

Source: **TSG CN WG 1**

Title: **CRs to Rel-6 on Work Item IMS2 towards 24.229 and 23.218**

Agenda item: **9.1**

Document for: **APPROVAL**

Introduction:

This document contains **7 CRs**, **Rel-6** Work Item "**IMS2**", that have been agreed by **TSG CN WG1 in CN1#32bis and CN1#33 meeting**, and are forwarded to TSG CN Plenary meeting #23 for approval.

| Spec | CR | Rev | Phase | Subject | Cat | Version-Current | Version-New | Doc-2nd-Level | Meeting-2nd-Level |
|-------------|-----------|------------|--------------|---|------------|------------------------|--------------------|----------------------|--------------------------|
| 23.218 | 064 | 1 | Rel-6 | Dh Interface | B | 6.0.0 | 6.1.0 | N1-040158 | N1-32bis |
| 23.218 | 066 | 2 | Rel-6 | Initiating Back to Back User Agent | F | 6.0.0 | 6.1.0 | N1-040472 | N1-33 |
| 24.229 | 578 | 1 | Rel-6 | UE requesting no-fork | B | 6.1.0 | 6.2.0 | N1-040184 | N1-32bis |
| 24.229 | 579 | 1 | Rel-6 | Inclusion of caller preferences into profile | B | 6.1.0 | 6.2.0 | N1-040284 | N1-33 |
| 24.229 | 588 | 1 | Rel-6 | Re-authentication - Abnormal cases | F | 6.1.0 | 6.2.0 | N1-040393 | N1-33 |
| 24.229 | 596 | 1 | Rel-6 | Sec-agree parameter in "Proxy-Require" header | F | 6.1.0 | 6.2.0 | N1-040400 | N1-33 |
| 24.229 | 604 | | Rel-6 | Forking in S-CSCF | B | 6.1.0 | 6.2.0 | N1-040325 | N1-33 |

CHANGE REQUEST

⌘ 23.218 CR 064 ⌘ rev 1 ⌘ Current version: 6.0.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ⌘ ME ⌘ Radio Access Network ⌘ Core Network

| | | |
|------------------------|---|--|
| Title: | ⌘ Dh interface | |
| Source: | ⌘ Nokia | |
| Work item code: | ⌘ IMS2 | Date: ⌘ 07/01/2004 |
| Category: | ⌘ B Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 . | Release: ⌘ Rel-6 Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

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| Reason for change: | ⌘ The TS 23.002 and 23.228 define the Dh interface between application server and SLF. The interface is used for retrieving the address of the user's HSS in multiple HSS environment. |
| Summary of change: | ⌘ The description of the interface Dh is proposed to be added into the specification. |
| Consequences if not approved: | ⌘ Misalignment with TS 23.002 and 23.228 |

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|------------------------------|---|---|---|---|--|---|--|---|--|
| Clauses affected: | ⌘ 9.2 | | | | | | | | |
| Other specs affected: | ⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Y</td><td>N</td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr></table> Other core specifications ⌘ ⌘ Test specifications ⌘ ⌘ O&M Specifications ⌘ | Y | N | X | | X | | X | |
| Y | N | | | | | | | | |
| X | | | | | | | | | |
| X | | | | | | | | | |
| X | | | | | | | | | |
| Other comments: | ⌘ | | | | | | | | |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2 Interfaces defined for a SIP Application Server

9.2.1 S-CSCF – Application Server (ISC) interface

This interface can be used by the Application Server to control an IP Multimedia session via a S-CSCF. Transactions between the S-CSCF and the Application Server on this interface are initiated either as a result of the S-CSCF proxying a SIP request to the Application Server or by the Application Server initiating by generating and sending a SIP request to the S-CSCF. This interface is based on SIP.

9.2.2 Application Server – HSS (Sh) interface

The Sh interface is between the HSS and the SIP Application Servers and the OSA SCS and may be used for transferring User Profile information.

9.2.3 Application Server – SLF (Dh) interface

The Dh interface is between the SLF and the SIP Application Servers, and the OSA SCS, and the IM-SSF and may be used for retrieving the address of the HSS which holds the User Profile information for a given user.

CHANGE REQUEST

⌘ 23.218 CR 066 ⌘ rev 2 ⌘ Current version: 6.0.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ⌘ ME Radio Access Network Core Network

| | | |
|------------------------|---|--|
| Title: | ⌘ Initiating Back to Back User Agent | |
| Source: | ⌘ INT/GET | |
| Work item code: | ⌘ IMS2 | Date: ⌘ 17/2/2004 |
| Category: | ⌘ F Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 . | Release: ⌘ Rel-6 Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

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| Reason for change: | ⌘ TS 23.218 describes the mode of operation between the S-SCSF and the Application Server. The role for an Application Servicer is currently restricted to the Routeing Back to Back User Agent in section 9.1.1.4. This CR introduces in TS 23.218 the possiblity for an Application Server performing third party call control to act as an initiating B2BUA. |
| Summary of change: | ⌘ The CR proposes to modify section 9.1.1.4 to allow an AS to act as an Initiating Back to Back User Agent. |
| Consequences if not approved: | ⌘ Misalignment between TS24.229 & TS23.218. |

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|------------------------------|--|---|---|---|--|---|--|---|--|
| Clauses affected: | ⌘ 9.1.1.4 | | | | | | | | |
| Other specs affected: | <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td></td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘ | Y | N | X | | X | | X | |
| Y | N | | | | | | | | |
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| X | | | | | | | | | |
| X | | | | | | | | | |
| Other comments: | ⌘ | | | | | | | | |

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9.1.1.4 Application Server performing third party call control/ B2BUA mode

The AS performing 3rd party call control acts as a B2BUA. There are several kinds of 3rd party call control, for example:

- Routing B2BUA: an AS receives a request from the S-CSCF, terminates it and generates a new request, which is based on the received request.

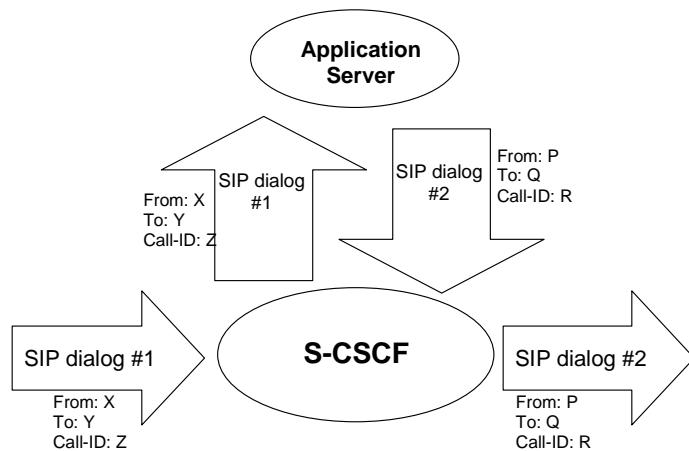


Figure 9.1.1.4.1: Application Server performing third party call control [acting as a routing B2BUA](#)

In this mode of operation the incoming SIP Request is proxied by the S-CSCF to the Application Server which then generates a new SIP request for a different SIP dialog which it sends to the S-CSCF which then proxies it towards the destination. In this mode the Application Server behaves as a B2BUA for the multiple SIP dialogs as specified in IETF RFC 3261 [6].

- Initiating B2BUA: an AS initiates two requests, which are logically connected together at the AS.

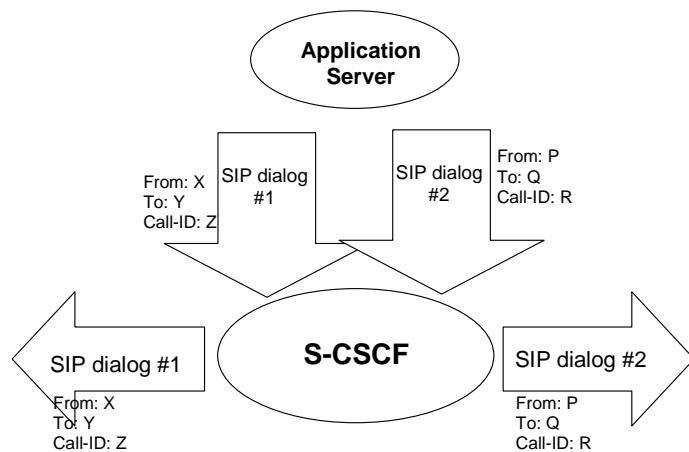


Figure 9.1.1.4.2: Application Server performing third party call control [acting as an initiating B2BUA](#)

In this mode of operation the Application Server initiates two requests with different SIP dialogs. The Application Server is responsible for correlating the two dialogs. These requests are proxied through the S-CSCF which then proxies them towards the destination. In this mode the Application Server behaves as a B2BUA for the multiple SIP dialogs as specified in IETF RFC 3261 [6].

CHANGE REQUEST

⌘ 24.229 CR 578 ⌘ rev 1- ⌘ Current version: 6.1.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ⌘ ME Radio Access Network Core Network

| | | |
|------------------------|---|--|
| Title: | ⌘ UE requesting no-fork | |
| Source: | ⌘ Lucent Technologies | |
| Work item code: | ⌘ IMS2 | Date: ⌘ 20/01/2004 |
| Category: | ⌘ B Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 . | Release: ⌘ Rel-6 Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

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| Reason for change: | ⌘ The document 23.228 subclause 4.2.7 states: "The UE shall be able to include preferences, in INVITE's, indicating that proxies should not fork the INVITE request." |
| Summary of change: | ⌘ In the initial IINVITE request the UE may includes "no-fork" value in the fork-directive. The S-CSCF will not fork if the initial IINVITE request has "no-fork" value in the fork-directive. |
| Consequences if not approved: | ⌘ Incomplete specification. |

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|------------------------------|---|---|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| Clauses affected: | ⌘ References, 5.1.3, 5.4.3.3. | | | | | | | | | | | | | | | | | | | | |
| Other specs affected: | ⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Y</td><td>N</td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table> Other core specifications ⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table> Test specifications ⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table> O&M Specifications ⌘ | Y | N | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Y | N | | | | | | | | | | | | | | | | | | | | |
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| Other comments: | ⌘ | | | | | | | | | | | | | | | | | | | | |

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******FIRST CHANGE*****

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, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 23.002: "Network architecture".
- [3] 3GPP TS 23.003: "Numbering, addressing and identification".
- [4] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service description; Stage 2".
- [4A] 3GPP TS 23.107: "Quality of Service (QoS) concept and architecture".
- [5] 3GPP TS 23.218: "IP Multimedia (IM) Session Handling; IM call model".
- [6] 3GPP TS 23.221: "Architectural requirements".
- [7] 3GPP TS 23.228: "IP multimedia subsystem; Stage 2".
- [8] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core Network protocols; Stage 3".
- [9] 3GPP TS 25.304: "UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode".
- [9A] 3GPP TS 25.331: "Radio Resource Control (RRC); Protocol Specification".
- [10] 3GPP TS 26.235: "Packet switched conversational multimedia applications; Default codecs".
- [10A] 3GPP TS 27.060: "Mobile Station (MS) supporting Packet Switched Services".
- [11] 3GPP TS 29.061: "Interworking between the Public Land Mobile Network (PLMN) supporting Packet Based Services and Packet Data Networks (PDN)".
- [12] 3GPP TS 29.207: "Policy control over Go interface".
- [13] 3GPP TS 29.208: "End to end Quality of Service (QoS) signalling flows".
- [13A] 3GPP TS 29.209: "Policy control over Gq interface".
- [14] 3GPP TS 29.228: "IP Multimedia (IM) Subsystem Cx and Dx Interfaces; Signalling flows and message contents".
- [15] 3GPP TS 29.229: "Cx and Dx Interfaces based on the Diameter protocol, Protocol details".
- [16] 3GPP TS 32.240: "Telecommunication management; Charging management; Charging architecture and principles".
- [17] 3GPP TS 32.260: "Telecommunication management; Charging management; IP Multimedia subsystem (IMS) charging".

- [18] 3GPP TS 33.102: "3G Security; Security architecture".
- [19] 3GPP TS 33.203: "Access security for IP based services".
- [19A] 3GPP TS 33.210: "IP Network Layer Security".
- [20] 3GPP TS 44.018: "Mobile radio interface layer 3 specification, Radio Resource Control Protocol".
- [20A] RFC 2401 (November 1998): "Security Architecture for the Internet Protocol".
- [20B] RFC 1594 (March 1994): "FYI on Questions and Answers to Commonly asked "New Internet User" Questions".
- [20C] RFC 2403 (November 1998) "The Use of HMAC-MD5-96 within ESP and AH".
- [20D] RFC 2404 (November 1998) "The Use of HMAC-SHA-1-96 within ESP and AH".
- [20E] RFC 2462 (November 1998): "IPv6 Address Autoconfiguration".
- [21] RFC 2617 (June 1999): "HTTP Authentication: Basic and Digest Access Authentication".
- [22] RFC 2806 (April 2000): "URLs for Telephone Calls".
- [23] RFC 2833 (May 2000): "RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals".
- [24] RFC 2916 (September 2000): "E.164 number and DNS".
- [25] RFC 2976 (October 2000): "The SIP INFO method".
- [25A] RFC 3041 (January 2001): "Privacy Extensions for Stateless Address Autoconfiguration in IPv6".
- [26] RFC 3261 (June 2002): "SIP: Session Initiation Protocol".
- [27] RFC 3262 (June 2002): "Reliability of provisional responses in Session Initiation Protocol (SIP)".
- [28] RFC 3265 (June 2002): "Session Initiation Protocol (SIP) Specific Event Notification".
- [29] RFC 3311 (September 2002): "The Session Initiation Protocol (SIP) UPDATE method".
- [30] RFC 3312 (October 2002): "Integration of resource management and Session Initiation Protocol (SIP)".
- [31] RFC 3313 (January 2003): "Private Session Initiation Protocol (SIP) Extensions for Media Authorization".
- [32] RFC 3320 (March 2002): "Signaling Compression (SigComp)".
- [33] RFC 3323 (November 2002): "A Privacy Mechanism for the Session Initiation Protocol (SIP)".
- [34] RFC 3325 (November 2002): "Private Extensions to the Session Initiation Protocol (SIP) for Network Asserted Identity within Trusted Networks".
- [34A] RFC 3326 (December 2002): "The Reason Header Field for the Session Initiation Protocol (SIP)".
- [35] RFC 3327 (December 2002): "Session Initiation Protocol Extension Header Field for Registering Non-Adjacent Contacts".
- [36] RFC 3515 (April 2003): "The Session Initiation Protocol (SIP) REFER method".
- [37] RFC 3420 (November 2002): "Internet Media Type message/sipfrag".
- [38] RFC 3608 (October 2003): "Session Initiation Protocol (SIP) Extension Header Field for Service Route Discovery During Registration".
- [39] draft-ietf-mmusic-sdp-new-13 (May 2003): "SDP: Session Description Protocol".

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

- [40] RFC 3315 (July 2003): "Dynamic Host Configuration Protocol for IPv6 (DHCPv6)".
- [41] RFC 3319 (July 2003): "Dynamic Host Configuration Protocol (DHCPv6) Options for Session Initiation Protocol (SIP) Servers".
- [42] RFC 3485 (February 2003): "The Session Initiation Protocol (SIP) and Session Description Protocol (SDP) static dictionary for Signaling Compression (SigComp)".
- [43] draft-ietf-sipping-reg-event-00 (October 2002): "A Session Initiation Protocol (SIP) Event Package for Registrations".

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

- [44] Void.
- [45] Void.
- [46] Void.
- [47] Void.
- [48] RFC 3329 (January 2003): "Security Mechanism Agreement for the Session Initiation Protocol (SIP)".
- [49] RFC 3310 (September 2002): "Hypertext Transfer Protocol (HTTP) Digest Authentication Using Authentication and Key Agreement (AKA)".
- [50] RFC 3428 (December 2002): "Session Initiation Protocol (SIP) Extension for Instant Messaging".
- [51] Void.
- [52] RFC 3455 (January 2003): "Private Header (P-Header) Extensions to the Session Initiation Protocol (SIP) for the 3rd-Generation Partnership Project (3GPP)".
- [53] RFC 3388 (December 2002): "Grouping of Media Lines in Session Description Protocol".
- [54] RFC 3524 (April 2003): "Mapping of Media Streams to Resource Reservation Flows".
- [55] RFC 3486 (February 2003): "Compressing the Session Initiation Protocol (SIP)".
- [56] RFC 3556 (July 2003): "Session Description Protocol (SDP) Bandwidth Modifiers for RTP Control Protocol (RTCP) Bandwidth".
- [56A] RFC 3581 (August 2003): "An Extension to the Session Initiation Protocol (SIP) for Symmetric Response Routing".
- [57] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".
- [58] [draft-ietf-sip-callerprefs-10 \(October, 2003\): " Caller Preferences for the Session Initiation Protocol \(SIP\)"](#)

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

****NEXT CHANGE***

5.1.3 Call initiation - mobile originating case

5.1.3.1 Initial INVITE

Upon generating an initial INVITE request, the UE shall:

- indicate the support for reliable provisional responses and specify it using the Supported header mechanism;
- indicate the requirement of precondition and specify it using the Require header mechanism.

The UE may also indicate that the proxies should not fork the INVITE request by including a "no-fork" directive within the Request-Disposition header in the initial INVITE request as described in draft-ietf-sip-callerprefs-10 [58].

If the UA receives a 503 (Service Unavailable) response to an initial INVITE request containing a Retry-After header, then the UE shall not automatically reattempt the request until after the period indicated by the Retry-After header contents.

****NEXT CHANGE***

5.4.3.3 Requests terminated at the served user

When the S-CSCF receives, destined for a registered served user, an initial request for a dialog or a request for a standalone transaction, prior to forwarding the request, the S-CSCF shall:

- 1) determine whether the request contains a barred public user identity in the Request-URI of the request or not. In case the Request URI contains a barred public user identity for the user, then the S-CSCF shall reject the request by generating a 404 (Not Found) response. Otherwise, continue with the rest of the steps;
- 2) remove its own URI from the topmost Route header;
- 3) check if an original dialog identifier that the S-CSCF previously placed in a Route header is present in the topmost Route header of the incoming request.
 - If present, it indicates an association with an existing dialog, the request has been sent from an AS in response to a previously sent request.
 - If not present, it indicates that the request is visiting the S-CSCF for the first time, and in this case the S-CSCF shall save the Request-URI from the request;
- 4) check whether the initial request matches the next unexecuted initial filter criteria in the priority order and apply the filter criteria on the SIP method as described in 3GPP TS 23.218 [5] subclause 6.5. If there is a match, then insert the AS URI to be contacted into the Route header as the topmost entry followed by its own URI populated as specified in the subclause 5.4.3.4;

NOTE 1: Depending on the result of the previous process, the S-CSCF may contact one or more AS(s) before processing the outgoing Request-URI.

- 5) insert a P-Charging-Function-Addresses header field, if not present, populated with values received from the HSS if the message is forwarded within the S-CSCF home network, including towards AS;
- 6) store the value of the icid parameter received in the P-Charging-Vector header and retain the icid parameter in the P-Charging-Vector header;

- 7) store the value of the orig-roi parameter received in the P-Charging-Vector header, if present. The orig-roi parameter identifies the sending network of the request message. The orig-roi parameter shall only be retained in the P-Charging-Vector header if the next hop is to an AS;
- 8) check whether the Request-URI equals to the saved value of the Request-URI. If there is no match, then:
 - a) if the request is an INVITE request, save the Contact, CSeq and Record-Route header field values received in the request such that the S-CSCF is able to release the session if needed; and
 - b) forward the request based on the Request-URI and skip the following steps;

If there is a match, then continue with the further steps;
- 9) in case there are no Route headers in the request, then determine, from the destination public user identity, the list of preloaded routes saved during registration or re-registration, as described in subclause 5.4.1.2. Furthermore, the S-CSCF shall:
 - a) build the Route header field with the values determined in the previous step;
 - b) determine, from the destination public user identity, the saved Contact URI where the user is reachable saved at registration or reregistration, as described in subclause 5.4.1.2. If [the fork-directive in the Request-Disposition header was not set to "no-fork", and](#) there is more than one contact address saved for the destination public user identity the S-CSCF shall either fork the request or perform sequential search based on the relative preference indicated by the qvalue parameter of the Contact header in the original REGISTER request, as described in RFC3261 [26]. In case no qvalue parameter was provided, the S-CSCF shall look into the user profile of the user to find the indication about the default handling of the request;
 - c) build a Request-URI with the contents of the saved Contact URI determined in the previous step; and
 - d) insert a P-Called-Party-ID SIP header field including the Request-URI received in the INVITE;

- 10) if the request is an INVITE request, save the Contact, CSeq and Record-Route header field values received in the request such that the S-CSCF is able to release the session if needed;
- 11) optionally, apply any privacy required by RFC 3323 [33] to the P-Asserted-Identity header; and

NOTE 2: The optional procedure above is in addition to any procedure for the application of privacy at the edge of the trust domain specified by RFC 3323 [33].

- 12) forward the request based on the topmost Route header.

When the S-CSCF receives, destined for an unregistered user, an initial request for a dialog or a request for a standalone transaction, the S-CSCF shall:

- 1) execute the procedures described in the steps 1, 2 and 3 in the above paragraph (when the S-CSCF receives, destined for the registered served user, an initial request for a dialog or a request for a standalone transaction);
- 2) if the S-CSCF does not have the user profile, then initiate the S-CSCF Registration/deregistration notification with the purpose of downloading the relevant user profile (i.e. for unregistered user) and informing the HSS that the user is unregistered, but this S-CSCF will assess triggering of services for the unregistered user, as described in 3GPP TS 29.228 [14]; and
- 3) execute the procedure described in step 4, 5, 6, 7, 8, 9, 11 and 12 in the above paragraph (when the S-CSCF receives, destined for the registered served user, an initial request for a dialog or a request for a standalone transaction).

In case that no AS needs to be contacted, then S-CSCF shall return an appropriate unsuccessful SIP response. This response may be a 480 (Temporarily unavailable) and terminate these procedures.

