 [1], section 21.4.20	O	
4.11	484	RFC 3261 [1], section 21.4.22	O	
4.12	485	RFC 3261 [1], section 21.4.23	O	
4.13	487	RFC 3261 [1], section 21.4.25	O	
4.14	488	RFC 3261 [1], section 21.4.26		
5	5XX			
5.1	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	M	
5.2	504	RFC 3261 [1], section 21.5.5	O	
5.3	513	RFC 3261 [1], section 21.5.7	O	
6	6XX			
6.1	600	RFC 3261 [1], section 21.6.1	M	
6.2	604	RFC 3261 [1], section 21.6.3	O	
Comments:				

## A.9.2.1.2.4 Redirection OPTIONS Responses

Table A.118: Redirection OPTIONS Responses

Prerequisite: A.1/4 and A.114/4				
Item	Status code	Reference	Status	Support
			Sending	Sending
1	1XX			
1.1	100	RFC 3261 [1], sections 21.1.1 and 8.1.3.2	O	
1.2	183	RFC 3261 [1], sections 21.1.5 and 8.1.3.2	O	
3	3XX			
3.1	300	RFC 3261 [1], sections 21.3.1 and 8.1.3.2	Oa118.01	
3.2	301	RFC 3261 [1], section 21.3.2	Oa118.01	
3.3	302	RFC 3261 [1], section 21.3.3	Oa118.01	
3.4	305	RFC 3261 [1], section 21.3.4	Oa118.01	
3.5	380	RFC 3261 [1], section 21.3.5	Oa118.01	

Prerequisite: A.1/4 and A.114/4				
Item	Status code	Reference	Status	Support
			Sending	Sending
<b>4</b>	4XX			
4.1	400	RFC 3261 [1], section 21.4.1	O	
4.2	401	RFC 3261 [1], section 21.4.2	O	
4.3	402	RFC 3261 [1], section 21.4.3	O	
4.4	403	RFC 3261 [1], section 21.4.4	O	
4.5	404	RFC 3261 [1], section 21.4.5	O	
4.6	405	RFC 3261 [1], section 21.4.6	O	
4.7	407	RFC 3261 [1], section 21.4.8	O	
4.8	408	RFC 3261 [1], section 21.4.9	O	
4.9	410	RFC 3261 [1], section 21.4.10	O	
4.10	413	RFC 3261 [1], section 21.4.11	O	
4.11	414	RFC 3261 [1], section 21.4.12	O	
4.12	416	RFC 3261 [1], section 21.4.14	O	
4.13	480	RFC 3261 [1], section 21.4.18	O	
4.14	484	RFC 3261 [1], section 21.4.22	O	
4.15	485	RFC 3261 [1], section 21.4.23	O	
4.16	486	RFC 3261 [1], section 21.4.24	O	
4.17	488	RFC 3261 [1], section 21.4.26	O	
4.18	491	RFC 3261 [1], section 21.4.27	O	
<b>5</b>	5XX			
5.1	500	RFC 3261 [1], sections 21.5.1 and 8.1.3.2	O	
5.2	503	RFC 3261 [1], section 21.5.4	O	
5.3	504	RFC 3261 [1], section 21.5.5	O	
5.4	505	RFC 3261 [1], section 21.5.6	O	
5.5	513	RFC 3261 [1], section 21.5.7	O	
<b>6</b>	6XX			
6.1	600	RFC 3261 [1], section 21.6.1		
6.2	603	RFC 3261 [1], section 21.6.2		
6.3	604	RFC 3261 [1], section 21.6.3		
Oa118.01 It is mandatory to support at least one of those items.				
Comments:				

### A.9.2.1.3 Redirection parameters

#### A.9.2.1.3.1 Request parameters

**Table A.119: OPTIONS Request parameters**

Prerequisite: A.1/3				
Item	Parameters name	Reference	Status	Support
			Receiving	Receiving
<b>1</b>	<b>Request-Line</b>			
1.1	Method	RFC 3261 [1], section 7.1	M	
1.2	Request-URI	RFC 3261 [1], section 7.1	M	
1.3	SIP-Version	RFC 3261 [1], section 7.1	M	
<b>2</b>	<b>Headers</b>			
2.1	Authorization	RFC 3261 [1], section 20	O	
2.2	Proxy-Authorization	RFC 3261 [1], section 20	O	
Comments:				

## A.9.2.1.3.2 Response parameters

Table A.120: Reponse parameters

Prerequisite: A.1/3				
Item	Parameters name	Reference	Status	Support
			Sending	Receiving
<b>1</b>	<b>Status-Line</b>			
1.1	SIP-Version	RFC 3261 [1], section 7.1	M	
1.2	Status-code	RFC 3261 [1], section 7.1	M	
1.3	Reason-Phrase	RFC 3261 [1], section 7.1	M	
<b>2</b>	<b>Headers</b>			
2.1	Authentication-Info	RFC 3261 [1], section 20	O	
2.2	Contact	RFC 3261 [1], section 20	M	
2.3	Proxy-Authenticate	RFC 3261 [1], section 20	O	
Comments:				