When the S-CSCF receives a 1xx or 2xx response to the initial request for a dialog (whether the user is registered or not), it shall:

- 1) if the response corresponds to an INVITE request, save the Contact and Record-Route header field values in the response such that the S-CSCF is able to release the session if needed;

- 2) in the case where the S-CSCF has knowledge of an associated tel-URL for a SIP URI contained in the received P-Asserted-Identity header, the S-CSCF shall add a second P-Asserted-Identity header containing this tel-URL; and
- 3) in case the response is forwarded to an AS that is located within the trust domain, the S-CSCF shall retain the P-Access-Network-Info header; otherwise, the S-CSCF shall remove the P-Access-Network-Info header.

When the S-CSCF receives a response to a request for a standalone transaction (whether the user is registered or not), in the case where the S-CSCF has knowledge of an associated tel-URL for a SIP URI contained in the received P-Asserted-Identity header, the S-CSCF shall add a second P-Asserted-Identity header containing this tel-URL. In case the response is forwarded to an AS that is located within the trust domain, the S-CSCF shall retain the P-Access-Network-Info header; otherwise, the S-CSCF shall remove the P-Access-Network-Info header.

When the S-CSCF receives the 200 (OK) response for a standalone transaction request, the S-CSCF shall insert a P-Charging-Function-Addresses header populated with values received from the HSS if the message is forwarded within the S-CSCF home network, including towards an AS.

When the S-CSCF receives, destined for a served user, a target refresh request for a dialog, prior to forwarding the request, the S-CSCF shall:

- 1) remove its own URI from the topmost Route header;
- 2) if the request is an INVITE request, save the Contact, Cseq and Record-Route header field values received in the request such that the S-CSCF is able to release the session if needed;
- 3) create a Record-Route header containing its own SIP URI; and
- 4) forward the request based on the topmost Route header.

When the S-CSCF receives a 1xx or 2xx response to the target refresh request for a dialog (whether the user is registered or not), the S-CSCF shall:

- 1) if the response corresponds to an INVITE request, save the Record-Route and Contact header field values in the response such that the S-CSCF is able to release the session if needed; and
- 2) in case the response is forwarded to an AS that is located within the trust domain, the S-CSCF shall retain the P-Access-Network-Info header; otherwise, the S-CSCF shall remove the P-Access-Network-Info header.

When the S-CSCF receives, destined for the served user, a subsequent request other than target refresh request for a dialog, prior to forwarding the request, the S-CSCF shall:

- 1) remove its own URI from the topmost Route header; and
- 2) forward the request based on the topmost Route header.

When the S-CSCF receives a response to a subsequent request other than target refresh request for a dialog, in case the response is forwarded to an AS that is located within the trust domain, the S-CSCF shall retain the P-Access-Network-Info header; otherwise, the S-CSCF shall remove the P-Access-Network-Info header.

*******NEXT CHANGE*****

5.7.3 Application Server (AS) acting as originating UA

When acting as an originating UA the AS shall behave as defined for a UE in subclause 5.1.3, with the exceptions identified in this subclause.

The AS, although acting as a UA, does not initiate any registration of its associated addresses. These are assumed to be known by peer-to-peer arrangements within the IM CN subsystem.

When an AS acting as an originating UA generates an initial request for a dialog or a request for a standalone transaction, the AS shall insert a P-Charging-Vector header with the icid parameter populated as specified in 3GPP TS 32.260 [17]. The AS may retrieve CCF and/or ECF addresses from HSS on Sh interface.

The AS shall extract charging function addresses from any P-Charging-Function-Addresses header that is received in any 1xx or 2xx responses to the requests.

[The AS may also indicate that the proxies should not fork the INVITE request by including a "no-fork" directive within the Request-Disposition header in the initial INVITE request as described in draft-ietf-sip-callerprefs-10 \[58\].](#)

Furthermore the AS shall insert a Route header pointing to the S-CSCF of the UE on whose behalf the request is generated.

NOTE: The address of the S-CSCF may be obtained either from a previous request terminated by the AS, by querying the HSS on the Sh interface or from static configuration.

******NEXT CHANGE*****

5.7.4 Application Server (AS) acting as a SIP proxy

When the AS acting as a SIP proxy receives a request from the S-CSCF, prior to forwarding the request it shall:

- remove its own URI from the topmost Route header; and
- after executing the required services, route the request based on the topmost Route header.

The AS may modify the SIP requests based on service logic, prior to forwarding the request back to the S-CSCF.

[The AS shall not fork the request if the fork-directive in the Request-Disposition header is set to "no-fork" as described in draft-ietf-sip-callerprefs-10 \[58\].](#)

An AS acting as a SIP proxy shall propagate any received IM CN subsystem XML message body in the forwarded message.

CHANGE REQUEST

⌘ 24.229 CR 579 ⌘ rev 1 ⌘ Current version: 6.1.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ⌘ ME Radio Access Network ⌘ Core Network

| | | |
|------------------------|---|--|
| Title: | ⌘ Inclusion of caller preferences into profile | |
| Source: | ⌘ Lucent Technologies | |
| Work item code: | ⌘ IMS2 | Date: ⌘ 20/01/2004 |
| Category: | ⌘ B Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 . | Release: ⌘ Rel-6 Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

| | |
|--------------------------------------|---|
| Reason for change: | ⌘ 23.228 specifies that , subclause 4.2.7 contains the following text in respect of forking: "The UE shall be able to include preferences, in INVITE's, indicating that proxies should not fork the INVITE request." This requirement is met by adoption of the caller preferences draft into 3GPP. The caller preferences draft is IESG approved and at the moment in the publication queue. Discussion of the support of individual headers is dealt with in N1-040281, N1-040282 and N1-040283. |
| Summary of change: | ⌘ Changes to the main body of 24.229 in respect of the impact of caller preferences on forking are dealt with in a separate CR. This separate CR also provides the forking. In the profile, appropriate options are added to the major capabilities tables, and 3 new headers: Request-Disposition, Accept-Contact and Reject-Contact are added to the PDU tables. |
| Consequences if not approved: | ⌘ Misalignment with stage 2 requirements in 23.228. |

| | | | | | | | | | |
|------------------------------|--|---|---|---|--|---|--|---|--|
| Clauses affected: | ⌘ A.2 | | | | | | | | |
| Other specs affected: | <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td></td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘ | Y | N | X | | X | | X | |
| Y | N | | | | | | | | |
| X | | | | | | | | | |
| X | | | | | | | | | |
| X | | | | | | | | | |
| Other comments: | ⌘ | | | | | | | | |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked * contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

A.2 Profile definition for the Session Initiation Protocol as used in the present document

A.2.1 User agent role

A.2.1.1 Introduction

This subclause contains the ICS proforma tables related to the user role. They need to be completed only for UA implementations:

Prerequisite: A.2/1 - - user agent role.

A.2.1.2 Major capabilities

Table A.4: Major capabilities

| Item | Does the implementation support | Reference | RFC status | Profile status |
|--|--|------------------------|------------|----------------|
| Capabilities within main protocol | | | | |
| 1 | client behaviour for registration? | [26] subclause 10.2 | o | c3 |
| 2 | registrar? | [26] subclause 10.3 | o | c4 |
| 2A | registration of multiple contacts for a single address of record | [26] 10.2.1.2, 16.6 | o | o |
| 2B | initiating a session? | [26] subclause 13 | o | o |
| 3 | client behaviour for INVITE requests? | [26] subclause 13.2 | c18 | c18 |
| 4 | server behaviour for INVITE requests? | [26] subclause 13.3 | c18 | c18 |
| 5 | session release? | [26] subclause 15.1 | c18 | c18 |
| 6 | timestamping of requests? | [26] subclause 8.2.6.1 | o | o |
| 7 | authentication between UA and UA? | [26] subclause 22.2 | o | o |
| 8 | authentication between UA and registrar? | [26] subclause 22.2 | o | n/a |
| 8A | authentication between UA and proxy? | [26] 20.28, 22.3 | o | o |
| 9 | server handling of merged requests due to forking? | [26] 8.2.2.2 | m | m |
| 10 | client handling of multiple responses due to forking? | [26] 13.2.2.4 | m | m |
| 11 | insertion of date in requests and responses? | [26] subclause 20.17 | o | o |
| 12 | downloading of alerting information? | [26] subclause 20.4 | o | o |
| Extensions | | | | |
| 13 | the SIP INFO method? | [25] | o | n/a |
| 14 | reliability of provisional responses in SIP? | [27] | c19 | c18 |
| 15 | the REFER method? | [36] | o | o |
| 16 | integration of resource management and SIP? | [30] | c19 | c18 |
| 17 | the SIP UPDATE method? | [29] | c5 | c18 |
| 19 | SIP extensions for media authorization? | [31] | o | c14 |
| 20 | SIP specific event notification? | [28] | o | c13 |
| 21 | the use of NOTIFY to establish a dialog? | [28] 4.2 | o | n/a |
| 22 | acting as the notifier of event information? | [28] | c2 | c15 |
| 23 | acting as the subscriber to event information? | [28] | c2 | c16 |
| 24 | session initiation protocol extension header field for registering non-adjacent contacts? | [35] | o | c6 |
| 25 | private extensions to the Session Initiation Protocol (SIP) for network asserted identity within trusted networks | [34] | o | m |
| 26 | a privacy mechanism for the Session Initiation Protocol (SIP) | [33] | o | m |
| 26A | request of privacy by the inclusion of a Privacy header | [33] | c9 | c11 |
| 26B | application of privacy based on the received Privacy header | [33] | c9 | n/a |
| 26C | passing on of the Privacy header transparently | [33] | c9 | c12 |
| 26D | application of the privacy option "header" such that those headers which cannot be completely expunged of identifying information without the assistance of intermediaries are obscured? | [33] 5.1 | c10 | |
| 26E | application of the privacy option "session" such that anonymization for the session(s) initiated by this message | [33] 5.2 | c10 | |

| | | | | |
|-----|---|----------|---------------------|---------------------|
| | occurs? | | | |
| 26F | application of the privacy option "user" such that user level privacy functions are provided by the network? | [33] 5.3 | c10 | |
| 26G | application of the privacy option "id" such that privacy of the network asserted identity is provided by the network? | [34] 7 | c10 | n/a |
| 27 | a messaging mechanism for the Session Initiation Protocol (SIP)? | [50] | o | c7 |
| 28 | session initiation protocol extension header field for service route discovery during registration? | [38] | o | c17 |
| 29 | compressing the session initiation protocol? | [55] | o | c8 |
| 30 | private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP)? | [52] | o | m |
| 31 | the P-Associated-URI header extension? | [52] 4.1 | c21 | c22 |
| 32 | the P-Called-Party-ID header extension? | [52] 4.2 | c21 | c23 |
| 33 | the P-Visited-Network-ID header extension? | [52] 4.3 | c21 | c24 |
| 34 | the P-Access-Network-Info header extension? | [52] 4.4 | c21 | c25 |
| 35 | the P-Charging-Function-Addresses header extension? | [52] 4.5 | c21 | c26 |
| 36 | the P-Charging-Vector header extension? | [52] 4.6 | c21 | c26 |
| 37 | security mechanism agreement for the session initiation protocol? | [48] | o | c20 |
| 38 | the Reason header field for the session initiation protocol? | [34A] | o | o (note 1) |
| 39 | an extension to the session initiation protocol for symmetric response routeing? | [56A] | o | x |
| 40 | caller preferences for the session initiation protocol? | [xx] | C28 | c28 |
| 40A | the proxy-directive within caller-preferences? | [xx] 9.1 | o.5 | o.5 |
| 40B | the cancel-directive within caller-preferences? | [xx] 9.1 | o.5 | o.5 |
| 40C | the fork-directive within caller-preferences? | [xx] 9.1 | o.5 | c27 |
| 40D | the recurse-directive within caller-preferences? | [xx] 9.1 | o.5 | o.5 |
| 40E | the parallel-directive within caller-preferences? | [xx] 9.1 | o.5 | c27 |
| 40F | the queue-directive within caller-preferences? | [xx] 9.1 | o.5 | o.5 |

| | |
|------|---|
| c2: | IF A.4/20 THEN o.1 ELSE n/a - - SIP specific event notification extension. |
| c3: | IF A.3/1 OR A.3/4 THEN m ELSE n/a - - UE or S-CSCF functional entity. |
| c4: | IF A.3/4 THEN m ELSE IF A.3/7 THEN o ELSE n/a - - S-CSCF or AS functional entity. |
| c5: | IF A.4/16 THEN m ELSE o - - integration of resource management and SIP extension. |
| c6: | IF A.3/4 OR A.3/1 THEN m ELSE n/a - - S-CSCF or UE. |
| c7: | IF A.3/4 THEN m ELSE (IF A.3/1 OR A.3/7B OR A.3/7D THEN o ELSE n/a - - S-CSCF or UA or AS acting as originating UA, or AS performing 3 rd party call control. |
| c8: | IF A.3/1 THEN m ELSE n/a - - UE behaviour. |
| c9: | IF A.4/26 THEN o.2 ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c10: | IF A.4/26B THEN o.3 ELSE n/a - - application of privacy based on the received Privacy header. |
| c11: | IF A.3/1 OR A.3/6 THEN o ELSE n/a - - UE or MGCF. |
| c12: | IF A.3/7D THEN m ELSE n/a - - AS performing 3rd-party call control. |
| c13: | IF A.3/1 OR A.3/4 THEN m ELSE o - - UE behaviour or S-CSCF. |
| c14: | IF A.3/1 THEN m ELSE IF A.3/2 THEN o ELSE n/a - - UE or P-CSCF. |
| c15: | IF A.4/20 and A.3/4 THEN m ELSE o - SIP specific event notification extensions and S-CSCF. |
| c16: | IF A.4/20 and (A.3/1 OR A.3/2) THEN m ELSE o - - SIP specific event notification extension and UE or P-CSCF. |
| c17: | IF A.3/1 or A.3/4 THEN m ELSE n/a - - UE or S-CSCF. |
| c18: | IF A.4/2B THEN m ELSE n/a - - initiating sessions. |
| c19: | IF A.4/2B THEN o ELSE n/a - - initiating sessions. |
| c20: | IF A.3/1 THEN m ELSE n/a - - UE behaviour. |
| c21: | IF A.4/30 THEN o.4 ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP). |
| c22: | IF A.4/30 AND (A.3/1 OR A.3/4) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and S-CSCF or UA. |
| c23: | IF A.4/30 AND A.3/1 THEN o ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and UE. |
| c24: | IF A.4/30 AND A.3/4) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and S-CSCF. |
| c25: | IF A.4/30 AND (A.3/1 OR A.3/4 OR A.3/7A OR A.3/7D) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and UE, S-CSCF or AS acting as terminating UA or AS acting as third-party call controller. |
| c26: | IF A.4/30 AND (A.3/6 OR A.3/7A OR A.3/7B or A.3/7D) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and MGCF, AS acting as a terminating UA, or AS acting as an originating UA, or AS acting as third-party call controller. |
| c27: | <u>IF A.3/1 THEN m ELSE o.5 - - UE.</u> |
| c28: | <u>IF A.4/40A OR A.4/40B OR A.4/40C OR A.4/40D OR A.4/40E OR A.4/40F THEN m ELSE n/a - - support of any directives within caller preferences for the session initiation protocol.</u> |
| o.1: | At least one of these capabilities is supported. |
| o.2: | At least one of these capabilities is supported. |
| o.3: | At least one of these capabilities is supported. |
| o.4: | At least one of these capabilities is supported. |
| o.5: | <u>At least one of these capabilities is supported.</u> |

NOTE 1: At the MGCF, the interworking specifications do not support a handling of the header associated with this extension.

A.2.1.3 PDUs

Table A.5: Supported methods

| Item | PDU | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | ACK request | [26] 13 | c10 | c10 | [26] 13 | c11 | c11 |
| 2 | BYE request | [26] 15.1 | c12 | c12 | [26] 15.1 | c12 | c12 |
| 3 | BYE response | [26] 15.1 | c12 | c12 | [26] 15.1 | c12 | c12 |
| 4 | CANCEL request | [26] 9 | m | m | [26] 9 | m | m |
| 5 | CANCEL response | [26] 9 | m | m | [26] 9 | m | m |
| 8 | INVITE request | [26] 13 | c10 | c10 | [26] 13 | c11 | c11 |
| 9 | INVITE response | [26] 13 | c11 | c11 | [26] 13 | c10 | c10 |
| 9A | MESSAGE request | [50] 4 | c7 | c7 | [50] 7 | c7 | c7 |
| 9B | MESSAGE response | [50] 4 | c7 | c7 | [50] 7 | c7 | c7 |
| 10 | NOTIFY request | [28] 8.1.2 | c4 | c4 | [28] 8.1.2 | c3 | c3 |
| 11 | NOTIFY response | [28] 8.1.2 | c3 | c3 | [28] 8.1.2 | c4 | c4 |
| 12 | OPTIONS request | [26] 11 | m | m | [26] 11 | m | m |
| 13 | OPTIONS response | [26] 11 | m | m | [26] 11 | m | m |
| 14 | PRACK request | [27] 6 | c5 | c5 | [27] 6 | c5 | c5 |
| 15 | PRACK response | [27] 6 | c5 | c5 | [27] 6 | c5 | c5 |
| 16 | REFER request | [36] 3 | c1 | c1 | [36] 3 | c1 | c1 |
| 17 | REFER response | [36] 3 | c1 | c1 | [36] 3 | c1 | c1 |
| 18 | REGISTER request | [26] 10 | c8 | c8 | [26] 10 | c9 | c9 |
| 19 | REGISTER response | [26] 10 | c9 | c9 | [26] 10 | c8 | c8 |
| 20 | SUBSCRIBE request | [28] 8.1.1 | c3 | c3 | [28] 8.1.1 | c4 | c4 |
| 21 | SUBSCRIBE response | [28] 8.1.1 | c4 | c4 | [28] 8.1.1 | c3 | c3 |
| 22 | UPDATE request | [30] 6.1 | c6 | c6 | [30] 6.2 | c6 | c6 |
| 23 | UPDATE response | [30] 6.2 | c6 | c6 | [30] 6.1 | c6 | c6 |

c1: IF A.4/15 THEN m ELSE n/a - - the REFER method extension.
 c3: IF A.4/23 THEN m ELSE n/a - - recipient for event information.
 c4: IF A.4/22 THEN m ELSE n/a - - notifier of event information.
 c5: IF A.4/14 THEN m ELSE n/a - - reliability of provisional responses extension.
 c6: IF A.4/17 THEN m ELSE n/a - - the SIP update method extension.
 c7: IF A.4/27 THEN m ELSE n/a - - the SIP MESSAGE method.
 c8: IF A.4/1 THEN m ELSE n/a - - client behaviour for registration.
 c9: IF A.4/2 THEN m ELSE n/a - - registrar.
 c10: IF A.4/3 THEN m ELSE n/a - - client behaviour for INVITE requests.
 c11: IF A.4/4 THEN m ELSE n/a - - server behaviour for INVITE requests.
 c12: IF A.4/5 THEN m ELSE n/a - - session release.

A.2.1.4 PDU parameters

A.2.1.4.1 Status-codes

Table A.6: Supported status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---------------------------------------|--------------|------------|----------------|--------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | 100 (Trying) | [26] 21.1.1 | n/a | n/a | [26] 21.1.1 | m | m |
| 2 | 180 (Ringing) | [26] 21.1.2 | c2 | c2 | [26] 21.1.2 | c1 | c1 |
| 3 | 181 (Call Is Being Forwarded) | [26] 21.1.3 | c2 | c2 | [26] 21.1.3 | c1 | c1 |
| 4 | 182 (Queued) | [26] 21.1.4 | c2 | c2 | [26] 21.1.4 | c1 | c1 |
| 5 | 183 (Session Progress) | [26] 21.1.5 | c1 | c1 | [26] 21.1.5 | c1 | c1 |
| 6 | 200 (OK) | [26] 21.2.1 | | | [26] 21.2.1 | | |
| 7 | 202 (Accepted) | [28] 8.3.1 | c3 | c3 | [28] 8.3.1 | c3 | c3 |
| 8 | 300 (Multiple Choices) | [26] 21.3.1 | | | [26] 21.3.1 | | |
| 9 | 301 (Moved Permanently) | [26] 21.3.2 | | | [26] 21.3.2 | | |
| 10 | 302 (Moved Temporarily) | [26] 21.3.3 | | | [26] 21.3.3 | | |
| 11 | 305 (Use Proxy) | [26] 21.3.4 | | | [26] 21.3.4 | | |
| 12 | 380 (Alternative Service) | [26] 21.3.5 | | | [26] 21.3.5 | | |
| 13 | 400 (Bad Request) | [26] 21.4.1 | | | [26] 21.4.1 | | |
| 14 | 401 (Unauthorized) | [26] 21.4.2 | | | [26] 21.4.2 | | |
| 15 | 402 (Payment Required) | [26] 21.4.3 | | | [26] 21.4.3 | | |
| 16 | 403 (Forbidden) | [26] 21.4.4 | | | [26] 21.4.4 | | |
| 17 | 404 (Not Found) | [26] 21.4.5 | | | [26] 21.4.5 | | |
| 18 | 405 (Method Not Allowed) | [26] 21.4.6 | | | [26] 21.4.6 | | |
| 19 | 406 (Not Acceptable) | [26] 21.4.7 | | | [26] 21.4.7 | | |
| 20 | 407 (Proxy Authentication Required) | [26] 21.4.8 | | | [26] 21.4.8 | | |
| 21 | 408 (Request Timeout) | [26] 21.4.9 | | | [26] 21.4.9 | | |
| 22 | 410 (Gone) | [26] 21.4.10 | | | [26] 21.4.10 | | |
| 23 | 413 (Request Entity Too Large) | [26] 21.4.11 | | | [26] 21.4.11 | | |
| 24 | 414 (Request-URI Too Large) | [26] 21.4.12 | | | [26] 21.4.12 | | |
| 25 | 415 (Unsupported Media Type) | [26] 21.4.13 | | | [26] 21.4.13 | | |
| 26 | 416 (Unsupported URI Scheme) | [26] 21.4.14 | | | [26] 21.4.14 | | |
| 27 | 420 (Bad Extension) | [26] 21.4.15 | | | [26] 21.4.15 | | |
| 28 | 421 (Extension Required) | [26] 21.4.16 | | | [26] 21.4.16 | | |
| 29 | 423 (Interval Too Brief) | [26] 21.4.17 | c4 | c4 | [26] 21.4.17 | m | m |
| 30 | 480 (Temporarily Unavailable) | [26] 21.4.18 | | | [26] 21.4.18 | | |
| 31 | 481 (Call/Transaction Does Not Exist) | [26] 21.4.19 | | | [26] 21.4.19 | | |
| 32 | 482 (Loop Detected) | [26] 21.4.20 | | | [26] 21.4.20 | | |
| 33 | 483 (Too Many Hops) | [26] 21.4.21 | | | [26] 21.4.21 | | |
| 34 | 484 (Address Incomplete) | [26] 21.4.22 | | | [26] 21.4.22 | | |
| 35 | 485 (Ambiguous) | [26] 21.4.23 | | | [26] 21.4.23 | | |
| 36 | 486 (Busy Here) | [26] 21.4.24 | | | [26] 21.4.24 | | |
| 37 | 487 (Request Terminated) | [26] 21.4.25 | | | [26] 21.4.25 | | |
| 38 | 488 (Not Acceptable Here) | [26] 21.4.26 | | | [26] 21.4.26 | | |
| 39 | 489 (Bad Event) | [28] 7.3.2 | c3 | c3 | [28] 7.3.2 | c3 | c3 |
| 40 | 491 (Request Pending) | [26] 21.4.27 | | | [26] 21.4.27 | | |
| 41 | 493 (Undecipherable) | [26] 21.4.28 | | | [26] 21.4.28 | | |
| 41A | 494 (Security Agreement Required) | [48] 2 | c5 | c5 | [48] 2 | c6 | c6 |
| 42 | 500 (Internal Server Error) | [26] 21.5.1 | | | [26] 21.5.1 | | |
| 43 | 501 (Not Implemented) | [26] 21.5.2 | | | [26] 21.5.2 | | |
| 44 | 502 (Bad Gateway) | [26] 21.5.3 | | | [26] 21.5.3 | | |
| 45 | 503 (Service Unavailable) | [26] 21.5.4 | | | [26] 21.5.4 | | |
| 46 | 504 (Server Time-out) | [26] 21.5.5 | | | [26] 21.5.5 | | |

| Item | Header | Sending | | | Receiving | | |
|--|-------------------------------|-------------|------------|----------------|-------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 47 | 505 (Version not supported) | [26] 21.5.6 | | | [26] 21.5.6 | | |
| 48 | 513 (Message Too Large) | [26] 21.5.7 | | | [26] 21.5.7 | | |
| 49 | 580 (Precondition Failure) | [30] 8 | | | [30] 8 | | |
| 50 | 600 (Busy Everywhere) | [26] 21.6.1 | | | [26] 21.6.1 | | |
| 51 | 603 (Decline) | [26] 21.6.2 | | | [26] 21.6.2 | | |
| 52 | 604 (Does Not Exist Anywhere) | [26] 21.6.3 | | | [26] 21.6.3 | | |
| 53 | 606 (Not Acceptable) | [26] 21.6.4 | | | [26] 21.6.4 | | |
| c1: IF A.5/9 THEN m ELSE n/a - - INVITE response. c2: IF A.5/9 THEN o ELSE n/a - - INVITE response. c3: IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. c4: IF A.5/19 OR A.5/21 THEN m ELSE n/a - - REGISTER response or SUBSCRIBE response. c5: IF A.4/37 AND A.4/2 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol and registrar. c6: IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | | |

A.2.1.4.2 ACK method

Prerequisite A.5/1 – ACK request

Table A.7: Supported headers within the ACK request

| Item | Header | Sending | | | Receiving | | |
|---|-------------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept-Contact | [xx] 9.2 | c9 | c9 | [xx] 9.2 | n/a | n/a |
| 2 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c2 | c2 |
| 3 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 4 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 6 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 7 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 8 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 9 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 10 | Content-Type | [26] 20.15 | o | o | [26] 20.15 | m | m |
| 11 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 12 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 13 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 14 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 15 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 15A | Privacy | [33] 4.2 | c6 | n/a | [33] 4.2 | c6 | n/a |
| 16 | Proxy-Authorization | [26] 20.28 | c5 | c5 | [26] 20.28 | n/a | n/a |
| 17 | Proxy-Require | [26] 20.29 | o | n/a | [26] 20.29 | n/a | n/a |
| 17A | Reason | [34A] 2 | c8 | c8 | [34A] 2 | c8 | c8 |
| 17B | Reject-Contact | [xx] 9.2 | c9 | c9 | [xx] 9.2 | n/a | n/a |
| 17C | Request-Disposition | [xx] 9.1 | c9 | c9 | [xx] 9.1 | n/a | n/a |
| 18 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 19 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 20 | Timestamp | [26] 20.38 | c7 | c7 | [26] 20.38 | m | m |
| 21 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 22 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | m | m |
| 23 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| c1: IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension. c2: IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. c3: IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. c4: IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. c5: IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. c6: IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). c7: IF A.4/6 THEN o ELSE n/a - - timestamping of requests. c8: IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. c9: IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol. | | | | | | | |

Editor's note: Is the following table a suitable way of showing the contents of message bodies.

Prerequisite A.5/1 – ACK request

Table A.8: Supported message bodies within the ACK request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.3 BYE method

Prerequisite A.5/2 - - BYE request

Table A.9: Supported headers within the BYE request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| 1A | Accept-Contact | [xx] 9.2 | c18 | c18 | [xx] 9.2 | n/a | n/a |
| 2 | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c2 | c2 |
| 5 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 7 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 8 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 9 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 10 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 11 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 12 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 13 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 14 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 15 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 16 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 16A | P-Access-Network-Info | [52] 4.4 | c9 | c10 | [52] 4.4 | c9 | c11 |
| 16B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c6 | c6 |
| 16C | P-Charging-Function-Addresses | [52] 4.5 | c13 | c14 | [52] 4.5 | c13 | c14 |
| 16D | P-Charging-Vector | [52] 4.6 | c12 | n/a | [52] 4.6 | c12 | n/a |
| 16E | P-Preferred-Identity | [34] 9.2 | c6 | x | [34] 9.2 | n/a | n/a |
| 16F | Privacy | [33] 4.2 | c7 | n/a | [33] 4.2 | c7 | c7 |
| 17 | Proxy-Authorization | [26] 20.28 | c5 | c5 | [26] 20.28 | n/a | n/a |
| 18 | Proxy-Require | [26] 20.29 | o | n/a | [26] 20.29 | n/a | n/a |
| 18A | Reason | [34A] 2 | c17 | c17 | [34A] 2 | c17 | c17 |
| 19 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | n/a | n/a |
| 19A | Reject-Contact | [xx] 9.2 | c18 | c18 | [xx] 9.2 | n/a | n/a |
| 19B | Request-Disposition | [xx] 9.1 | c18 | c18 | [xx] 9.1 | n/a | n/a |
| 20 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 21 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 21A | Security-Client | [48] 2.3.1 | c15 | c15 | [48] 2.3.1 | n/a | n/a |
| 21B | Security-Verify | [48] 2.3.1 | c16 | c16 | [48] 2.3.1 | n/a | n/a |
| 22 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| 23 | Timestamp | [26] 20.38 | c8 | c8 | [26] 20.38 | m | m |
| 24 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 25 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 26 | Via | [26] 20.42 | m | m | [20] 20.42 | m | m |

| | |
|-------|---|
| c1: | IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension. |
| c2: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. |
| c3: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. |
| c4: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. |
| c5: | IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. |
| c6: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c7: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c8: | IF A.4/6 THEN o ELSE n/a - - timestamping of requests. |
| c9: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. |
| c10: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. |
| c11: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. |
| c12: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. |
| c13: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c14: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c15: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note). |
| c16: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c17: | IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. |
| c18: | <u>IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol.</u> |
| NOTE: | Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented. Use of this header in this method is not appropriate to the security mechanism defined by 3GPP TS 33.203 [19]. |

Prerequisite A.5/2 - - BYE request

Table A.10: Supported message bodies within the BYE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/1 - - 100 (Trying)

Table A.11: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | n/a | n/a | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | n/a | n/a | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | n/a | n/a | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | n/a | n/a | [26] 20.17 | m | m |
| 5 | From | [26] 20.20 | n/a | n/a | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | n/a | n/a | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | n/a | n/a | [26] 20.42 | m | m |

Prerequisite A.5/3 - - BYE response

Table A.12: Supported headers within the BYE response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 3 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 4 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 10A | P-Access-Network-Info | [52] 4.4 | c5 | c6 | [52] 4.4 | c5 | c6 |
| 10B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c3 | c3 |
| 10C | P-Charging-Function-Addresses | [52] 4.5 | c9 | c10 | [52] 4.5 | c9 | c10 |
| 10D | P-Charging-Vector | [52] 4.6 | c8 | n/a | [52] 4.6 | c8 | n/a |
| 10E | P-Preferred-Identity | [34] 9.2 | c3 | x | [34] 9.2 | n/a | n/a |
| 10F | Privacy | [33] 4.2 | c4 | n/a | [33] 4.2 | c4 | c4 |
| 10G | Require | [26] 20.32 | m | m | [26] 20.32 | m | m |
| 10H | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |

c1: IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses.
c2: IF A.4/6 THEN m ELSE n/a - - timestamping of requests.
c3: IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks.
c4: IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c5: IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension.
c6: IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE.
c7: IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller.
c8: IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension.
c9: IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension.
c10: IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension.

NOTE: For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/6 - - 2xx

Table A.13: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA. | | | | | | |
| c2: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 - - 3xx or 485 (Ambiguous)

Table A.14: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 0B | Contact | [26] 20.10 | o (note) | o | [26] 20.10 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.15: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.16: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.17: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/19 - - 407 (Proxy Authentication Required)

Table A.18: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 6 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/3 - - BYE response

Prerequisite A.6/25 - - 415 (Unsupported Media Type)

Table A.19: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| o.1 | At least one of these capabilities is supported. | | | | | | |

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.20: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 5 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.20A: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 3 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/3 - - BYE response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.21: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/3 - - BYE response

Table A.22: Supported message bodies within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.4 CANCEL method

Prerequisite A.5/4 - - CANCEL request

Table A.23: Supported headers within the CANCEL request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept-Contact | [xx] 9.2 | c9 | c9 | [xx] 9.2 | n/a | n/a |
| 4 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c2 | c2 |
| 5 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 8 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 9 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 10 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 11 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 12 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 14 | Privacy | [33] 4.2 | c6 | n/a | [33] 4.2 | c6 | n/a |
| 15 | Reason | [34A] 2 | c7 | c7 | [34A] 2 | c7 | c7 |
| 16 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | n/a | n/a |
| 17 | Reject-Contact | [xx] 9.2 | c9 | c9 | [xx] 9.2 | n/a | n/a |
| 17A | Request-Disposition | [xx] 9.1 | c9 | c9 | [xx] 9.1 | n/a | n/a |
| 18 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 19 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| 20 | Timestamp | [26] 20.38 | c8 | c8 | [26] 20.38 | m | m |
| 21 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 22 | User-Agent | [26] 20.41 | o | | [26] 20.41 | o | |
| 23 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

c1: IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension.
c2: IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension.
c3: IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA.
c4: IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses.
c6: IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c7: IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol.
c8: IF A.4/6 THEN o ELSE n/a - - timestamping of requests.
c9: IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol.

Prerequisite A.5/4 - - CANCEL request

Table A.24: Supported message bodies within the CANCEL request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/5 - - CANCEL response

Table A.25: Supported headers within the CANCEL response - all status-codes

| Item | Header | Sending | | | Receiving | | |
|-------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 5 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 5A | Privacy | [33] 4.2 | c3 | n/a | [33] 4.2 | c3 | n/a |
| 6 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 7 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 7A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 8 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 9 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |
| c1: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.4/6 THEN m ELSE n/a - - timestamping of requests. | | | | | | |
| c3: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| NOTE: | For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL. | | | | | | |

Prerequisite A.5/5 - - CANCEL response

Prerequisite: A.6/6 - - 200 (OK)

Table A.26: Supported headers within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|--------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/5 - - CANCEL response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.27: Supported headers within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/5 - - CANCEL response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 - - 404, 413, 480, 500, 503, 600, 603

Table A.28: Supported headers within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/5 - - CANCEL response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.30: Supported headers within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/5 - - CANCEL response

Table A.31: Supported message bodies within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.5 COMET method

Void

A.2.1.4.6 INFO method

Void

A.2.1.4.7 INVITE method

Prerequisite A.5/8 - - INVITE request

Table A.46: Supported headers within the INVITE request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------------------|------------|----------------|------------------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| 1A | Accept-Contact | [xx] 9.2 | c24 | c24 | [xx] 9.2 | n/a | n/a |
| 2 | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 4 | Alert-Info | [26] 20.4 | o | o | [26] 20.4 | c1 | c1 |
| 5 | Allow | [26] 20.5, [26] 5.1 | o (note 1) | o | [26] 20.5, [26] 5.1 | m | m |
| 6 | Allow-Events | [28] 7.2.2 | c2 | c2 | [28] 7.2.2 | c2 | c2 |
| 8 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 9 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 10 | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 11 | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 12 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 13 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 14 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 15 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 16 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 17 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 18 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 19 | Expires | [26] 20.19 | o | o | [26] 20.19 | o | o |
| 20 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 21 | In-Reply-To | [26] 20.21 | o | o | [26] 20.21 | o | o |
| 22 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 23 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 24 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 24A | P-Access-Network-Info | [52] 4.4 | c15 | c16 | [52] 4.4 | c15 | c17 |
| 24B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c7 | c7 |
| 24C | P-Called-Party-ID | [52] 4.2 | x | x | [52] 4.2 | c13 | c13 |
| 24D | P-Charging-Function-Addresses | [52] 4.5 | c20 | c21 | [52] 4.5 | c20 | c21 |
| 24E | P-Charging-Vector | [52] 4.6 | c18 | c19 | [52] 4.6 | c18 | c19 |
| 25 | P-Media-Authorization | [31] 6.1 | n/a | n/a | [31] 6.1 | c11 | c12 |
| 25A | P-Preferred-Identity | [34] 9.2 | c7 | c5 | [34] 9.2 | n/a | n/a |
| 25B | P-Visited-Network-ID | [52] 4.3 | x (note 3) | x | [52] 4.3 | c14 | n/a |
| 26 | Priority | [26] 20.26 | o | o | [26] 20.26 | o | o |
| 26A | Privacy | [33] 4.2 | c9 | c9 | [33] 4.2 | c9 | c9 |
| 27 | Proxy-Authorization | [26] 20.28 | c6 | c6 | [26] 20.28 | n/a | n/a |
| 28 | Proxy-Require | [26] 20.29 | o (note 2) | o (note 2) | [26] 20.29 | n/a | n/a |
| 28A | Reason | [34A] 2 | c8 | c8 | [34A] 2 | c8 | c8 |
| 29 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | m | m |
| 31 | Reply-To | [26] 20.31 | o | o | [26] 20.31 | o | o |
| 31A | Reject-Contact | [xx] 9.2 | c24 | c24 | [xx] 9.2 | n/a | n/a |
| 31B | Request-Disposition | [xx] 9.1 | c24 | c24 | [xx] 9.1 | n/a | n/a |
| 32 | Require | [26] 20.32 | o | m | [26] 20.32 | m | m |
| 33 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 33A | Security-Client | [48] 2.3.1 | c22 | c22 | [48] 2.3.1 | n/a | n/a |
| 33B | Security-Verify | [48] 2.3.1 | c23 | c23 | [48] 2.3.1 | n/a | n/a |

| Item | Header | Sending | | | Receiving | | |
|---|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 34 | Subject | [26] 20.36 | o | o | [26] 20.36 | o | o |
| 35 | Supported | [26] 20.37 | c8 | m | [26] 20.37 | m | m |
| 36 | Timestamp | [26] 20.38 | c10 | c10 | [26] 20.38 | m | m |
| 37 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 38 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 39 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| c1: | IF A.4/12 THEN m ELSE n/a - - downloading of alerting information. | | | | | | |
| c2: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. | | | | | | |
| c3: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |
| c4: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | |
| c5: | IF A.3/1 AND A.4/25 THEN o ELSE n/a - - UE and private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c6: | IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. | | | | | | |
| c7: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c8: | IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. | | | | | | |
| c9: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c10: | IF A.4/6 THEN o ELSE n/a - - timestamping of requests. | | | | | | |
| c11: | IF A.4/19 THEN m ELSE n/a - - SIP extensions for media authorization. | | | | | | |
| c12: | IF A.3/1 THEN m ELSE n/a - - UE. | | | | | | |
| c13: | IF A.4/32 THEN o ELSE n/a - - the P-Called-Party-ID extension. | | | | | | |
| c14: | IF A.4/33 THEN o ELSE n/a - - the P-Visited-Network-ID extension. | | | | | | |
| c15: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. | | | | | | |
| c16: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. | | | | | | |
| c17: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. | | | | | | |
| c18: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c19: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c20: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c21: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c22: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note 4). | | | | | | |
| c23: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |
| c24: | IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol. | | | | | | |
| o.1: | At least one of these shall be supported. | | | | | | |
| NOTE 1: The strength of this requirement in RFC 3261 [26] is RECOMMENDED, rather than OPTIONAL. | | | | | | | |
| NOTE 2: No distinction has been made in these tables between first use of a request on a From/To/Call-ID combination, and the usage in a subsequent one. Therefore the use of "o" etc. above has been included from a viewpoint of first usage. | | | | | | | |
| NOTE 3: The strength of this requirement in RFC 3455 [52] is SHOULD NOT, rather than MUST NOT. | | | | | | | |
| NOTE 4: Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented. Use of this header in this method is not appropriate to the security mechanism defined by 3GPP TS 33.203 [19]. | | | | | | | |

Prerequisite A.5/8 - - INVITE request

Table A.47: Supported message bodies within the INVITE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/1 - - 100 (Trying)

Table A.48: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | n/a | n/a | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | n/a | n/a | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | n/a | n/a | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | n/a | n/a | [26] 20.17 | m | m |
| 5 | From | [26] 20.20 | n/a | n/a | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | n/a | n/a | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | n/a | n/a | [26] 20.42 | m | m |

Prerequisite A.5/9 - - INVITE response

Table A.49: Supported headers within the INVITE response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 2 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 3 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 4 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 11 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 11A | P-Access-Network-Info | [52] 4.4 | c5 | c6 | [52] 4.4 | c5 | c7 |
| 11B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c3 | c3 |
| 11C | P-Charging-Function-Addresses | [52] 4.5 | c10 | c11 | [52] 4.5 | c11 | c11 |
| 11D | P-Charging-Vector | [52] 4.6 | c8 | c9 | [52] 4.6 | c8 | c9 |
| 11E | P-Preferred-Identity | [34] 9.2 | c3 | x | [34] 9.2 | n/a | n/a |
| 11F | Privacy | [33] 4.2 | c4 | c4 | [33] 4.2 | c4 | c4 |
| 11G | Require | [26] 20.32 | m | m | [26] 20.32 | m | m |
| 11H | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 12 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 13 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 13A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 14 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 15 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |

c1: IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses.
c2: IF A.4/6 THEN m ELSE n/a - - timestamping of requests.
c3: IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks.
c4: IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c5: IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension.
c6: IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE.
c7: IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller.
c8: IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension.
c9: IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension.
c10: IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension.
c11: IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension.

NOTE: For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/2 OR A.6/3 OR A.6/4 OR A.6/5 - - 1xx

Table A.50: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Contact | [26] 20.10 | o | m | [26] 20.10 | m | m |
| 6 | P-Media-Authorization | [31] 6.1 | n/a | n/a | [31] 6.1 | c11 | c12 |
| 9 | Rseq | [27] 7.1 | c2 | m | [27] 7.1 | c3 | m |
| 11 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| c2: | IF A.4/14 THEN o ELSE n/a - - reliability of provisional responses in SIP. | | | | | | |
| c3: | IF A.4/14 THEN m ELSE n/a - - reliability of provisional responses in SIP. | | | | | | |
| c11: | IF A.4/19 THEN m ELSE n/a - - SIP extensions for media authorization. | | | | | | |
| c12: | IF A.3/1 THEN m ELSE n/a - - UE. | | | | | | |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/6 - - 2xx

Table A.51: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|---|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| 1A | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 1B | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 2 | Allow | [26] 20.5 | o (note 1) | o | [26] 20.5 | m | m |
| 4 | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 6 | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 8 | P-Media-Authorization | [31] 6.1 | n/a | n/a | [31] 6.1 | c11 | c12 |
| 9 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | m | m |
| 13 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA. | | | | | | |
| c2: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |
| c11: | IF A.4/19 THEN m ELSE n/a - - SIP extensions for media authorization. | | | | | | |
| c12: | IF A.3/1 THEN m ELSE n/a - - UE. | | | | | | |
| NOTE 1: The strength of this requirement in RFC 3261 [26] is RECOMMENDED, rather than OPTIONAL. | | | | | | | |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 - - 3xx or 485 (Ambiguous)

Table A.52: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|---|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Contact | [26] 20.10 | o (note 1) | o | [26] 20.10 | m | m |
| 5 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| NOTE: The strength of this requirement is RECOMMENDED rather than OPTIONAL. | | | | | | | |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.53: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 6 | Proxy-Authenticate | [26] 20.27 | c3 | c3 | [26] 20.27 | c3 | c3 |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 13 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |
| c1: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.4/6 THEN m ELSE n/a - - timestamping of requests. | | | | | | |
| c3: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 600, 603

Table A.54: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 8 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.55: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 5 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/20 - - 407 (Proxy Authentication Required)

Table A.56: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 6 | Proxy-Authenticate | [26] 20.27 | o | | [26] 20.27 | o | |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 11 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/25 - - 415 (Unsupported Media Type)

Table A.57: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 6 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 11 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| o.1 | At least one of these capabilities is supported. | | | | | | |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.58: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 9 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 10 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.58A: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 3 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.59: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 9 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/42 - - 500 (Server Internal Error)

Table A.60: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 8 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | o | o |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/9 - - INVITE response

Prerequisite: A.6/45 - - 503 (Service Unavailable)

Table A.61: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 8 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | m |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/9 - - INVITE response

Table A.62: Supported message bodies within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.7A MESSAGE method

Prerequisite A.5/9A - - MESSAGE request

Table A.62A: Supported headers within the MESSAGE request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept-Contact | [xx] 9.2 | c24 | c24 | [xx] 9.2 | n/a | n/a |
| 1A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c2 | c2 |
| 3 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 4 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 5 | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 6 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 7 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 8 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 9 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 10 | Content-Type | [26] 20.15 | m | m | [26] 29.15 | m | m |
| 11 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 12 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 13 | Expires | [26] 20.19 | o | o | [26] 20.19 | o | o |
| 14 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 15 | In-Reply-To | [26] 20.21 | o | o | [26] 20.21 | o | o |
| 16 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 17 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 18 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 18A | P-Access-Network-Info | [52] 4.4 | c15 | c16 | [52] 4.4 | c15 | c16 |
| 18B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c11 | c11 |
| 18C | P-Called-Party-ID | [52] 4.2 | x | x | [52] 4.2 | c13 | c13 |
| 18D | P-Charging-Function-Addresses | [52] 4.5 | c20 | c21 | [52] 4.5 | c20 | c21 |
| 18E | P-Charging-Vector | [52] 4.6 | c18 | c19 | [52] 4.6 | c18 | c19 |
| 18F | P-Preferred-Identity | [34] 9.2 | c11 | c7 | [34] 9.2 | n/a | n/a |
| 18G | P-Visited-Network-ID | [52] 4.3 | x (note 1) | x | [52] 4.3 | c14 | n/a |
| 19 | Priority | [26] 20.26 | o | o | [26] 20.26 | o | o |
| 19A | Privacy | [33] 4.2 | c12 | c12 | [33] 4.2 | c12 | c12 |
| 20 | Proxy-Authorization | [26] 20.28 | c5 | c5 | [26] 20.28 | n/a | n/a |
| 21 | Proxy-Require | [26] 20.29 | o | n/a | [26] 20.29 | n/a | n/a |
| 21A | Reason | [34A] 2 | c6 | c6 | [34A] 2 | c6 | c6 |
| 22 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | n/a | n/a |
| 23 | Reply-To | [26] 20.31 | o | o | [26] 20.31 | o | o |
| 23A | Reject-Contact | [xx] 9.2 | c24 | c24 | [xx] 9.2 | n/a | n/a |
| 23B | Request-Disposition | [xx] 9.1 | c24 | c24 | [xx] 9.1 | n/a | n/a |
| 24 | Require | [26] 20.32 | c8 | o | [26] 20.32 | m | m |
| 25 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 25A | Security-Client | [48] 2.3.1 | c22 | c22 | [48] 2.3.1 | n/a | n/a |
| 25B | Security-Verify | [48] 2.3.1 | c23 | c23 | [48] 2.3.1 | n/a | n/a |
| 26 | Subject | [26] 20.35 | o | o | [26] 20.36 | o | o |
| 27 | Supported | [26] 20.37 | c9 | m | [26] 20.37 | m | m |
| 28 | Timestamp | [26] 20.38 | c10 | c10 | [26] 20.38 | m | m |
| 29 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 30 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 31 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| Item | Header | Sending | | | Receiving | | |
|---------|---|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| c1: | IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension. | | | | | | |
| c2: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. | | | | | | |
| c3: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |
| c4: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | |
| c5: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. | | | | | | |
| c6: | IF A.4/38 THEN o ELSE n/a - - The Reason header field for the session initiation protocol. | | | | | | |
| c7: | IF A.3/1 AND A.4/25 THEN o ELSE n/a - - UE and private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c8: | IF A.4/14 THEN o.1 ELSE o - - Reliable transport. | | | | | | |
| c9: | IF IF A.4/14 THEN o.1 ELSE o - - support of reliable transport. | | | | | | |
| c10: | IF A.4/6 THEN o ELSE n/a - - timestamping of requests. | | | | | | |
| c11: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c12: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c13: | IF A.4/32 THEN o ELSE n/a - - the P-Called-Party-ID extension. | | | | | | |
| c14: | IF A.4/33 THEN o ELSE n/a - - the P-Visited-Network-ID extension. | | | | | | |
| c15: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. | | | | | | |
| c16: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. | | | | | | |
| c17: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. | | | | | | |
| c18: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c19: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c20: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c21: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c22: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note 2). | | | | | | |
| c23: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |
| c24: | <u>IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol.</u> | | | | | | |
| NOTE 1: | The strength of this requirement in RFC 3455 [52] is SHOULD NOT, rather than MUST NOT. | | | | | | |
| NOTE 2: | Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented. Use of this header in this method is not appropriate to the security mechanism defined by 3GPP TS 33.203 [19]. | | | | | | |

Prerequisite A.5/9A - - MESSAGE request

Table A.62B: Supported message bodies within the MESSAGE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/9B - - MESSAGE response

Table A.62C: Supported headers within the MESSAGE response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | | | | | | | | |
|--|--|------------|------------|----------------|------------|------------|----------------|--|--|--|--|--|--|--|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status | | | | | | | |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m | | | | | | | |
| 2 | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o | | | | | | | |
| 3 | Content-Disposition | [26] 20.11 | o (note 2) | o (note 2) | [26] 20.11 | m (note 2) | m (note 2) | | | | | | | |
| 4 | Content-Encoding | [26] 20.12 | o (note 2) | o (note 2) | [26] 20.12 | m (note 2) | m (note 2) | | | | | | | |
| 5 | Content-Language | [26] 20.13 | o (note 2) | o (note 2) | [26] 20.13 | m (note 2) | m (note 2) | | | | | | | |
| 6 | Content-Length | [26] 20.14 | m (note 2) | m (note 2) | [26] 20.14 | m (note 2) | m (note 2) | | | | | | | |
| 7 | Content-Type | [26] 20.15 | m (note 2) | m (note 2) | [26] 20.15 | m (note 2) | m (note 2) | | | | | | | |
| 8 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m | | | | | | | |
| 9 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m | | | | | | | |
| 10 | From | [26] 20.20 | m | m | [26] 20.20 | m | m | | | | | | | |
| 11 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m | | | | | | | |
| 12 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o | | | | | | | |
| 12A | P-Access-Network-Info | [52] 4.4 | c5 | c6 | [52] 4.4 | c5 | c7 | | | | | | | |
| 12B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c3 | c3 | | | | | | | |
| 12C | P-Charging-Function-Addresses | [52] 4.5 | c10 | c11 | [52] 4.5 | c10 | c11 | | | | | | | |
| 12D | P-Charging-Vector | [52] 4.6 | c8 | c9 | [52] 4.6 | c8 | c9 | | | | | | | |
| 12E | P-Preferred-Identity | [34] 9.2 | c3 | x | [34] 9.2 | n/a | n/a | | | | | | | |
| 12F | Privacy | [33] 4.2 | c4 | c4 | [33] 4.2 | c4 | c4 | | | | | | | |
| 12G | Require | [26] 20.32 | o | o | [26] 20.32 | m | m | | | | | | | |
| 13 | Server | [26] 20.35 | o | o | [26] 20.35 | o | o | | | | | | | |
| 14 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 | | | | | | | |
| 15 | To | [26] 20.39 | m | m | [26] 20.39 | m | m | | | | | | | |
| 16 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o | | | | | | | |
| 17 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m | | | | | | | |
| 18 | Warning | [26] 20.43 | o | o | [26] 20.43 | o | o | | | | | | | |
| c1: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | | | | | | | | |
| c2: | IF A.4/6 THEN m ELSE n/a - - timestamping of requests. | | | | | | | | | | | | | |
| c3: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | | | | | | | | |
| c4: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | | | | | | | | |
| c5: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. | | | | | | | | | | | | | |
| c6: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. | | | | | | | | | | | | | |
| c7: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. | | | | | | | | | | | | | |
| c8: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. | | | | | | | | | | | | | |
| c9: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | | | | | | | | |
| c10: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | | | | | | | | |
| c11: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | | | | | | | | |
| NOTE 1: For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL. | | | | | | | | | | | | | | |
| NOTE 2: RFC 3428 [50] clause 7 states that all 2xx class responses to a MESSAGE request must not include any body, therefore for 2xx responses to the MESSAGE request the values on Sending side for "RFC status" and "Profile status" are "x", the values for Receiving side for "RFC status" and "Profile Status" are "n/a". RFC 3261 [26] subclause 7.4 states that all responses may contain bodies, therefore for all responses to the MESSAGE request other than 2xx responses, the values on Sending side for "RFC status" and "Profile status" are "o", the values for Receiving side for "RFC status" and "Profile Status" are "m". | | | | | | | | | | | | | | |

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/6 - - 2xx

Table A.62D: Supported headers within the MESSAGE response

| Item | Header | Sending | Receiving |
|------|--------|---------|-----------|
|------|--------|---------|-----------|

| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
|-----|--|------------|------------|----------------|------------|------------|----------------|
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 4 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| c1: | IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA. | | | | | | |
| c2: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 - - 3xx or 485 (Ambiguous)

Table A.62E: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Contact | [26] 20.10 | o (note) | o | [26] 20.10 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.62F: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |

c1: IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA.

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.62G: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.62H: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/20 - - 407 (Proxy Authentication Required)

Table A.62I: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 6 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: | IF A.5/7 THEN m ELSE n/a -- support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/25 - - 415 (Unsupported Media Type)

Table A.62J: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 4 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 5 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| o.1 | At least one of these capabilities is supported. | | | | | | |

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.62K: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 5 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.62L: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/9B - - MESSAGE response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.62M: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/9B - - MESSAGE response

Table A.62N: Supported message bodies within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.8 NOTIFY method

Prerequisite A.5/10 - - NOTIFY request

Table A.63: Supported headers within the NOTIFY request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| 1A | Accept-Contact | [xx] 9.2 | c19 | c19 | [xx] 9.2 | n/a | n/a |
| 2 | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c2 | c2 |
| 5 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 6A | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 7 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 8 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 9 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 10 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 11 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 12 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 13 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 14 | Event | [28] 7.2.1 | m | m | [28] 7.2.1 | m | m |
| 15 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 16 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 17 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 17A | P-Access-Network-Info | [52] 4.4 | c10 | c11 | [52] 4.4 | c10 | c12 |
| 17B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c6 | c6 |
| 17C | P-Charging-Function-Addresses | [52] 4.5 | c14 | c15 | [52] 4.5 | c14 | c15 |
| 17D | P-Charging-Vector | [52] 4.6 | c13 | n/a | [52] 4.6 | c13 | n/a |
| 17E | P-Preferred-Identity | [34] 9.2 | c6 | x | [34] 9.2 | n/a | n/a |
| 17F | Privacy | [33] 4.2 | c7 | n/a | [33] 4.2 | c7 | c7 |
| 18 | Proxy-Authorization | [26] 20.28 | c5 | c5 | [26] 20.28 | n/a | n/a |
| 19 | Proxy-Require | [26] 20.29 | o | n/a | [26] 20.29 | n/a | n/a |
| 19A | Reason | [34A] 2 | c18 | c18 | [34A] 2 | c18 | c18 |
| 20 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | c9 | c9 |
| 20A | Reject-Contact | [xx] 9.2 | c19 | c19 | [xx] 9.2 | n/a | n/a |
| 20A | Request-Disposition | [xx] 9.1 | c19 | c19 | [xx] 9.1 | n/a | n/a |
| 21 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 22A | Security-Client | [48] 2.3.1 | c16 | c16 | [48] 2.3.1 | n/a | n/a |
| 22B | Security-Verify | [48] 2.3.1 | c17 | c17 | [48] 2.3.1 | n/a | n/a |
| 22 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 23 | Subscription-State | [28] 8.2.3 | m | m | [28] 8.2.3 | m | m |
| 24 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| 25 | Timestamp | [26] 20.38 | c8 | c8 | [26] 20.38 | m | m |
| 26 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 27 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 28 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|-------|---|
| c1: | IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension. |
| c2: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. |
| c3: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. |
| c4: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. |
| c5: | IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. |
| c6: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c7: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c8: | IF A.4/6 THEN o ELSE n/a - - timestamping of requests. |
| c9: | IF A.4/15 OR A.4/20 THEN m ELSE n/a - - the REFER method extension or SIP specific event notification extension. |
| c10: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. |
| c11: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. |
| c12: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. |
| c13: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. |
| c14: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c15: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c16: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note). |
| c17: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c18: | IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. |
| c19: | IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol. |
| NOTE: | Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented. Use of this header in this method is not appropriate to the security mechanism defined by 3GPP TS 33.203 [19]. |

Prerequisite A.5/10 - - NOTIFY request

Table A.64: Supported message bodies within the NOTIFY request

| Item | Header | Sending | | | Receiving | | |
|------|--|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | sipfrag | [37] 2 | c1 | c1 | [37] | c1 | c1 |
| c1: | IF A.4/15 THEN m ELSE o - - the REFER method extension | | | | | | |

Prerequisite A.5/11 - - NOTIFY response

Table A.65: Supported headers within the NOTIFY response - all status-codes

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 3 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 4 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 10A | P-Access-Network-Info | [52] 4.4 | c5 | c6 | [52] 4.4 | c5 | c7 |
| 10B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c3 | c3 |
| 10C | P-Charging-Function-Addresses | [52] 4.5 | c9 | c10 | [52] 4.5 | c9 | c10 |
| 10D | P-Charging-Vector | [52] 4.6 | c8 | n/a | [52] 4.6 | c8 | n/a |
| 10E | P-Preferred-Identity | [34] 9.2 | c3 | x | [34] 9.2 | n/a | n/a |
| 10F | Privacy | [33] 4.2 | c4 | n/a | [33] 4.2 | c4 | c4 |
| 10G | Require | [26] 20.32 | m | m | [26] 20.32 | m | m |
| 10H | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |

c1: IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses.
c2: IF A.4/6 THEN m ELSE n/a - - timestamping of requests.
c3: IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks.
c4: IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c5: IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension.
c6: IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE.
c7: IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller.
c8: IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension.
c9: IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension.
c10: IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension.

NOTE: For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/11 - - NOTIFY response

Prerequisite: A.6/6 and A.6/7 - - 2xx

Table A.66: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|---------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 1A | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 2 | Record-Route | [26] 20.30 | c3 | c3 | [26] 20.30 | c3 | c3 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

c1: IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA.
c2: IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA.
c3: IF A.4/15 OR A.4/20 THEN m ELSE n/a - - the REFER method extension or SIP specific event notification extension.

Prerequisite A.5/11 -- NOTIFY response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 -- 3xx or 485 (Ambiguous)

Table A.67: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Contact | [26] 20.10 | m (note) | m | [26] 20.10 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than MANDATORY for a 485 response.

Prerequisite A.5/11 -- NOTIFY response

Prerequisite: A.6/14 -- 401 (Unauthorized)

Table A.68: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |
| c1: | IF A.5/7 THEN m ELSE n/a -- support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/11 -- NOTIFY response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 -- 404, 413, 480, 486, 500, 503, 600, 603

Table A.69: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/11 -- NOTIFY response

Prerequisite: A.6/18 -- 405 (Method Not Allowed)

Table A.70: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/11 - - NOTIFY response

Prerequisite: A.6/20 - - 407 (Proxy Authentication Required)

Table A.71: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Proxy-Authenticate | [26] 20.27 | c3 | c3 | [26] 20.27 | c3 | c3 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 6 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c3: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/11 - - NOTIFY response

Prerequisite A.6/25 - - 415 (Unsupported Media Type)

Table A.72: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/11 - - NOTIFY response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.73: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 5 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/11 - - NOTIFY response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.73A: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/11 - - NOTIFY response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.74: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/11 - - NOTIFY response

Prerequisite: A.6/39 - - 489 (Bad Event)

Table A.75: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|--------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |

Prerequisite A.5/11 - - NOTIFY response

Table A.76: Supported message bodies within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.9 OPTIONS method

Prerequisite A.5/12 - - OPTIONS request

Table A.77: Supported headers within the OPTIONS request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | m | m |
| <u>1A</u> | <u>Accept-Contact</u> | <u>[xx] 9.2</u> | <u>c21</u> | <u>c21</u> | <u>[xx] 9.2</u> | <u>n/a</u> | <u>n/a</u> |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7 | c2 | c2 | [26] 20.7 | c2 | c2 |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 7 | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 8 | Contact | [26] 20.10 | o | o | [26] 20.10 | o | o |
| 9 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 10 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 11 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 12 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 13 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 14 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 15 | Date | [26] 20.17 | c3 | c3 | [26] 20.17 | m | m |
| 16 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 17 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 18 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 19 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 19A | P-Access-Network-Info | [52] 4.4 | c11 | c12 | [52] 4.4 | c11 | c13 |
| 19B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c6 | c6 |
| 19C | P-Called-Party-ID | [52] 4.2 | x | x | [52] 4.2 | c9 | c9 |
| 19D | P-Charging-Function-Addresses | [52] 4.5 | c16 | c17 | [52] 4.5 | c16 | c17 |
| 19E | P-Charging-Vector | [52] 4.6 | c14 | c15 | [52] 4.6 | c14 | c15 |
| 19F | P-Preferred-Identity | [34] 9.2 | c6 | c4 | [34] 9.2 | n/a | n/a |
| 19G | P-Visited-Network-ID | [52] 4.3 | x (note 2) | x | [52] 4.3 | c10 | n/a |
| 19H | Privacy | [33] 4.2 | c8 | c8 | [33] 4.2 | c8 | c8 |
| 20 | Proxy-Authorization | [26] 20.28 | c5 | c5 | [26] 20.28 | n/a | n/a |
| 21 | Proxy-Require | [26] 20.29 | o | o (note 1) | [26] 20.29 | n/a | n/a |
| 21A | Reason | [34A] 2 | c20 | c20 | [34A] 2 | c20 | c20 |
| 22 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | n/a | n/a |
| <u>22A</u> | <u>Reject-Contact</u> | <u>[xx] 9.2</u> | <u>c21</u> | <u>c21</u> | <u>[xx] 9.2</u> | <u>n/a</u> | <u>n/a</u> |
| <u>22B</u> | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c21</u> | <u>c21</u> | <u>[xx] 9.1</u> | <u>n/a</u> | <u>n/a</u> |
| 23 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 24 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 24A | Security-Client | [48] 2.3.1 | c18 | c18 | [48] 2.3.1 | n/a | n/a |
| 24B | Security-Verify | [48] 2.3.1 | c19 | c19 | [48] 2.3.1 | n/a | n/a |
| 25 | Supported | [26] 20.37 | c6 | c6 | [26] 20.37 | m | m |
| 26 | Timestamp | [26] 20.38 | c7 | c7 | [26] 20.38 | m | m |
| 27 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 28 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 29 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|---------|---|
| c1: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. |
| c2: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. |
| c3: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. |
| c4: | IF A.3/1 AND A.4/25 THEN o ELSE n/a - - UE and private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c5: | IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. |
| c6: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c7: | IF A.4/6 THEN o ELSE n/a - - timestamping of requests. |
| c8: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c9: | IF A.4/32 THEN o ELSE n/a - - the P-Called-Party-ID extension. |
| c10: | IF A.4/33 THEN o ELSE n/a - - the P-Visited-Network-ID extension. |
| c11: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. |
| c12: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. |
| c13: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. |
| c14: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. |
| c15: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c16: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c17: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c18: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note 3). |
| c19: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c20: | IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. |
| c21: | IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol. |
| NOTE 1: | No distinction has been made in these tables between first use of a request on a From/To/Call-ID combination, and the usage in a subsequent one. Therefore the use of "o" etc. above has been included from a viewpoint of first usage. |
| NOTE 2: | The strength of this requirement in RFC 3455 [52] is SHOULD NOT, rather than MUST NOT. |
| NOTE 3: | Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented. Use of this header in this method is not appropriate to the security mechanism defined by 3GPP TS 33.203 [19]. |

Prerequisite A.5/12 - - OPTIONS request

Table A.78: Supported message bodies within the OPTIONS request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/1 - - 100 (Trying)

Table A.79: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | n/a | n/a | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | n/a | n/a | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | n/a | n/a | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | n/a | n/a | [26] 20.17 | m | m |
| 5 | From | [26] 20.20 | n/a | n/a | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | n/a | n/a | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | n/a | n/a | [26] 20.42 | m | m |

Prerequisite A.5/13 - - OPTIONS response

Table A.80: Supported headers within the OPTIONS response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|-------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 2 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 3 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 4 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 11 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 11A | P-Access-Network-Info | [52] 4.4 | c5 | c6 | [52] 4.4 | c5 | c7 |
| 11B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c3 | c3 |
| 11C | P-Charging-Function-Addresses | [52] 4.5 | c10 | c11 | [52] 4.5 | c10 | c11 |
| 11D | P-Charging-Vector | [52] 4.6 | c8 | c9 | [52] 4.6 | c8 | c9 |
| 11E | P-Preferred-Identity | [34] 9.2 | c3 | x | [34] 9.2 | n/a | n/a |
| 11F | Privacy | [33] 4.2 | c4 | c4 | [33] 4.2 | c4 | c4 |
| 11G | Require | [26] 20.32 | m | m | [26] 20.32 | m | m |
| 12 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 13 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 13A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 14 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 15 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |
| c1: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.4/6 THEN m ELSE n/a - - timestamping of requests. | | | | | | |
| c3: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c4: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c5: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. | | | | | | |
| c6: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. | | | | | | |
| c7: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. | | | | | | |
| c8: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c9: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c10: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c11: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| NOTE: | For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL. | | | | | | |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/6 - - 2xx

Table A.81: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|---------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | m | m |
| 2 | Allow | [26] 20.5 | o (note 1) | o | [26] 20.5 | m | m |
| 3 | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 5 | Contact | [26] 20.10 | o | | [26] 20.10 | o | |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA. | | | | | | |
| c2: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |
| NOTE 1: | The strength of this requirement in RFC 3261 [26] is RECOMMENDED, rather than OPTIONAL. | | | | | | |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 - - 3xx or 485 (Ambiguous)

Table A.82: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Contact | [26] 20.10 | o (note) | o | [26] 20.10 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.83: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|---|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 10 | WWW-Authenticate | [26] 20.44 | o | | [26] 20.44 | o | |
| c1: IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | | |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.84: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.85: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/20 - - 407 (Proxy Authentication Required)

Table A.86: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/25 - - 415 (Unsupported Media Type)

Table A.87: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 4 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 5 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| o.1 | At least one of these capabilities is supported. | | | | | | |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.88: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 7 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.88A: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/13 - - OPTIONS response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.89: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/13 - - OPTIONS response

Table A.90: Supported message bodies within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.3.10 PRACK method

Prerequisite A.5/14 -- PRACK request

Table A.91: Supported headers within the PRACK request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| <u>1A</u> | <u>Accept-Contact</u> | <u>[xx] 9.2</u> | <u>c21</u> | <u>c21</u> | <u>[xx] 9.2</u> | <u>n/a</u> | <u>n/a</u> |
| 2 | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c2 | c2 |
| 5 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 7 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 8 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 9 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 10 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 11 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 12 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 13 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 14 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 15 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 16 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 16A | P-Access-Network-Info | [52] 4.4 | c9 | c10 | [52] 4.4 | c9 | c11 |
| 16B | P-Charging-Function-Addresses | [52] 4.5 | c13 | c14 | [52] 4.5 | c13 | c14 |
| 16C | P-Charging-Vector | [52] 4.6 | c12 | n/a | [52] 4.6 | c12 | n/a |
| 16D | Privacy | [33] 4.2 | c6 | n/a | [33] 4.2 | c6 | n/a |
| 17 | Proxy-Authorization | [26] 20.28 | c5 | c5 | [26] 20.28 | n/a | n/a |
| 18 | Proxy-Require | [26] 20.29 | o | n/a | [26] 20.29 | n/a | n/a |
| 19 | Rack | [27] 7.2 | m | m | [27] 7.2 | m | m |
| 19A | Reason | [34A] 2 | c7 | c7 | [34A] 2 | c7 | c7 |
| 20 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | n/a | n/a |
| <u>20A</u> | <u>Reject-Contact</u> | <u>[xx] 9.2</u> | <u>c21</u> | <u>c21</u> | <u>[xx] 9.2</u> | <u>n/a</u> | <u>n/a</u> |
| <u>20B</u> | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c21</u> | <u>c21</u> | <u>[xx] 9.1</u> | <u>n/a</u> | <u>n/a</u> |
| 21 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 22 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 23 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| 24 | Timestamp | [26] 20.38 | c8 | c8 | [26] 20.38 | m | m |
| 25 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 26 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 27 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

c1: IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension.
c2: IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension.
c3: IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA.
c4: IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses.
c5: IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy.
c6: IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c7: IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol.
c8: IF A.4/6 THEN o ELSE n/a - - timestamping of requests.
c9: IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension.
c10: IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE.
c11: IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller.
c12: IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension.
c13: IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension.
c14: IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension.
c15: IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol.