## A.9.2.2 Redirection Security

## A9.2.2.1 Redirection Security capabilities

Table A.121: Redirection Security capabilities

Prerequisite: A.1/4				
Item	Security capabilities	Reference	Status	Support
<b>1</b>	HTTP Authentication	RFC 3261 [1], sections 22 and 26.2.3	M	
<b>2</b>	S/MIME	RFC 3261 [1], sections 23 and 26.2.4	O	
<b>3</b>	TLS	RFC 3261 [1], section 26.3.1	M	
Comments:				

## A.9.2.2.2 HTTP parameters

Table A.122: Access Authentication

Prerequisite: A.1/4				
Item	Parameters name	Reference	Status	Support
<b>1</b>	Basic	RFC 2617 [3], section 2	X	
<b>2</b>	Digest	RFC 2617 [3], section 3	M	
Comments:				

Table A.123: Authenticate header

Prerequisite: A.1/4				
Item	Parameters name	Reference	Status	Support
<b>1</b>	realm	RFC 2617 [3], section 3.2.1	M	
<b>2</b>	domain	RFC 2617 [3], section 3.2.1	O	
<b>3</b>	nonce	RFC 2617 [3], section 3.2.1	M	
<b>4</b>	opaque	RFC 2617 [3], section 3.2.1	O	
<b>5</b>	stale	RFC 2617 [3], section 3.2.1	O	
<b>6</b>	algorithm	RFC 2617 [3], section 3.2.1	O	
<b>7</b>	qop-options	RFC 2617 [3], section 3.2.1	O	
<b>8</b>	auth-param	RFC 2617 [3], section 3.2.1	O	
NOTE: If a proxy sends a qop-options header in a proxy-Authenticate then message-quop is mandatory.				
Comments:				

Table A.124: Authorization header

Prerequisite: A.1/4				
Item	Parameters name	Reference	Status	Support
1	username	RFC 2617 [3], section 3.2.2	M	
2	realm	RFC 2617 [3], section 3.2.2	M	
3	nonce	RFC 2617 [3], section 3.2.2	M	
4	digest-uri	RFC 2617 [3], section 3.2.2	M	
5	response	RFC 2617 [3], section 3.2.2	M	
6	algorithm	RFC 2617 [3], section 3.2.2	O	
7	cnonce	RFC 2617 [3], section 3.2.2	O	
8	opaque	RFC 2617 [3], section 3.2.2	O	
9	message-qop	RFC 2617 [3], section 3.2.2	O (see note)	
10	nonce-count	RFC 2617 [3], section 3.2.2	O	
11	auth-param	RFC 2617 [3], section 3.2.2	O	
NOTE: If a proxy sends a qop-options header in a proxy-Authenticate then message-quop is mandatory.				
Comments:				

### A.9.2.3 Redirection Transport

Table A.125: transport

Prerequisite: A.1/4				
Item	Transport	Reference	Status	Support
1	UDP	RFC 3261 [1], section 18	M	
2	TCP	RFC 3261 [1], section 18	M	
3	Other transport	RFC 3261 [1], section 18	O	
Comments:				

### A.9.2.4 Redirection Addressing

#### A.9.2.4.1 URIs

Table A.126: Redirection URI

Prerequisite: A.1/4				
Item	URI scheme	Reference	Status	Support
1	SIP	RFC 3261 [1], section 19	M	
2	SIPS	RFC 3261 [1], section 19	M	
Comments:				

#### A.9.2.4.2 IP address

Table A.127: Call Control IP Address

Prerequisite: A.1/4				
Item	IP Address format	Reference	Status	Support
1	IPv4	RFC 3261 [1], section 19	M	
2	IPv6	RFC 3261 [1], section 19	O	
Comments:				

## A.9.2.5 Redirection Timers

Table A.128: Redirection Timer

Prerequisite: A.1/4				
Item	Timer	Reference	Status	Support
1	Timer G	RFC 3261 [1], section 17.2.1 and table 4	Ca128.01	
2	Timer H	RFC 3261 [1], section 17.2.1 and table 4	Ca128.01	
3	Timer I	RFC 3261 [1], section 17.2.1 and table 4	Ca128.01	
4	Timer J	RFC 3261 [1], section 17.2.2 and table 4	Ca128.02	
Ca128.01 IF A.114/1 THEN M ELSE N/A -- INVITE server.				
Ca128.02 IF (A.114/2 OR A.114/3 OR A.114/4) THEN M ELSE N/A -- non-INVITE server.				
NOTE: Set to zero for reliable transport.				
Comments:				



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## Annex B (informative): Bibliography

- ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification". (See also ITU-T Recommendation X.291).
- ISO/IEC 9646-3: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The Tree and Tabular Combined Notation" (TTCN). (See also ITU-T Recommendation X.292).
- ISO/IEC 9646-4: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 4: Test realization".
- ISO/IEC 9646-5: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 5: Requirements on test laboratories and clients for the conformance assessment process".
- ISO/IEC 9646-6: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".
- IETF RFC 2616: "Hypertext Transfer Protocol - HTTP/1.1".

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## History

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