Prerequisite A.5/14 - - PRACK request

Table A.92: Supported message bodies within the PRACK request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/1 - - 100 (Trying)

Table A.93: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | n/a | n/a | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | n/a | n/a | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | n/a | n/a | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | n/a | n/a | [26] 20.17 | m | m |
| 5 | From | [26] 20.20 | n/a | n/a | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | n/a | n/a | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | n/a | n/a | [26] 20.42 | m | m |

Prerequisite A.5/15 - - PRACK response

Table A.94: Supported headers within the PRACK response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|-------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 3 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 4 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 10A | P-Access-Network-Info | [52] 4.4 | c3 | c4 | [52] 4.4 | c3 | c5 |
| 10B | P-Charging-Function-Addresses | [52] 4.5 | c7 | c8 | [52] 4.5 | c7 | c8 |
| 10C | P-Charging-Vector | [52] 4.6 | c6 | n/a | [52] 4.6 | c6 | n/a |
| 10D | Privacy | [33] 4.2 | c2 | n/a | [33] 4.2 | c2 | n/a |
| 10E | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 10F | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |
| c1: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c3: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. | | | | | | |
| c4: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. | | | | | | |
| c5: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. | | | | | | |
| c6: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c7: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c8: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| NOTE: | For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL. | | | | | | |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/6 - - 2xx

Table A.95: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 0B | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 3 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA. | | | | | | |
| c2: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 - - 3xx or 485 (Ambiguous)

Table A.96: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Contact | [26] 20.10 | o (note) | o | [26] 20.10 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.97: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.98: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.99: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/20 - - 407 (Proxy Authentication Required)

Table A.100: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 6 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/25 - - 415 (Unsupported Media Type)

Table A.101: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.102: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.102A: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/15 - - PRACK response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.103: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/15 - - PRACK response

Table A.104: Supported message bodies within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.11 REFER method

Prerequisite A.5/16 - - REFER request

Table A.105: Supported headers within the REFER request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|-------------------------|------------|----------------|-------------------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| <u>0B</u> | <u>Accept-Contact</u> | <u>[xx] 9.2</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.2</u> | <u>n/a</u> | <u>n/a</u> |
| <u>0CB</u> | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 1 | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 1A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c2 | c2 |
| 3 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 4 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 5 | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 5A | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 5B | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 5C | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 6 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 7 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 8 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 9 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 10 | Expires | [26] 20.19 | o | o | [26] 20.19 | o | o |
| 11 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 12 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 13 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 14 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 14A | P-Access-Network-Info | [52] 4.4 | c12 | c13 | [52] 4.4 | c12 | c14 |
| 14B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c8 | c8 |
| 14C | P-Called-Party-ID | [52] 4.2 | x | x | [52] 4.2 | c10 | c10 |
| 14D | P-Charging-Function-Addresses | [52] 4.5 | c17 | c18 | [52] 4.5 | c17 | c18 |
| 14E | P-Charging-Vector | [52] 4.6 | c15 | c16 | [52] 4.6 | c15 | c16 |
| 14F | P-Preferred-Identity | [34] 9.2 | c8 | c7 | [34] 9.2 | n/a | n/a |
| 14G | P-Visited-Network-ID | [52] 4.3 | x (note 1) | x | [52] 4.3 | c11 | n/a |
| 14H | Privacy | [33] 4.2 | c9 | c9 | [33] 4.2 | c9 | c9 |
| 15 | Proxy-Authorization | [26] 20.28 | c5 | c5 | [26] 20.28 | n/a | n/a |
| 16 | Proxy-Require | [26] 20.29 | o | n/a | [26] 20.29 | n/a | n/a |
| 16A | Reason | [34A] 2 | c21 | c21 | [34A] 2 | c21 | c21 |
| 17 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | m | m |
| 18 | Refer-To | [36] 3 | m | m | [36] 3 | m | m |
| <u>18A</u> | <u>Reject-Contact</u> | <u>[xx] 9.2</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.2</u> | <u>n/a</u> | <u>n/a</u> |
| <u>18B</u> | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.1</u> | <u>n/a</u> | <u>n/a</u> |
| 19 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 20 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 20A | Security-Client | [48] 2.3.1 | c19 | c19 | [48] 2.3.1 | n/a | n/a |
| 20B | Security-Verify | [48] 2.3.1 | c20 | c20 | [48] 2.3.1 | n/a | n/a |
| 20C | Subject | [26] 20.36 | o | o | [26] 20.36 | o | o |
| 21 | Supported | [26] 20.37, [26] 7.1 | o | o | [26] 20.37, [26] 7.1 | m | m |
| 22 | Timestamp | [26] 20.38 | c6 | c6 | [26] 20.38 | m | m |
| 23 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 24 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 25 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|--|
| c1: | IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension. |
| c2: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. |
| c3: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. |
| c4: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. |
| c5: | IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. |
| c6: | IF A.4/6 THEN o ELSE n/a - - timestamping of requests. |
| c7: | IF A.3/1 AND A.4/25 THEN o ELSE n/a - - UE and private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c8: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c9: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c10: | IF A.4/32 THEN o ELSE n/a - - the P-Called-Party-ID extension. |
| c11: | IF A.4/33 THEN o ELSE n/a - - the P-Visited-Network-ID extension. |
| c12: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. |
| c13: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. |
| c14: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. |
| c15: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. |
| c16: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c17: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c18: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c19: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note 2). |
| c20: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c21: | IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. |
| c22: | <u>IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol.</u> |

NOTE 1: The strength of this requirement in RFC 3455 [52] is SHOULD NOT, rather than MUST NOT.
 NOTE 2: Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented. Use of this header in this method is not appropriate to the security mechanism defined by 3GPP TS 33.203 [19].

Prerequisite A.5/16 - - REFER request

Table A.106: Supported message bodies within the REFER request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/1 - - 100 (Trying)

Table A.107: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | n/a | n/a | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | n/a | n/a | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | n/a | n/a | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | n/a | n/a | [26] 20.17 | m | m |
| 5 | From | [26] 20.20 | n/a | n/a | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | n/a | n/a | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | n/a | n/a | [26] 20.42 | m | m |

Prerequisite A.5/17 - - REFER response

Table A.108: Supported headers within the REFER response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|-------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 2 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 3 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 4 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 5 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 6 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 7 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 8 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 9 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 10 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 10A | P-Access-Network-Info | [52] 4.4 | c5 | c6 | [52] 4.4 | c5 | c7 |
| 10B | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c3 | c3 |
| 10C | P-Charging-Function-Addresses | [52] 4.5 | c10 | c11 | [52] 4.5 | c10 | c11 |
| 10D | P-Charging-Vector | [52] 4.6 | c8 | c9 | [52] 4.6 | c8 | c9 |
| 10E | P-Preferred-Identity | [34] 9.2 | c3 | x | [34] 9.2 | n/a | n/a |
| 10F | Privacy | [33] 4.2 | c4 | c4 | [33] 4.2 | c4 | c4 |
| 10G | Require | [26] 20.32 | m | m | [26] 20.32 | m | m |
| 10H | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |
| c1: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.4/6 THEN m ELSE n/a - - timestamping of requests. | | | | | | |
| c3: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c4: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c5: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. | | | | | | |
| c6: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. | | | | | | |
| c7: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. | | | | | | |
| c8: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c9: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c10: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c11: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| NOTE: | For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL. | | | | | | |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/7 - - 202 (Accepted)

Table A.109: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 3 | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 5 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | m | m |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA. | | | | | | |
| c2: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 - - 3xx or 485 (Ambiguous)

Table A.110: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Contact | [26] 20.10 | o (note) | o | [26] 20.10 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.111: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 10 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.112: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 6 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.113: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/20 - - 407 (Proxy Authentication Required)

Table A.114: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/25 - - 415 (Unsupported Media Type)

Table A.115: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| o.1 | At least one of these capabilities is supported. | | | | | | |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.116: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.116A: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/17 - - REFER response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.117: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/17 - - REFER response

Table A.118: Supported message bodies within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.12 REGISTER method

Prerequisite A.5/18 - - REGISTER request

Table A.119: Supported headers within the REGISTER request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|--------------------|------------|----------------|--------------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7, [49] | c2 | o | [26] 20.7, [49] | m | c22 |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 7 | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 8 | Contact | [26] 20.10 | o | o | [26] 20.10 | m | m |
| 9 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 10 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 11 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 12 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 13 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 14 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 15 | Date | [26] 20.17 | c3 | c3 | [26] 20.17 | m | m |
| 16 | Expires | [26] 20.19 | o | o | [26] 20.19 | m | m |
| 17 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 18 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 19 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 20 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 20A | P-Access-Network-Info | [52] 4.4 | c12 | c13 | [52] 4.4 | c12 | c14 |
| 20B | P-Charging-Function-Addresses | [52] 4.5 | c17 | c18 | [52] 4.5 | c17 | c18 |
| 20C | P-Charging-Vector | [52] 4.6 | c15 | c16 | [52] 4.6 | c15 | c16 |
| 20D | P-Visited-Network-ID | [52] 4.3 | x (note 2) | x | [52] 4.3 | c10 | c11 |
| 20E | Path | [35] 4 | c4 | c5 | [35] 4 | m | c6 |
| 20F | Privacy | [33] 4.2 | c9 | n/a | [33] 4.2 | c9 | n/a |
| 21 | Proxy-Authorization | [26] 20.28 | c8 | c8 | [26] 20.28 | n/a | n/a |
| 22 | Proxy-Require | [26] 20.29 | o | o (note 1) | [26] 20.29 | n/a | n/a |
| 22A | Reason | [34A] 2 | c23 | c23 | [34A] 2 | c23 | c23 |
| 22B | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c24</u> | <u>c24</u> | <u>[xx] 9.1</u> | <u>n/a</u> | <u>n/a</u> |
| 23 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 24 | Route | [26] 20.34 | o | n/a | [26] 20.34 | n/a | n/a |
| 24A | Security-Client | [48] 2.3.1 | c19 | c20 | [48] 2.3.1 | n/a | n/a |
| 24B | Security-Verify | [48] 2.3.1 | c20 | c20 | [48] 2.3.1 | c21 | n/a |
| 25 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| 26 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c7 | c7 |
| 27 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 28 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 29 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|---|
| c1: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. |
| c2: | IF A.4/8 THEN m ELSE n/a - - authentication between UA and registrar. |
| c3: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. |
| c4: | IF A.4/24 THEN o ELSE n/a - - session initiation protocol extension header field for registering non-adjacent contacts. |
| c5: | IF A.4/24 THEN x ELSE n/a - - session initiation protocol extension header field for registering non-adjacent contacts. |
| c6: | IF A.3/4 THEN m ELSE n/a - - S-CSCF. |
| c7: | IF A.4/6 THEN m ELSE n/a - - timestamping of requests. |
| c8: | IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. |
| c9: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c10: | IF A.4/33 THEN o ELSE n/a - - the P-Visited-Network-ID extension. |
| c11: | IF A.4/33 THEN m ELSE n/a - - the P-Visited-Network-ID extension. |
| c12: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. |
| c13: | IF A.4/34 AND (A.3/1 OR A.3/4) THEN o ELSE n/a - - the P-Access-Network-Info header extension and UE or S-CSCF (note 4). |
| c14: | IF A.4/34 AND (A.3/4 OR A.3/7A) THEN m ELSE n/a - - the P-Access-Network-Info header extension and S-CSCF or AS acting as terminating UA. |
| c15: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. |
| c16: | IF A.4/36 OR A.3/4 THEN m ELSE n/a - - the P-Charging-Vector header extension (including S-CSCF as registrar). |
| c17: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c18: | IF A.4/35 OR A.3/4 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension (including S-CSCF as registrar). |
| c19: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note 3). |
| c20: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c21: | IF A.4/37 AND A.4/2 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol and registrar. |
| c22: | IF A.3/4 THEN m ELSE n/a - - S-CSCF. |
| c23: | IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. |
| c24: | IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol. |

NOTE 1: No distinction has been made in these tables between first use of a request on a From/To/Call-ID combination, and the usage in a subsequent one. Therefore the use of "o" etc. above has been included from a viewpoint of first usage.

NOTE 2: The strength of this requirement in RFC 3455 [52] is SHOULD NOT, rather than MUST NOT.

NOTE 3: Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented.

NOTE 4: Refere to subclause 5.1.1.2 for information on when the UE sets the P-Access-Network-Info header.

Prerequisite A.5/18 - - REGISTER request

Table A.120: Supported message bodies within the REGISTER request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/1 - - 100 (Trying)

Table A.121: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | n/a | n/a | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | n/a | n/a | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | n/a | n/a | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | n/a | n/a | [26] 20.17 | m | m |
| 5 | From | [26] 20.20 | n/a | n/a | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | n/a | n/a | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | n/a | n/a | [26] 20.42 | m | m |

Prerequisite A.5/19 - - REGISTER response

Table A.122: Supported headers within the REGISTER response - all status-codes

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 2 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 3 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 4 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 11 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 11A | P-Access-Network-Info | [52] 4.4 | c3 | n/a | [52] 4.4 | c3 | n/a |
| 11B | P-Charging-Function-Addresses | [52] 4.5 | c6 | c7 | [52] 4.5 | c6 | c7 |
| 11C | P-Charging-Vector | [52] 4.6 | c4 | c5 | [52] 4.6 | c4 | c5 |
| 11D | Privacy | [33] 4.2 | c2 | n/a | [33] 4.2 | c2 | n/a |
| 11E | Require | [26] 20.32 | m | m | [26] 20.32 | m | m |
| 11F | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 12 | Timestamp | [26] 20.38 | c2 | c2 | [26] 20.38 | m | m |
| 13 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 13A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 14 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 15 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |

c1: IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses.
c2: IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c3: IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension.
c4: IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension.
c5: IF A.4/36 OR A.3/4 THEN m ELSE n/a - - the P-Charging-Vector header extension (including S-CSCF as registrar).
c6: IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension.
c7: IF A.4/35 OR A.3/4 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension (including S-CSCF as registrar).

NOTE: For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/6 - - 2xx

Table A.123: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|---------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | | [26] 20.1 | o | |
| 1A | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 1B | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 2 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Authentication-Info | [26] 20.6 | c6 | c6 | [26] 20.6 | c7 | c7 |
| 5 | Contact | [26] 20.10 | o | o | [26] 20.10 | m | m |
| 5A | P-Associated-URI | [52] 4.1 | c8 | c9 | [52] 4.1 | c10 | c11 |
| 6 | Path | [35] 4 | c3 | c3 | [35] 4 | c4 | c4 |
| 8 | Service-Route | [38] 5 | c5 | c5 | [38] 5 | c5 | c5 |
| 9 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

c1: IF (A.3/4 AND A.4/2) THEN m ELSE n/a. - - S-CSCF acting as registrar.
 c2: IF A.3/4 OR A.3/1THEN m ELSE n/a. - - S-CSCF or UE.
 c3: IF A.4/24 THEN m ELSE n/a - - session initiation protocol extension header field for registering non-adjacent contacts.
 c4: IF A.4/24 THEN o ELSE n/a - - session initiation protocol extension header field for registering non-adjacent contacts.
 c5: IF A.4/28 THEN m ELSE n/a - - session initiation protocol extension header field for service route discovery during registration.
 c6: IF A.4/8 THEN o ELSE n/a - - authentication between UA and registrar.
 c7: IF A.4/8 THEN m ELSE n/a - - authentication between UA and registrar.
 c8: IF A.4/2 AND A.4/31 THEN m ELSE n/a - - P-Associated-URI header extension and registrar.
 c9: IF A.3/1 AND A.4/31 THEN m ELSE n/a - - P-Associated-URI header extension and S-CSCF.
 c10: IF A.4/31 THEN o ELSE n/a - - P-Associated-URI header extension.
 c11: IF A.4/31 AND A.3/1 THEN m ELSE n/a - - P-Associated-URI header extension and UE.

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 - - 3xx or 485 (Ambiguous)

Table A.124: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Contact | [26] 20.10 | o (note) | o | [26] 20.10 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.125: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|---|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Proxy-Authenticate | [26] 20.27 | c1 | x | [26] 20.27 | c1 | x |
| 6 | Security-Server | [48] 2 | x | x | [48] 2 | n/a | c2 |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 10 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |
| c1: IF A.5/8 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | | |
| c2: IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | | |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.126: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 6 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.127: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 4 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/20 - - 407 (Proxy Authentication Required)

Table A.128: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|---|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Proxy-Authenticate | [26] 20.27 | c1 | x | [26] 20.27 | c1 | x |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 9 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: IF A.5/8 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | | |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/25 - - 415 (Unsupported Media Type)

Table A.129: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 4 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 5 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 9 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| o.1 | At least one of these capabilities is supported. | | | | | | |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.130: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.130A: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c2 | c2 | [48] 2 | c1 | c1 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |
| c2: | IF A.4/37 AND A.4/2 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol and registrar. | | | | | | |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/29 - - 423 (Interval Too Brief)

Table A.131: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | | [26] 20.18 | o | |
| 5 | Min-Expires | [26] 20.23 | m | m | [26] 20.23 | m | m |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/19 - - REGISTER response

Prerequisite: A.6/34 - - 484 (Address Incomplete)

Table A.132: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/19 - - REGISTER response

Table A.133: Supported message bodies within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.13 SUBSCRIBE method

Prerequisite A.5/20 - - SUBSCRIBE request

Table A.134: Supported headers within the SUBSCRIBE request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| <u>1A</u> | <u>Accept-Contact</u> | <u>[xx] 9.2</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.2</u> | <u>n/a</u> | <u>n/a</u> |
| 2 | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 3A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 4 | Allow-Events | [28] 7.2.2 | c1 | c1 | [28] 7.2.2 | c2 | c2 |
| 5 | Authorization | [26] 20.7 | c3 | c3 | [26] 20.7 | c3 | c3 |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 6A | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 7 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 8 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 9 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 10 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 11 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 12 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 13 | Date | [26] 20.17 | c4 | c4 | [26] 20.17 | m | m |
| 14 | Event | [28] 7.2.1 | m | m | [28] 7.2.1 | m | m |
| 15 | Expires | [26] 20.19 | o (note 1) | o (note 1) | [26] 20.19 | m | m |
| 16 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 17 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 18 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 18A | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 18B | P-Access-Network-Info | [52] 4.4 | c12 | c13 | [52] 4.4 | c12 | c14 |
| 18C | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c6 | c6 |
| 18D | P-Called-Party-ID | [52] 4.2 | x | x | [52] 4.2 | c10 | c10 |
| 18E | P-Charging-Function-Addresses | [52] 4.5 | c17 | c18 | [52] 4.5 | c17 | c18 |
| 18F | P-Charging-Vector | [52] 4.6 | c15 | c16 | [52] 4.6 | c15 | c16 |
| 18G | P-Preferred-Identity | [34] 9.2 | c6 | c7 | [34] 9.2 | n/a | n/a |
| 18H | P-Visited-Network-ID | [52] 4.3 | x (note 2) | x | [52] 4.3 | c11 | n/a |
| 18I | Privacy | [33] 4.2 | c9 | c9 | [33] 4.2 | c9 | c9 |
| 19 | Proxy-Authorization | [26] 20.28 | c5 | c5 | [26] 20.28 | n/a | n/a |
| 20 | Proxy-Require | [26] 20.29 | o | n/a | [26] 20.29 | n/a | n/a |
| 20A | Reason | [34A] 2 | c21 | c21 | [34A] 2 | c21 | c21 |
| 21 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | m | m |
| <u>21A</u> | <u>Reject-Contact</u> | <u>[xx] 9.2</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.2</u> | <u>n/a</u> | <u>n/a</u> |
| <u>21B</u> | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.1</u> | <u>n/a</u> | <u>n/a</u> |
| 22 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 23 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 23A | Security-Client | [48] 2.3.1 | c19 | c19 | [48] 2.3.1 | n/a | n/a |
| 23B | Security-Verify | [48] 2.3.1 | c20 | c20 | [48] 2.3.1 | n/a | n/a |
| 24 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| 25 | Timestamp | [26] 20.38 | c8 | c8 | [26] 20.38 | m | m |
| 26 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 27 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 28 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|--|
| c1: | IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension. |
| c2: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. |
| c3: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. |
| c4: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. |
| c5: | IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. |
| c6: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c7: | IF A.3/1 AND A.4/25 THEN o ELSE n/a - - UE and private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c8: | IF A.4/6 THEN o ELSE n/a - - timestamping of requests. |
| c9: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c10: | IF A.4/32 THEN o ELSE n/a - - the P-Called-Party-ID extension. |
| c11: | IF A.4/33 THEN o ELSE n/a - - the P-Visited-Network-ID extension. |
| c12: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. |
| c13: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. |
| c14: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. |
| c15: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. |
| c16: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c17: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c18: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c19: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note 3). |
| c20: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c21: | IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. |
| c22: | IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol. |

NOTE 1: The strength of this requirement is RECOMMENDED rather than OPTIONAL.

NOTE 2: The strength of this requirement in RFC 3455 [52] is SHOULD NOT, rather than MUST NOT.

NOTE 3: Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented. Use of this header in this method is not appropriate to the security mechanism defined by 3GPP TS 33.203 [19].

Prerequisite A.5/20 - - SUBSCRIBE request

Table A.135: Supported message bodies within the SUBSCRIBE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/21 - - SUBSCRIBE response

Table A.136: Supported headers within the SUBSCRIBE response - all status-codes

| Item | Header | Sending | | | Receiving | | |
|-------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 3 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 4 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 10A | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 10B | P-Access-Network-Info | [52] 4.4 | c5 | c6 | [52] 4.4 | c5 | c7 |
| 10C | P-Asserted-Identity | [34] 9.1 | n/a | n/a | [34] 9.1 | c3 | c3 |
| 10D | P-Charging-Function-Addresses | [52] 4.5 | c10 | c11 | [52] 4.5 | c10 | c11 |
| 10E | P-Charging-Vector | [52] 4.6 | c8 | c9 | [52] 4.6 | c8 | c9 |
| 10F | P-Preferred-Identity | [34] 9.2 | c3 | x | [34] 9.2 | n/a | n/a |
| 10G | Privacy | [33] 4.2 | c4 | c4 | [33] 4.2 | c4 | c4 |
| 10H | Require | [26] 20.32 | m | m | [26] 20.32 | m | m |
| 10I | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |
| c1: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.4/6 THEN m ELSE n/a - - timestamping of requests. | | | | | | |
| c3: | IF A.4/25 THEN o ELSE n/a - - private extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c4: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c5: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. | | | | | | |
| c6: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. | | | | | | |
| c7: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. | | | | | | |
| c8: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c9: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c10: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c11: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| NOTE: | For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL. | | | | | | |

Prerequisite A.5/21 - - SUBSCRIBE response

Prerequisite: A.6/6 and A.6/7 - - 2xx

Table A.137: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 1A | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 2 | Expires | [26] 20.19 | m | m | [26] 20.19 | m | m |
| 4 | Require | [26] 20.32 | m | m | [26] 20.32 | m | m |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA. | | | | | | |
| c2: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. | | | | | | |

Prerequisite A.5/21 - - SUBSCRIBE response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 OR A.6/35 - - 3xx or 485 (Ambiguous)

Table A.138: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Contact | [26] 20.10 | m (note) | m | [26] 20.10 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than MANDATORY for a 485 response.

Prerequisite A.5/21 - - SUBSCRIBE response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.139: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |

c1: IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA.

Prerequisite A.5/21 - - SUBSCRIBE response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 500, 600, 603

Table A.140: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Retry-After | [26] 20.33 | o | | [26] 20.33 | o | |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/21 - - SUBSCRIBE response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.141: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/21 -- SUBSCRIBE response

Prerequisite: A.6/20 -- 407 (Proxy Authentication Required)

Table A.142: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 6 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: | IF A.5/7 THEN m ELSE n/a -- support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/21 -- SUBSCRIBE response

Prerequisite A.6/25 -- 415 (Unsupported Media Type)

Table A.143: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 4 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 6 | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| o.1 | At least one of these capabilities is supported. | | | | | | |

Prerequisite A.5/21 -- SUBSCRIBE response

Prerequisite: A.6/27 -- 420 (Bad Extension)

Table A.144: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 5 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/21 -- SUBSCRIBE response

Prerequisite: A.6/28 OR A.6/41A -- 421 (Extension Required), 494 (Security Agreement Required)

Table A.144A: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a -- security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/21 -- SUBSCRIBE response

Prerequisite: A.6/29 -- 423 (Interval Too Brief)

Table A.145: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 2 | Min-Expires | [26] 20.23 | m | m | [26] 20.23 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/21 -- SUBSCRIBE response

Prerequisite: A.6/34 -- 484 (Address Incomplete)

Table A.146: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/21 -- SUBSCRIBE response

Prerequisite: A.6/39 -- 489 (Bad Event)

Table A.147: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |

Prerequisite A.5/21 -- SUBSCRIBE response

Prerequisite: A.6/45 -- 503 (Service Unavailable)

Table A.148: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 1 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/21 - - SUBSCRIBE response

Table A.149: Supported message bodies within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.1.4.14 UPDATE method

Prerequisite A.5/22 - - UPDATE request

Table A.150: Supported headers within the UPDATE request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| 1A | Accept-Contact | [xx] 9.2 | c20 | c20 | [xx] 9.2 | n/a | n/a |
| 2 | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 4 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 5 | Allow-Events | [28] 7.2.2 | c2 | c2 | [28] 7.2.2 | c3 | c3 |
| 6 | Authorization | [26] 20.7 | c4 | c4 | [26] 20.7 | c4 | c4 |
| 7 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 8 | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 9 | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 10 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 11 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 12 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 13 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 14 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 15 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 16 | Date | [26] 20.17 | c5 | c5 | [26] 20.17 | m | m |
| 17 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 18 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | n/a | n/a |
| 19 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 20 | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 20A | P-Access-Network-Info | [52] 4.4 | c11 | c12 | [52] 4.4 | c11 | c13 |
| 20B | P-Charging-Function-Addresses | [52] 4.5 | c16 | c17 | [52] 4.5 | c16 | c17 |
| 20C | P-Charging-Vector | [52] 4.6 | c14 | c15 | [52] 4.6 | c14 | c15 |
| 20D | Privacy | [33] 4.2 | c6 | n/a | [33] 4.2 | c6 | n/a |
| 21 | Proxy-Authorization | [26] 20.28 | c10 | c10 | [26] 20.28 | n/a | n/a |
| 22 | Proxy-Require | [26] 20.29 | o | n/a | [26] 20.29 | n/a | n/a |
| 22A | Reason | [34A] 2 | c8 | c8 | [34A] 2 | c8 | c8 |
| 23 | Record-Route | [26] 20.30 | n/a | n/a | [26] 20.30 | n/a | n/a |
| 23A | Reject-Contact | [xx] 9.2 | c20 | c20 | [xx] 9.2 | n/a | n/a |
| 23A | Request-Disposition | [xx] 9.1 | c20 | c20 | [xx] 9.1 | n/a | n/a |
| 24 | Require | [26] 20.32 | o | o | [26] 20.32 | m | m |
| 25 | Route | [26] 20.34 | m | m | [26] 20.34 | n/a | n/a |
| 25A | Security-Client | [48] 2.3.1 | c18 | c18 | [48] 2.3.1 | n/a | n/a |
| 25B | Security-Verify | [48] 2.3.1 | c19 | c19 | [48] 2.3.1 | n/a | n/a |
| 26 | Supported | [26] 20.37 | o | o | [26] 20.37 | m | m |
| 27 | Timestamp | [26] 20.38 | c9 | c9 | [26] 20.38 | m | m |
| 28 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 29 | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 30 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|--|
| c2: | IF A.4/20 THEN o ELSE n/a - - SIP specific event notification extension. |
| c3: | IF A.4/20 THEN m ELSE n/a - - SIP specific event notification extension. |
| c4: | IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA. |
| c5: | IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses. |
| c6: | IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c8: | IF A.4/38 THEN o ELSE n/a - - the Reason header field for the session initiation protocol. |
| c9: | IF A.4/6 THEN o ELSE n/a - - timestamping of requests. |
| c10: | IF A.4/8A THEN m ELSE n/a - - authentication between UA and proxy. |
| c11: | IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension. |
| c12: | IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE. |
| c13: | IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller. |
| c14: | IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension. |
| c15: | IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c16: | IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c17: | IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c18: | IF A.4/37 THEN o ELSE n/a - - security mechanism agreement for the session initiation protocol (note). |
| c19: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c20: | IF A.4/40 THEN o ELSE n/a - - caller preferences for the session initiation protocol. |

NOTE: Support of this header in this method is dependent on the security mechanism and the security architecture which is implemented. Use of this header in this method is not appropriate to the security mechanism defined by 3GPP TS 33.203 [19].

Prerequisite A.5/22 - - UPDATE request

Table A.151: Supported message bodies within the UPDATE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.5/23 - - UPDATE response

Table A.152: Supported headers within the UPDATE response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Call-Info | [26] 20.9 | o | o | [26] 20.9 | o | o |
| 2 | Content-Disposition | [26] 20.11 | o | o | [26] 20.11 | m | m |
| 3 | Content-Encoding | [26] 20.12 | o | o | [26] 20.12 | m | m |
| 4 | Content-Language | [26] 20.13 | o | o | [26] 20.13 | m | m |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | m | m |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | o | o | [26] 20.24 | m | m |
| 10A | Organization | [26] 20.25 | o | o | [26] 20.25 | o | o |
| 10B | P-Access-Network-Info | [52] 4.4 | c4 | c5 | [52] 4.4 | c4 | c6 |
| 10C | P-Charging-Function-Addresses | [52] 4.5 | c9 | c10 | [52] 4.5 | c9 | c10 |
| 10D | P-Charging-Vector | [52] 4.6 | c7 | c8 | [52] 4.6 | c7 | c8 |
| 10E | Privacy | [33] 4.2 | c3 | n/a | [33] 4.2 | c3 | n/a |
| 10F | Require | [26] 20.31 | m | m | [26] 20.31 | m | m |
| 10G | Server | [26] 20.35 | o | o | [26] 20.35 | o | o |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | c2 | c2 |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | o | o | [26] 20.41 | o | o |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | o (note) | o | [26] 20.43 | o | o |

c1: IF A.4/11 THEN o ELSE n/a - - insertion of date in requests and responses.
c2: IF A.4/6 THEN m ELSE n/a - - timestamping of requests.
c3: IF A.4/26 THEN o ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c4: IF A.4/34 THEN o ELSE n/a - - the P-Access-Network-Info header extension.
c5: IF A.4/34 AND A.3/1 THEN m ELSE n/a - - the P-Access-Network-Info header extension and UE.
c6: IF A.4/34 AND (A.3/7A OR A.3/7D) THEN m ELSE n/a - - the P-Access-Network-Info header extension and AS acting as terminating UA or AS acting as third-party call controller.
c7: IF A.4/36 THEN o ELSE n/a - - the P-Charging-Vector header extension.
c8: IF A.4/36 THEN m ELSE n/a - - the P-Charging-Vector header extension.
c9: IF A.4/35 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension.
c10: IF A.4/35 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension.

NOTE: For a 606 (Not Acceptable Here) response, this status is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/6 - - 2xx

Table A.153: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|---------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Accept | [26] 20.1 | o | o | [26] 20.1 | m | m |
| 0B | Accept-Encoding | [26] 20.2 | o | o | [26] 20.2 | m | m |
| 0C | Accept-Language | [26] 20.3 | o | o | [26] 20.3 | m | m |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Authentication-Info | [26] 20.6 | c1 | c1 | [26] 20.6 | c2 | c2 |
| 3 | Contact | [26] 20.10 | m | m | [26] 20.10 | m | m |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

c1: IF A.4/7 THEN o ELSE n/a - - authentication between UA and UA.
c2: IF A.4/7 THEN m ELSE n/a - - authentication between UA and UA.

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/8 OR A.6/9 OR A.6/10 OR A.6/11 OR A.6/12 - - 3xx

Table A.154: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Contact | [26] 20.10 | o | o | [26] 20.10 | o | o |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/14 - - 401 (Unauthorized)

Table A.154A: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Proxy-Authenticate | [26] 20.27 | o | | [26] 20.27 | o | |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | m | m |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/17 OR A.6/23 OR A.6/30 OR A.6/36 OR A.6/42 OR A.6/45 OR A.6/50 OR A.6/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.155: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 5 | Retry-After | [26] 20.33 | o | o | [26] 20.33 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/18 - - 405 (Method Not Allowed)

Table A.156: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/20 - - 407 (Proxy Authentication Required)

Table A.157: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 4 | Proxy-Authenticate | [26] 20.27 | c1 | c1 | [26] 20.27 | c1 | c1 |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 8 | WWW-Authenticate | [26] 20.44 | o | o | [26] 20.44 | o | o |
| c1: | IF A.5/7 THEN m ELSE n/a - - support of authentication between UA and UA. | | | | | | |

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/25 - - 415 (Unsupported Media Type)

Table A.158: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | o.1 | o.1 | [26] 20.1 | m | m |
| 2 | Accept-Encoding | [26] 20.2 | o.1 | o.1 | [26] 20.2 | m | m |
| 3 | Accept-Language | [26] 20.3 | o.1 | o.1 | [26] 20.3 | m | m |
| 4 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 6 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| o.1 | At least one of these capabilities is supported. | | | | | | |

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/27 - - 420 (Bad Extension)

Table A.159: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| 7 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | m | m |

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/28 OR A.6/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.159A: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | x | x | [48] 2 | c1 | c1 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.5/23 - - UPDATE response

Prerequisite: A.6/35 - - 485 (Ambiguous)

Table A.160: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Contact | [26] 20.10 | o (note) | o | [26] 20.10 | m | m |
| 3 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |

NOTE: The strength of this requirement is RECOMMENDED rather than OPTIONAL.

Prerequisite A.5/23 - - UPDATE response

Table A.161: Supported message bodies within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2 Proxy role

A.2.2.1 Introduction

This subclause contains the ICS proforma tables related to the proxy role. They need to be completed only for proxy implementations.

Prerequisite: A.2/2 - - proxy role

A.2.2.2 Major capabilities

Table A.162: Major capabilities

| Item | Does the implementation support Capabilities within main protocol | Reference | RFC status | Profile status |
|-------------------|---|------------------|------------|----------------|
| 3 | initiate session release? | [26] 16 | x | c27 |
| 4 | stateless proxy behaviour? | [26] 16.11 | o.1 | c28 |
| 5 | stateful proxy behaviour? | [26] 16.2 | o.1 | c29 |
| 6 | forking of initial requests? | [26] 16.1 | c1 | c31 |
| 7 | support of TLS connections on the upstream side? | [26] 16.7 | o | n/a |
| 8 | support of TLS connections on the downstream side? | [26] 16.7 | o | n/a |
| 8A | authentication between UA and proxy? | [26] 20.28, 22.3 | o | x |
| 9 | insertion of date in requests and responses? | [26] 20.17 | o | o |
| 10 | suppression or modification of alerting information data? | [26] 20.4 | o | o |
| 11 | reading the contents of the Require header before proxying the request or response? | [26] 20.32 | o | o |
| 12 | adding or modifying the contents of the Require header before proxying the REGISTER request or response | [26] 20.32 | o | m |
| 13 | adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER? | [26] 20.32 | o | o |
| 14 | being able to insert itself in the subsequent transactions in a dialog (record-routing)? | [26] 16.6 | o | c2 |
| 15 | the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing? | [26] 16.7 | c3 | c3 |
| 16 | reading the contents of the Supported header before proxying the response? | [26] 20.37 | o | o |
| 17 | reading the contents of the Unsupported header before proxying the 420 response to a REGISTER? | [26] 20.40 | o | m |
| 18 | reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER? | [26] 20.40 | o | o |
| 19 | the inclusion of the Error-Info header in 3xx - 6xx responses? | [26] 20.18 | o | o |
| 19A | reading the contents of the Organization header before proxying the request or response? | [26] 20.25 | o | o |
| 19B | adding or concatenating the Organization header before proxying the request or response? | [26] 20.25 | o | o |
| 19C | reading the contents of the Call-Info header before proxying the request or response? | [26] 20.25 | o | o |
| 19D | adding or concatenating the Call-Info header before proxying the request or response? | [26] 20.25 | o | o |
| 19E | delete Contact headers from 3xx responses prior to relaying the response? | [26] 20 | o | o |
| Extensions | | | | |
| 20 | the SIP INFO method? | [25] | o | o |
| 21 | reliability of provisional responses in | [27] | o | i |

| | SIP? | | | |
|-----|--|----------|-----|-----|
| 22 | the REFER method? | [36] | o | o |
| 23 | integration of resource management and SIP? | [30] | o | i |
| 24 | the SIP UPDATE method? | [29] | c4 | i |
| 26 | SIP extensions for media authorization? | [31] | o | c7 |
| 27 | SIP specific event notification | [28] | o | i |
| 28 | the use of NOTIFY to establish a dialog | [28] 4.2 | o | n/a |
| 29 | Session Initiation Protocol Extension Header Field for Registering Non-Adjacent Contacts | [35] | o | c6 |
| 30 | extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks | [34] | o | m |
| 30A | act as first entity within the trust domain for asserted identity | [34] | c5 | c8 |
| 30B | act as subsequent entity within trust network that can route outside the trust network | [34] | c5 | c9 |
| 31 | a privacy mechanism for the Session Initiation Protocol (SIP) | [33] | o | m |
| 31A | request of privacy by the inclusion of a Privacy header | [33] | n/a | |
| 31B | application of privacy based on the received Privacy header | [33] | c10 | |
| 31C | passing on of the Privacy header transparently | [33] | c10 | |
| 31D | application of the privacy option "header" such that those headers which cannot be completely expunged of identifying information without the assistance of intermediaries are obscured? | [33] 5.1 | x | |
| 31E | application of the privacy option "session" such that anonymization for the session(s) initiated by this message occurs? | [33] 5.2 | n/a | n/a |
| 31F | application of the privacy option "user" such that user level privacy functions are provided by the network? | [33] 5.3 | n/a | n/a |
| 31G | application of the privacy option "id" such that privacy of the network asserted identity is provided by the network? | [34] 7 | c11 | c12 |
| 32 | Session Initiation Protocol Extension Header Field for Service Route Discovery During Registration | [38] | o | c30 |
| 33 | a messaging mechanism for the Session Initiation Protocol (SIP) | [50] | o | m |
| 34 | Compressing the Session Initiation Protocol | [55] | o | c7 |
| 35 | private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP)? | [52] | o | m |
| 36 | the P-Associated-URI header extension? | [52] 4.1 | c14 | c15 |
| 37 | the P-Called-Party-ID header extension? | [52] 4.2 | c14 | c16 |
| 38 | the P-Visited-Network-ID header extension? | [52] 4.3 | c14 | c17 |
| 39 | reading, or deleting the P-Visited-Network-ID header before proxying the request or response? | [52] 4.3 | c18 | n/a |
| 41 | the P-Access-Network-Info header extension? | [52] 4.4 | c14 | c19 |
| 42 | act as first entity within the trust domain | [52] 4.4 | c20 | c21 |

| | | | | |
|---------------------|--|----------|---------------------|---------------------|
| | for access network information? | | | |
| 43 | act as subsequent entity within trust network for access network information that can route outside the trust network? | [52] 4.4 | c20 | c22 |
| 44 | the P-Charging-Function-Addresses header extension? | [52] 4.5 | c14 | m |
| 44A | adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response? | [52] 4.6 | c25 | c26 |
| 45 | the P-Charging-Vector header extension? | [52] 4.6 | c14 | m |
| 46 | adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response? | [52] 4.6 | c23 | c24 |
| 47 | security mechanism agreement for the session initiation protocol? | [48] | o | c7 |
| 48 | the Reason header field for the session initiation protocol | [34A] | o | o |
| 49 | an extension to the session initiation protocol for symmetric response routeing | [56A] | o | x |
| 50 | caller preferences for the session initiation protocol? | [xx] | c33 | c33 |
| 50A | the proxy-directive within caller-preferences? | [xx] 9.1 | o.4 | o.4 |
| 50B | the cancel-directive within caller-preferences? | [xx] 9.1 | o.4 | o.4 |
| 50C | the fork-directive within caller-preferences? | [xx] 9.1 | o.4 | c32 |
| 50D | the recurse-directive within caller-preferences? | [xx] 9.1 | o.4 | o.4 |
| 50E | the parallel-directive within caller-preferences? | [xx] 9.1 | o.4 | c32 |
| 50F | the queue-directive within caller-preferences? | [xx] 9.1 | o.4 | o.4 |

| | |
|-------------|--|
| c1: | IF A.162/5 THEN o ELSE n/a - - stateful proxy behaviour. |
| c2: | IF A.3/2 OR A.3/3A OR A.3/4 THEN m ELSE o - - P-CSCF, I-CSCF(THIG) or S-CSCF. |
| c3: | IF (A.162/7 AND NOT A.162/8) OR (NOT A.162/7 AND A.162/8) THEN m ELSE IF A.162/14 THEN o ELSE n/a - - TLS interworking with non-TLS else proxy insertion. |
| c4: | IF A.162/23 THEN m ELSE o - - integration of resource management and SIP. |
| c5: | IF A.162/30 THEN o ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c6: | IF A.3/2 OR A.3/3A THEN m ELSE n/a - - P-CSCF or I-CSCF (THIG). |
| c7: | IF A.3/2 THEN m ELSE n/a - - P-CSCF. |
| c8: | IF A.3/2 AND A.162/30 THEN m ELSE n/a - - P-CSCF and extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c9: | |
| c10: | IF A.162/31 THEN o.2 ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c11: | IF A.162/31B THEN o ELSE x - - application of privacy based on the received Privacy header. |
| c12: | |
| c13: | |
| c14: | IF A.162/35 THEN o.3 ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP). |
| c15: | IF A.162/35 AND (A.3/2 OR A.3/3) THEN m THEN o ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and P-CSCF or I-CSCF. |
| c16: | IF A.162/35 AND (A.3/2 OR A.3/3 OR A.3/4) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and P-CSCF or I-CSCF or S-CSCF. |
| c17: | IF A.162/35 AND (A.3/2 OR A.3/3) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and P-CSCF or I-CSCF. |
| c18: | IF A.162/38 THEN o ELSE n/a - - the P-Visited-Network-ID header extension. |
| c19: | IF A.162/35 AND (A.3/2 OR A.3.3 OR A.3/4 OR A.3/7 THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and P-CSCF, I-CSCF, S-CSCF, AS acting as a proxy. |
| c20: | IF A.162/41 THEN o ELSE n/a - - the P-Access-Network-Info header extension. |
| c21: | IF A.162/41 AND A.3/2 THEN m ELSE n/a - - the P-Access-Network-Info header extension and P-CSCF. |
| c22: | IF A.162/41 AND A.3/4 THEN m ELSE n/a - - the P-Access-Network-Info header extension and S-CSCF. |
| c23: | IF A.162/45 THEN o ELSE n/a - - the P-Charging-Vector header extension. |
| c24: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c25: | IF A.162/44 THEN o ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c26: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function Addresses header extension. |
| c27: | IF A.3/2 OR A.3/4 THEN m ELSE x - - P-CSCF or S-CSCF. |
| c28: | IF A.3/2 OR A.3/4 OR A.3/6 then m ELSE o - - P-CSCF or S-CSCF of MGCF. |
| c29: | IF A.3/2 OR A.3/4 OR A.3/6 then o ELSE m - - P-CSCF or S-CSCF of MGCF. |
| c30: | IF A.3/2 o ELSE i - - P-CSCF. |
| <u>c31:</u> | IF A.3/4 THEN m ELSE x - - S-CSCF |
| <u>c32:</u> | <u>IF A.3/4 THEN m ELSE o.5 - - S-CSCF.</u> |
| <u>c33:</u> | <u>IF A.162/50A OR A.162/50B OR A.162/50C OR A.162/50D OR A.162/50E OR A.162/50F THEN m ELSE n/a - - support of any directives within caller preferences for the session initiation protocol.</u> |
| o.1: | It is mandatory to support at least one of these items. |
| o.2: | It is mandatory to support at least one of these items. |
| o.3: | It is mandatory to support at least one of these items. |
| <u>o.4</u> | <u>At least one of these capabilities is supported.</u> |
| NOTE: | An AS acting as a proxy may be outside the trust domain, and therefore not able to support the capability for that reason; in this case it is perfectly reasonable for the header to be passed on transparently, as specified in the PDU parts of the profile. |

A.2.2.3 PDUs

Table A.163: Supported methods

| Item | PDU | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | ACK request | [26] 13 | m | m | [26] 13 | m | m |
| 2 | BYE request | [26] 16 | m | m | [26] 16 | m | m |
| 3 | BYE response | [26] 16 | m | m | [26] 16 | m | m |
| 4 | CANCEL request | [26] 16.10 | m | m | [26] 16.10 | m | m |
| 5 | CANCEL response | [26] 16.10 | m | m | [26] 16.10 | m | m |
| 8 | INVITE request | [26] 16 | m | m | [26] 16 | m | m |
| 9 | INVITE response | [26] 16 | m | m | [26] 16 | m | m |
| 9A | MESSAGE request | [50] 4 | c5 | c5 | [50] 7 | c5 | c5 |
| 9B | MESSAGE response | [50] 4 | c5 | c5 | [50] 7 | c5 | c5 |
| 10 | NOTIFY request | [28] 8.1.2 | c3 | c3 | [28] 8.1.2 | c3 | c3 |
| 11 | NOTIFY response | [28] 8.1.2 | c3 | c3 | [28] 8.1.2 | c3 | c3 |
| 12 | OPTIONS request | [26] 16 | m | m | [26] 16 | m | m |
| 13 | OPTIONS response | [26] 16 | m | m | [26] 16 | m | m |
| 14 | PRACK request | [27] 6 | c6 | c6 | [27] 6 | c6 | c6 |
| 15 | PRACK response | [27] 6 | c6 | c6 | [27] 6 | c6 | c6 |
| 16 | REFER request | [36] 3 | c1 | c1 | [36] 3 | c1 | c1 |
| 17 | REFER response | [36] 3 | c1 | c1 | [36] 3 | c1 | c1 |
| 18 | REGISTER request | [26] 16 | m | m | [26] 16 | m | m |
| 19 | REGISTER response | [26] 16 | m | m | [26] 16 | m | m |
| 20 | SUBSCRIBE request | [28] 8.1.1 | c3 | c3 | [28] 8.1.1 | c3 | c3 |
| 21 | SUBSCRIBE response | [28] 8.1.1 | c3 | c3 | [28] 8.1.1 | c3 | c3 |
| 22 | UPDATE request | [30] 7 | c4 | c4 | [30] 7 | c4 | c4 |
| 23 | UPDATE response | [30] 7 | c4 | c4 | [30] 7 | c4 | c4 |

c1: IF A.162/22 THEN m ELSE n/a - - the REFER method.
 c3: IF A.162/27 THEN m ELSE n/a - - SIP specific event notification.
 c4: IF A.162/24 THEN m ELSE n/a - - the SIP UPDATE method.
 c5: IF A.162/33 THEN m ELSE n/a - - the SIP MESSAGE method.
 c6: IF A.162/21 THEN m ELSE n/a - - reliability of provisional responses.

A.2.2.4 PDU parameters

A.2.2.4.1 Status-codes

Table A.164: Supported-status codes

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------------|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | 100 (Trying) | [26] 21.1.1 | c1 | c1 | [26] 21.1.1 | c2 | c2 |
| 2 | 180 (Ringing) | [26] 21.1.2 | c3 | c3 | [26] 21.1.2 | c3 | c3 |
| 3 | 181 (Call Is Being Forwarded) | [26] 21.1.3 | c3 | c3 | [26] 21.1.3 | c3 | c3 |
| 4 | 182 (Queued) | [26] 21.1.4 | c3 | c3 | [26] 21.1.4 | c3 | c3 |
| 5 | 183 (Session Progress) | [26] 21.1.5 | c3 | c3 | [26] 21.1.5 | c3 | c3 |
| 6 | 200 (OK) | [26] 21.2.1 | | | [26] 21.2.1 | | |
| 7 | 202 (Accepted) | [28] 8.3.1 | c4 | c4 | [28] 8.3.1 | c4 | c4 |
| 8 | 300 (Multiple Choices) | [26] 21.3.1 | | | [26] 21.3.1 | | |
| 9 | 301 (Moved Permanently) | [26] 21.3.2 | | | [26] 21.3.2 | | |
| 10 | 302 (Moved Temporarily) | [26] 21.3.3 | | | [26] 21.3.3 | | |
| 11 | 305 (Use Proxy) | [26] 21.3.4 | | | [26] 21.3.4 | | |
| 12 | 380 (Alternative Service) | [26] 21.3.5 | | | [26] 21.3.5 | | |
| 13 | 400 (Bad Request) | [26] 21.4.1 | | | [26] 21.4.1 | | |
| 14 | 401 (Unauthorized) | [26] 21.4.2 | | | [26] 21.4.2 | | |
| 15 | 402 (Payment Required) | [26] 21.4.3 | | | [26] 21.4.3 | | |
| 16 | 403 (Forbidden) | [26] 21.4.4 | | | [26] 21.4.4 | | |
| 17 | 404 (Not Found) | [26] 21.4.5 | | | [26] 21.4.5 | | |
| 18 | 405 (Method Not Allowed) | [26] 21.4.6 | | | [26] 21.4.6 | | |
| 19 | 406 (Not Acceptable) | [26] 21.4.7 | | | [26] 21.4.7 | | |
| 20 | 407 (Proxy Authentication Required) | [26] 21.4.8 | | | [26] 21.4.8 | | |
| 21 | 408 (Request Timeout) | [26] 21.4.9 | | | [26] 21.4.9 | | |
| 22 | 410 (Gone) | [26] 21.4.10 | | | [26] 21.4.10 | | |
| 23 | 413 (Request Entity Too Large) | [26] 21.4.11 | | | [26] 21.4.11 | | |
| 24 | 414 (Request-URI Too Large) | [26] 21.4.12 | | | [26] 21.4.12 | | |
| 25 | 415 (Unsupported Media Type) | [26] 21.4.13 | | | [26] 21.4.13 | | |
| 26 | 416 (Unsupported URI Scheme) | [26] 21.4.14 | | | [26] 21.4.14 | | |
| 27 | 420 (Bad Extension) | [26] 21.4.15 | | | [26] 21.4.15 | | |
| 28 | 421 (Extension Required) | [26] 21.4.16 | | | [26] 21.4.16 | | |
| 29 | 423 (Interval Too Brief) | [26] 21.4.17 | c5 | c5 | [26] 21.4.17 | c6 | c6 |

| Item | Header | Sending | | | Receiving | | |
|------|--|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 30 | 480 (Temporarily not available) | [26] 21.4.18 | | | [26] 21.4.18 | | |
| 31 | 481 (Call /Transaction Does Not Exist) | [26] 21.4.19 | | | [26] 21.4.19 | | |
| 32 | 482 (Loop Detected) | [26] 21.4.20 | | | [26] 21.4.20 | | |
| 33 | 483 (Too Many Hops) | [26] 21.4.21 | | | [26] 21.4.21 | | |
| 34 | 484 (Address Incomplete) | [26] 21.4.22 | | | [26] 21.4.22 | | |
| 35 | 485 (Ambiguous) | [26] 21.4.23 | | | [26] 21.4.23 | | |
| 36 | 486 (Busy Here) | [26] 21.4.24 | | | [26] 21.4.24 | | |
| 37 | 487 (Request Terminated) | [26] 21.4.25 | | | [26] 21.4.25 | | |
| 38 | 488 (Not Acceptable Here) | [26] 21.4.26 | | | [26] 21.4.26 | | |
| 39 | 489 (Bad Event) | [28] 7.3.2 | c4 | c4 | [28] 7.3.2 | c4 | c4 |
| 40 | 491 (Request Pending) | [26] 21.4.27 | | | [26] 21.4.27 | | |
| 41 | 493 (Undecipherable) | [26] 21.4.28 | | | [26] 21.4.28 | | |
| 41A | 494 (Security Agreement Required) | [48] 2 | c7 | c7 | [48] 2 | n/a | n/a |
| 42 | 500 (Internal Server Error) | [26] 21.5.1 | | | [26] 21.5.1 | | |
| 43 | 501 (Not Implemented) | [26] 21.5.2 | | | [26] 21.5.2 | | |
| 44 | 502 (Bad Gateway) | [26] 21.5.3 | | | [26] 21.5.3 | | |
| 45 | 503 (Service Unavailable) | [26] 21.5.4 | | | [26] 21.5.4 | | |
| 46 | 504 (Server Time-out) | [26] 21.5.5 | | | [26] 21.5.5 | | |
| 47 | 505 (Version not supported) | [26] 21.5.6 | | | [26] 21.5.6 | | |
| 48 | 513 (Message Too Large) | [26] 21.5.7 | | | [26] 21.5.7 | | |
| 49 | 580 (Precondition Failure) | [30] 8 | | | [30] 8 | | |
| 50 | 600 (Busy Everywhere) | [26] 21.6.1 | | | [26] 21.6.1 | | |
| 51 | 603 (Decline) | [26] 21.6.2 | | | [26] 21.6.2 | | |
| 52 | 604 (Does Not Exist Anywhere) | [26] 21.6.3 | | | [26] 21.6.3 | | |
| 53 | 606 (Not Acceptable) | [26] 21.6.4 | | | [26] 21.6.4 | | |
| c1: | IF A.162/15 THEN m ELSE n/a - - stateful proxy. | | | | | | |
| c2: | IF A.162/15 THEN m ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. | | | | | | |
| c3: | IF A.163/9 THEN m ELSE n/a - - INVITE response. | | | | | | |
| c4: | IF A.162/27 THEN m ELSE n/a - - SIP specific event notification. | | | | | | |
| c5: | IF A.163/19 OR A.163/21 THEN m ELSE n/a - - REGISTER response or SUBSCRIBE response. | | | | | | |
| c6: | IF A.163/19 OR A.163/21 THEN i ELSE n/a - - REGISTER response or SUBSCRIBE response. | | | | | | |
| c7: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

A.2.2.4.2 ACK method

Prerequisite A.163/1 -- ACK request

Table A.165: Supported headers within the ACK request

| Item | Header | Sending | | | Receiving | | |
|-------|--|----------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept-Contact | [xx] 9.2 | c10 | c10 | [xx] 9.2 | c11 | c11 |
| 2 | Allow-Events | [28] | 7.2.2 | m | [28] | 7.2.2 | c1 |
| 3 | Authorization | [26] | 20.7 | m | [26] | 20.7 | i |
| 4 | Call-ID | [26] | 20.8 | m | [26] | 20.8 | m |
| 6 | Content-Disposition | [26] | 20.11 | m | [26] | 20.11 | i |
| 7 | Content-Encoding | [26] | 20.12 | m | [26] | 20.12 | i |
| 8 | Content-Language | [26] | 20.13 | m | [26] | 20.13 | i |
| 9 | Content-Length | [26] | 20.14 | m | [26] | 20.14 | m |
| 10 | Content-Type | [26] | 20.15 | m | [26] | 20.15 | i |
| 11 | Cseq | [26] | 20.16 | m | [26] | 20.16 | m |
| 12 | Date | [26] | 20.17 | m | [26] | 20.17 | c2 |
| 13 | From | [26] | 20.20 | m | [26] | 20.20 | m |
| 14 | Max-Forwards | [26] | 20.22 | m | [26] | 20.22 | m |
| 15 | MIME-Version | [26] | 20.24 | m | [26] | 20.24 | i |
| 15A | Privacy | [33] | 4.2 | c6 | [33] | 4.2 | c7 |
| 16 | Proxy-Authorization | [26] | 20.28 | m | [26] | 20.28 | c4 |
| 17 | Proxy-Require | [26] | 20.29 | m | [26] | 20.29 | m |
| 17A | Reason | [34A] | 2 | c8 | [34A] | 2 | c9 |
| 17B | Reject-Contact | [xx] 9.2 | c10 | c10 | [xx] 9.2 | c11 | c11 |
| 17C | Request-Disposition | [xx] 9.1 | c10 | c10 | [xx] 9.1 | c11 | c11 |
| 18 | Require | [26] | 20.32 | m | [26] | 20.32 | c5 |
| 19 | Route | [26] | 20.34 | m | [26] | 20.34 | m |
| 20 | Timestamp | [26] | 20.38 | m | [26] | 20.38 | i |
| 21 | To | [26] | 20.39 | m | [26] | 20.39 | m |
| 22 | User-Agent | [26] | 20.41 | m | [26] | 20.41 | i |
| 23 | Via | [26] | 20.42 | m | [26] | 20.42 | m |
| c1: | IF A.4/20 THEN m ELSE i -- SIP specific event notification extension. | | | | | | |
| c2: | IF A.162/9 THEN m ELSE i -- insertion of date in requests and responses. | | | | | | |
| c3: | IF A.3/2 OR A.3/4 THEN m ELSE i -- P-CSCF or S-CSCF. | | | | | | |
| c4: | IF A.162/8A THEN m ELSE i -- authentication between UA and proxy. | | | | | | |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i -- reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |
| c6: | IF A.162/31 THEN m ELSE n/a -- a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c7: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a -- application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c8: | IF A.162/48 THEN m ELSE n/a -- the Reason header field for the session initiation protocol. | | | | | | |
| c9: | IF A.162/48 THEN i ELSE n/a -- the Reason header field for the session initiation protocol. | | | | | | |
| c10: | IF A.162/50 THEN m ELSE n/a -- caller preferences for the session initiation protocol. | | | | | | |
| c11: | IF A.162/50 THEN i ELSE n/a -- caller preferences for the session initiation protocol. | | | | | | |
| NOTE: | c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY. | | | | | | |

Editor's note: Is the following table a suitable way of showing the contents of message bodies.

Prerequisite A.163/1 -- ACK request

Table A.166: Supported message bodies within the ACK request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.3 BYE method

Prerequisite A.163/2 - - BYE request

Table A.167: Supported headers within the BYE request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| <u>1A</u> | <u>Accept-Contact</u> | <u>[xx] 9.2</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.2</u> | <u>c23</u> | <u>c23</u> |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 7 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | c3 |
| 8 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | c3 |
| 9 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | c3 |
| 10 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 11 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | c3 |
| 12 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 13 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 14 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 15 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 16 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | c3 |
| 16A | P-Access-Network-Info | [52] 4.4 | c13 | c13 | [52] 4.4 | c14 | c14 |
| 16B | P-Asserted-Identity | [34] 9.1 | c9 | c9 | [34] 9.1 | c10 | c10 |
| 16C | P-Charging-Function-Addresses | [52] 4.5 | c17 | c17 | [52] 4.5 | c18 | c18 |
| 16D | P-Charging-Vector | [52] 4.6 | c15 | n/a | [52] 4.6 | c16 | n/a |
| 16E | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c8 | n/a |
| 16F | Privacy | [33] 4.2 | c11 | c11 | [33] 4.2 | c12 | c12 |
| 17 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c4 | c4 |
| 18 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 18A | Reason | [34A] 2 | c20 | c20 | [34A] 2 | c21 | c21 |
| 19 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| <u>19A</u> | <u>Reject-Contact</u> | <u>[xx] 9.2</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.2</u> | <u>c23</u> | <u>c23</u> |
| <u>19B</u> | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c22</u> | <u>c22</u> | <u>[xx] 9.1</u> | <u>c23</u> | <u>c23</u> |
| 20 | Require | [26] 20.32 | m | m | [26] 20.32 | c5 | c5 |
| 21 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 21A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c19 | c19 |
| 21B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c19 | c19 |
| 22 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 23 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 24 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 25 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 26 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. |
| c3: | IF A.3/2 OR A.3/4 THEN m ELSE i - - P-CSCF or S-CSCF. |
| c4: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c6: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c7: | IF A.162/14 THEN o ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog. |
| c8: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. |
| c9: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c10: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. |
| c11: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c12: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c13: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c14: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c15: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c16: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c17: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c18: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c19: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c20: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c21: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c22: | IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol. |
| c23: | IF A.162/50 THEN i ELSE n/a - - caller preferences for the session initiation protocol. |

NOTE: c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY.

Prerequisite A.163/2 - - BYE request

Table A.168: Supported message bodies within the BYE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/1 - - 100 (Trying)

Table A.169: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 5 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

c1: IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses.

Prerequisite A.163/3 - - BYE response

Table A.170: Supported headers within the BYE response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | c2 |
| 3 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | c2 |
| 4 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | c2 |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | c2 |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | c2 |
| 10A | P-Access-Network-Info | [52] 4.4 | c12 | c12 | [52] 4.4 | c13 | c13 |
| 10B | P-Asserted-Identity | [34] 9.1 | c4 | c4 | [34] 9.1 | c5 | c5 |
| 10C | P-Charging-Function-Addresses | [52] 4.5 | c10 | c10 | [52] 4.5 | c11 | c11 |
| 10D | P-Charging-Vector | [52] 4.6 | c8 | n/a | [52] 4.6 | c9 | n/a |
| 10E | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c3 | n/a |
| 10F | Privacy | [33] 4.2 | c6 | c6 | [33] 4.2 | c7 | c7 |
| 10G | Require | [26] 20.32 | m | m | [26] 20.32 | c14 | c14 |
| 10H | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |

c1: IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses.
c2: IF A.3/2 OR A.3/4 THEN m ELSE i - - P-CSCF or S-CSCF.
c3: IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity.
c4: IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks.
c5: IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network.
c6: IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c7: IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently.
c8: IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension.
c9: IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension.
c10: IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension.
c11: IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension.
c12: IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension.
c13: IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension.
c14: IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER.

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/6 - - 2xx

Table A.171: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 2 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c3: | IF A.162/15 THEN o ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. | | | | | | |

Prerequisite A.163/3 - BYE response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.172: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.173: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.174: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 3 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.175: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.176: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.177: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.178: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| | | | | | | | |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 5 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/18 THEN m ELSE i - - reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER. | | | | | | |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/28 OR A.164/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.178A: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/3 - - BYE response

Prerequisite: A.164/34 - - 484 (Address Incomplete)

Table A.179: Supported headers within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/3 - - BYE response

Table A.180: Supported message bodies within the BYE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.4 CANCEL method

Prerequisite A.163/4 -- CANCEL request

Table A.181: Supported headers within the CANCEL request

| Item | Header | Sending | | | Receiving | | |
|-------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept-Contact | [xx] 9.2 | c10 | c10 | [xx] 9.2 | c11 | c11 |
| 4 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 8 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 9 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 10 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 11 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 12 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 14 | Privacy | [33] 4.2 | c3 | c3 | [33] 4.2 | c4 | c4 |
| 15 | Reason | [34A] 2 | c8 | c8 | [34A] 2 | c9 | c9 |
| 16 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| 17 | Reject-Contact | [xx] 9.2 | c10 | c10 | [xx] 9.2 | c11 | c11 |
| 17A | Request-Disposition | [xx] 9.1 | c10 | c10 | [xx] 9.1 | c11 | c11 |
| 18 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 19 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 20 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 21 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 22 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 23 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| c1: | IF A.4/20 THEN m ELSE i -- SIP specific event notification extension. | | | | | | |
| c2: | IF A.162/9 THEN m ELSE i -- insertion of date in requests and responses. | | | | | | |
| c3: | IF A.162/31 THEN m ELSE n/a -- a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c4: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a -- application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c6: | IF A.162/16 THEN m ELSE i -- reading the contents of the Supported header before proxying the response. | | | | | | |
| c7: | IF A.162/14 THEN o ELSE i -- the requirement to be able to insert itself in the subsequent transactions in a dialog. | | | | | | |
| c8: | IF A.162/48 THEN m ELSE n/a -- the Reason header field for the session initiation protocol. | | | | | | |
| c9: | IF A.162/48 THEN i ELSE n/a -- the Reason header field for the session initiation protocol. | | | | | | |
| c10: | IF A.162/50 THEN m ELSE n/a -- caller preferences for the session initiation protocol. | | | | | | |
| c11: | IF A.162/50 THEN i ELSE n/a -- caller preferences for the session initiation protocol. | | | | | | |
| NOTE: | c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY. | | | | | | |

Prerequisite A.163/4 -- CANCEL request

Table A.182: Supported message bodies within the CANCEL request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/5 - - CANCEL response

Table A.183: Supported headers within the CANCEL response - all status-codes

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 5 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 5A | Privacy | [33] 4.2 | c2 | c2 | [33] 4.2 | c3 | c3 |
| 6 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 7 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 7A | User-Agent | [26] 20.41 | o | | [26] 20.41 | o | |
| 8 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 9 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |

c1: IF A.162/9 THEN m ELSE i -- insertion of date in requests and responses.
 c2: IF A.162/31 THEN m ELSE n/a -- a privacy mechanism for the Session Initiation Protocol (SIP).
 c3: IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a -- application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently.

Prerequisite A.163/5 - - CANCEL response

Prerequisite: A.164/6 - - 200 (OK)

Table A.184: Supported headers within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|--------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

c3: IF A.162/15 THEN o ELSE i -- the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing.

Prerequisite A.163/5 - - CANCEL response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.185: Supported headers within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/5 - - CANCEL response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 500, 503, 600, 603

Table A.186: Supported headers within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Error-Info | [26] 2418 | m | m | [26] 20.18 | i | i |
| 4 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/5 - - CANCEL response

Prerequisite: A.164/34 - - 484 (Address Incomplete)

Table A.188: Supported headers within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/5 - - CANCEL response

Table A.189: Supported message bodies within the CANCEL response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.5 COMET method

Void

A.2.2.4.6 INFO method

Void

A.2.2.4.7 INVITE method

Prerequisite A.163/8 - - INVITE request

Table A.204: Supported headers within the INVITE request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|-----------------------|------------|----------------|-----------------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 1A | Accept-Contact | [xx] 9.2 | c34 | c34 | [xx] 9.2 | c34 | c35 |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 4 | Alert-Info | [26] 20.4 | c2 | c2 | [26] 20.4 | c3 | c3 |
| 5 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 6 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 8 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 9 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 10 | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c12 | c12 |
| 11 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 12 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | c6 |
| 13 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | c6 |
| 14 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | c6 |
| 15 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 16 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | c6 |
| 17 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 18 | Date | [26] 20.17 | m | m | [26] 20.17 | c4 | c4 |
| 19 | Expires | [26] 20.19 | m | m | [26] 20.19 | i | i |
| 20 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 21 | In-Reply-To | [26] 20.21 | m | m | [26] 20.21 | i | i |
| 22 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 23 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | c6 |
| 24 | Organization | [26] 20.25 | m | m | [26] 20.25 | c5 | c5 |
| 24A | P-Access-Network-Info | [52] 4.4 | c28 | c28 | [52] 4.4 | c29 | c30 |
| 24B | P-Asserted-Identity | [34] 9.1 | c15 | c15 | [34] 9.1 | c16 | c16 |
| 24C | P-Called-Party-ID | [52] 4.2 | c19 | c19 | [52] 4.2 | c20 | c21 |
| 24D | P-Charging-Function-Addresses | [52] 4.5 | c26 | c27 | [52] 4.5 | c26 | c27 |
| 24E | P-Charging-Vector | [52] 4.6 | c24 | c24 | [52] 4.6 | c25 | c25 |
| 25 | P-Media-Authorization | [31] 6.1 | c9 | c10 | [31] 6.1 | n/a | n/a |
| 25A | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c14 | c14 |
| 25B | P-Visited-Network-ID | [52] 4.3 | c22 | n/a | [52] 4.3 | c23 | n/a |
| 26 | Priority | [26] 20.26 | m | m | [26] 20.26 | i | i |
| 26A | Privacy | [33] 4.2 | c17 | c17 | [33] 4.2 | c18 | c18 |
| 27 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c13 | c13 |
| 28 | Proxy-Require | [26] 20.29, [34] 4 | m | m | [26] 20.29, [34] 4 | m | m |
| 28A | Reason | [34A] 2 | c32 | c32 | [34A] 2 | c33 | c33 |
| 29 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c11 | c11 |
| 31 | Reply-To | [26] 20.31 | m | m | [26] 20.31 | i | i |
| 31A | Reject-Contact | [xx] 9.2 | c34 | c34 | [xx] 9.2 | c34 | c35 |
| 31B | Request-Disposition | [xx] 9.1 | c34 | c34 | [xx] 9.1 | c34 | c34 |
| 32 | Require | [26] 20.32 | m | m | [26] 20.32 | c7 | c7 |
| 33 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 33A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c31 | c31 |

| Item | Header | Sending | | | Receiving | | |
|-------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 33B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c31 | c31 |
| 34 | Subject | [26] 20.36 | m | m | [26] 20.36 | i | i |
| 35 | Supported | [26] 20.37 | m | m | [26] 20.37 | c8 | c8 |
| 36 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 37 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 38 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 39 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| c1: | IF A.4/20 THEN m ELSE i -- SIP specific event notification extension. | | | | | | |
| c2: | IF A.162/10 THEN n/a ELSE m -- suppression or modification of alerting information data. | | | | | | |
| c3: | IF A.162/10 THEN m ELSE i -- suppression or modification of alerting information data. | | | | | | |
| c4: | IF A.162/9 THEN m ELSE i -- insertion of date in requests and responses. | | | | | | |
| c5: | IF A.162/19A OR A.162/19B THEN m ELSE i -- reading, adding or concatenating the Organization header. | | | | | | |
| c6: | IF A.3/2 OR A.3/4 THEN m ELSE i -- P-CSCF or S-CSCF. | | | | | | |
| c7: | IF A.162/11 OR A.162/13 THEN m ELSE i -- reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |
| c8: | IF A.162/16 THEN m ELSE i -- reading the contents of the Supported header before proxying the response. | | | | | | |
| c9: | IF A.162/26 THEN m ELSE n/a -- SIP extensions for media authorization. | | | | | | |
| c10: | IF A.3/2 THEN m ELSE n/a -- P-CSCF. | | | | | | |
| c11: | IF A.162/14 THEN m ELSE i -- the requirement to be able to insert itself in the subsequent transactions in a dialog. | | | | | | |
| c12: | IF A.162/19C OR A.162/19D THEN m ELSE i -- reading, adding or concatenating the Call-Info header. | | | | | | |
| c13: | IF A.162/8A THEN m ELSE i -- authentication between UA and proxy. | | | | | | |
| c14: | IF A.162/30A THEN m ELSE n/a -- act as first entity within the trust domain for asserted identity. | | | | | | |
| c15: | IF A.162/30 THEN m ELSE n/a -- extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c16: | IF A.162/30A or A.162/30B THEN m ELSE i -- extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. | | | | | | |
| c17: | IF A.162/31 THEN m ELSE n/a -- a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c18: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a -- application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c19: | IF A.162/37 THEN m ELSE n/a -- the P-Called-Party-ID header extension. | | | | | | |
| c20: | IF A.162/37 THEN i ELSE n/a -- the P-Called-Party-ID header extension. | | | | | | |
| c21: | IF A.162/37 AND A.3/2 THEN m ELSE IF A.162/37 AND A.3/3 THEN i ELSE n/a -- the P-Called-Party-ID header extension and P-CSCF or I-CSCF. | | | | | | |
| c22: | IF A.162/38 THEN m ELSE n/a -- the P-Visited-Network-ID header extension. | | | | | | |
| c23: | IF A.162/39 THEN m ELSE i -- reading, or deleting the P-Visited-Network-ID header before proxying the request or response. | | | | | | |
| c24: | IF A.162/45 THEN m ELSE n/a -- the P-Charging-Vector header extension. | | | | | | |
| c25: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a -- adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c26: | IF A.162/44 THEN m ELSE n/a -- the P-Charging-Function-Addresses header extension. | | | | | | |
| c27: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a -- adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c28: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a -- act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c29: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a -- act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c30: | IF A.162/43 OR (A.162/41 AND A.3/2) THEN m ELSE IF A.162/41 THEN i ELSE n/a -- act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension (with or without P-CSCF). | | | | | | |
| c31: | IF A.4/37 THEN m ELSE n/a -- security mechanism agreement for the session initiation protocol. | | | | | | |
| c32: | IF A.162/48 THEN m ELSE n/a -- the Reason header field for the session initiation protocol. | | | | | | |
| c33: | IF A.162/48 THEN i ELSE n/a -- the Reason header field for the session initiation protocol. | | | | | | |
| c34: | <u>IF A.162/50 THEN m ELSE n/a -- caller preferences for the session initiation protocol.</u> | | | | | | |
| c35: | <u>IF A.162/50 AND A.4/3 THEN m ELSE IF A.162/50 AND NOT A.4/3 THEN i ELSE n/a -- caller preferences for the session initiation protocol, and S-CSCF.</u> | | | | | | |
| NOTE: | c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY. | | | | | | |

Prerequisite A.163/8 - - INVITE request

Table A.205: Supported message bodies within the INVITE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/1 - - 100 (Trying)

Table A.206: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | c1 | c1 | [26] 20.17 | c2 | c2 |
| 5 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| c1: | IF (A.162/9 AND A.162/5) OR A.162/4 THEN m ELSE n/a - - stateful proxy behaviour that inserts date, or stateless proxies. | | | | | | |
| c2: | IF A.162/4 THEN i ELSE m - - Stateless proxy passes on. | | | | | | |

Prerequisite A.163/9 - - INVITE response

Table A.207: Supported headers within the INVITE response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c4 | c4 |
| 2 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | c3 |
| 3 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | c3 |
| 4 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | c3 |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | c3 |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | c3 |
| 11 | Organization | [26] 20.25 | m | m | [26] 20.25 | c2 | c2 |
| 11A | P-Access-Network-Info | [52] 4.4 | c14 | c14 | [52] 4.4 | c15 | c15 |
| 11B | P-Asserted-Identity | [34] 9.1 | c6 | c6 | [34] 9.1 | c7 | c7 |
| 11C | P-Charging-Function-Addresses | [52] 4.5 | c12 | c12 | [52] 4.5 | c13 | c13 |
| 11D | P-Charging-Vector | [52] 4.6 | c10 | c10 | [52] 4.6 | c11 | c11 |
| 11E | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c5 | n/a |
| 11F | Privacy | [33] 4.2 | c8 | c8 | [33] 4.2 | c9 | c9 |
| 11G | Require | [26] 20.32 | m | m | [26] 20.32 | c16 | c16 |
| 11H | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 12 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 13 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 13A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 14 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 15 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. | | | | | | |
| c3: | IF A.3/2 OR A.3/4 THEN m ELSE i - - P-CSCF or S-CSCF. | | | | | | |
| c4: | IF A.162/19C OR A.162/19D THEN m ELSE i - - reading, adding or concatenating the Call-Info header. | | | | | | |
| c5: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. | | | | | | |
| c6: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c7: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. | | | | | | |
| c8: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c9: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c10: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c11: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c12: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c13: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c14: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c15: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c16: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/2 OR A.164/3 OR A.164/4 OR A.164/5 - - 1xx

Table A.208: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|---|-----------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 6 | P-Media-Authorization | [31] 6.1 | c9 | c10 | [31] 6.1 | n/a | n/a |
| 9 | Rseq | [27] 7.1 | m | m | [27] 7.1 | i | i |
| 11 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c9: IF A.162/26 THEN m ELSE n/a - - SIP extensions for media authorization. | | | | | | | |
| c10: IF A.3/2 THEN m ELSE n/a - - P-CSCF. | | | | | | | |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/6 - - 2xx

Table A.209: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|---|-----------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 1A | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 1B | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 6 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 8 | P-Media-Authorization | [31] 6.1 | c9 | c10 | [31] 6.1 | n/a | n/a |
| 9 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 13 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c3: IF A.162/14 THEN m ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog. | | | | | | | |
| c9: IF A.162/26 THEN m ELSE n/a - - SIP extensions for media authorization. | | | | | | | |
| c10: IF A.3/2 THEN m ELSE n/a - - P-CSCF. | | | | | | | |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.210: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|--|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 5 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | | |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.211: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 6 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 15 | WWW-Authenticate | [26] 20.44 | o | | [26] 20.44 | o | |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 600, 603

Table A.212: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 8 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 12 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.213: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Allow | [26] 20.5 | m | | [26] 20.5 | m/o | |
| 5 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 13 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.214: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 6 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 11 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.215: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 6 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 11 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.216: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 9 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 10 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/18 THEN m ELSE i - - reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER. | | | | | | |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/28 OR A.164/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.216A: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/34 - - 484 (Address Incomplete)

Table A.217: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 9 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/42 - - 500 (Server Internal Error)

Table A.217A: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 8 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9 - - INVITE response

Prerequisite: A.164/45 - - 503 (Service Unavailable)

Table A.217B: Supported headers within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 8 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9 - - INVITE response

Table A.218: Supported message bodies within the INVITE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.7A MESSAGE method

Prerequisite A.163/9A - - MESSAGE request

Table A.218A: Supported headers within the MESSAGE request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept-Contact | [xx] 9.2 | c28 | c28 | [xx] 9.2 | c28 | c29 |
| 1A | Allow | [26] 20.5 | m | m | [50] 10 | i | i |
| 2 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 3 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 4 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 5 | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c4 | c4 |
| 6 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 7 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 8 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 9 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 10 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 11 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 12 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 13 | Expires | [26] 20.19 | m | m | [26] 20.19 | l | i |
| 14 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 15 | In-Reply-To | [26] 20.21 | m | m | [50] 10 | i | i |
| 16 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 17 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 18 | Organization | [26] 20.25 | m | m | [26] 20.25 | c3 | c3 |
| 18A | P-Access-Network-Info | [52] 4.4 | c23 | c23 | [52] 4.4 | c24 | c24 |
| 18B | P-Asserted-Identity | [34] 9.1 | c10 | c10 | [34] 9.1 | c11 | c11 |
| 18C | P-Called-Party-ID | [52] 4.2 | c14 | c14 | [52] 4.2 | c15 | c16 |
| 18D | P-Charging-Function-Addresses | [52] 4.5 | c21 | c21 | [52] 4.5 | c22 | c22 |
| 18E | P-Charging-Vector | [52] 4.6 | c19 | c19 | [52] 4.6 | c20 | c20 |
| 18F | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c9 | c9 |
| 18G | P-Visited-Network-ID | [52] 4.3 | c17 | n/a | [52] 4.3 | c18 | n/a |
| 19 | Priority | [26] 20.26 | m | m | [26] 20.26 | i | i |
| 19A | Privacy | [33] 4.2 | c12 | c12 | [33] 4.2 | c13 | c13 |
| 20 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c8 | c8 |
| 21 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 21A | Reason | [34A] 2 | c26 | c26 | [34A] 2 | c27 | c27 |
| 22 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| 23 | Reply-To | [26] 20.31 | m | m | [26] 20.31 | i | i |
| 23A | Reject-Contact | [xx] 9.2 | c28 | c28 | [xx] 9.2 | c28 | c29 |
| 23B | Request-Disposition | [xx] 9.1 | c28 | c28 | [xx] 9.1 | c28 | c28 |
| 24 | Require | [26] 20.32 | m | m | [26] 20.32 | c5 | c5 |
| 25 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 25A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c25 | c25 |
| 25B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c25 | c25 |
| 26 | Subject | [26] 20.36 | m | m | [26] 20.36 | i | i |
| 27 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 28 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 29 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 30 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 31 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. |
| c3: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. |
| c4: | IF A.162/19C OR A.162/19D THEN m ELSE i - - reading, adding or concatenating the Call-Info header. |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c6: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c7: | IF A.162/14 THEN o ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog. |
| c8: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c9: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. |
| c10: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c11: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. |
| c12: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c13: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c14: | IF A.162/37 THEN m ELSE n/a - - the P-Called-Party-ID header extension. |
| c15: | IF A.162/37 THEN i ELSE n/a - - the P-Called-Party-ID header extension. |
| c16: | IF A.162/37 AND A.3/2 THEN m ELSE IF A.162/37 AND A.3/3 THEN i ELSE n/a - - the P-Called-Party-ID header extension and P-CSCF or I-CSCF. |
| c17: | IF A.162/38 THEN m ELSE n/a - - the P-Visited-Network-ID header extension. |
| c18: | IF A.162/39 THEN m ELSE i - - reading, or deleting the P-Visited-Network-ID header before proxying the request or response. |
| c19: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c20: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c21: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c22: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c23: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c24: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c25: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c26: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c27: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c28: | IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol. |
| c29: | IF A.162/50 AND A.4/3 THEN m ELSE IF A.162/50 AND NOT A.4/3 THEN i ELSE n/a - - caller preferences for the session initiation protocol, and S-CSCF. |

NOTE: c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY.

Prerequisite A.163/9A - - MESSAGE request

Table A.218B: Supported message bodies within the MESSAGE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/9B - - MESSAGE response

Table A.218C: Supported headers within the MESSAGE response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c3 | c3 |
| 3 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 4 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 5 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 6 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 7 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 8 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 9 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 10 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 11 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 12 | Organization | [26] 20.25 | m | m | [26] 20.25 | c2 | c2 |
| 12A | P-Access-Network-Info | [52] 4.4 | c13 | c13 | [52] 4.4 | c14 | c14 |
| 12B | P-Asserted-Identity | [34] 9.1 | c5 | c5 | [34] 9.1 | c6 | c6 |
| 12C | P-Charging-Function-Addresses | [52] 4.5 | c11 | c11 | [52] 4.5 | c12 | c12 |
| 12D | P-Charging-Vector | [52] 4.6 | c9 | n/a | [52] 4.6 | c10 | n/a |
| 12E | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c4 | n/a |
| 12F | Privacy | [33] 4.2 | c7 | c7 | [33] 4.2 | c8 | c8 |
| 12G | Require | [26] 20.32 | m | m | [26] 20.32 | c15 | c15 |
| 13 | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 14 | Timestamp | [26] 20.38 | i | i | [26] 20.38 | i | i |
| 15 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 16 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 17 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 18 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. | | | | | | |
| c3: | IF A.162/19C OR A.162/19D THEN m ELSE i - - reading, adding or concatenating the Call-Info header. | | | | | | |
| c4: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. | | | | | | |
| c5: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c6: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. | | | | | | |
| c7: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c8: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c9: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c10: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c11: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c12: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c13: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c14: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c15: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/6 - - 2xx

Table A.218D: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 4 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c3: | IF A.162/15 THEN o ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. | | | | | | |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.218E: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [50] 10 | i | i |
| 2 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.218F: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [50] 10 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 3 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.218G: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [50] 10 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.218H: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.218I: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [50] 10 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 3 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.218J: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 4 | Allow | [26] 20.5 | m | m | [50] 10 | i | i |
| 5 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.218K: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [50] 10 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 5 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/18 THEN m ELSE i - - reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER. | | | | | | |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/28 OR A.164/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.218L: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/9B - - MESSAGE response

Prerequisite: A.164/34 - - 484 (Address Incomplete)

Table A.218M: Supported headers within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [50] 10 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/9B - - MESSAGE response

Table A.218N: Supported message bodies within the MESSAGE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.8 NOTIFY method

Prerequisite A.163/10 - - NOTIFY request

Table A.219: Supported headers within the NOTIFY request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 1A | Accept-Contact | [xx] 9.2 | c21 | c21 | [xx] 9.2 | c22 | c22 |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 6A | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 7 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 8 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 9 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 10 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 11 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 12 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 13 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 14 | Event | [28] 7.2.1 | m | m | [28] 7.2.1 | m | m |
| 15 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 16 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 17 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 17A | P-Access-Network-Info | [52] 4.4 | c16 | c16 | [52] 4.4 | c17 | c17 |
| 17B | P-Asserted-Identity | [34] 9.1 | c8 | c8 | [34] 9.1 | c9 | c9 |
| 17C | P-Charging-Function-Addresses | [52] 4.5 | c14 | c14 | [52] 4.5 | c15 | c15 |
| 17D | P-Charging-Vector | [52] 4.6 | c12 | n/a | [52] 4.6 | c13 | n/a |
| 17E | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c3 | n/a |
| 17F | Privacy | [33] 4.2 | c10 | c10 | [33] 4.2 | c11 | c11 |
| 18 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c4 | c4 |
| 19 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 19A | Reason | [34A] 2 | c19 | c19 | [34A] 2 | c20 | c20 |
| 20 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| 20A | Reject-Contact | [xx] 9.2 | c21 | c21 | [xx] 9.2 | c22 | c22 |
| 20B | Request-Disposition | [xx] 9.1 | c21 | c21 | [xx] 9.1 | c22 | c22 |
| 21 | Require | [26] 20.32 | m | m | [26] 20.32 | c5 | c5 |
| 22 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 22A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c18 | c18 |
| 22B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c18 | c18 |
| 23 | Subscription-State | [28] 8.2.3 | m | m | [28] 8.2.3 | i | i |
| 24 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 25 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 26 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 27 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 28 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. |
| c3: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. |
| c4: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c6: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c7: | IF A.162/14 THEN (IF A.162/22 OR A.162/27 THEN m ELSE o) ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog or (the REFER method or SIP specific event notification). |
| c8: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c9: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. |
| c10: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c11: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c12: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c13: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c14: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c15: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c16: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c17: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c18: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c19: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c20: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c21: | IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol. |
| c22: | IF A.162/50 THEN i ELSE n/a - - caller preferences for the session initiation protocol. |

NOTE: c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY.

Prerequisite A.163/10 - - NOTIFY request

Table A.220: Supported message bodies within the NOTIFY request

| Item | Header | Sending | | | Receiving | | |
|------|---------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | sipfrag | [37] 2 | m | m | [37] 2 | i | i |

Prerequisite A.163/11 - - NOTIFY response

Table A.221: Supported headers within the NOTIFY response - all status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 3 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 4 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 10A | P-Access-Network-Info | [52] 4.4 | c11 | c11 | [52] 4.4 | c12 | c12 |
| 10B | P-Asserted-Identity | [34] 9.1 | c3 | c3 | [34] 9.1 | c4 | c4 |
| 10C | P-Charging-Function-Addresses | [52] 4.5 | c9 | c9 | [52] 4.5 | c10 | c10 |
| 10D | P-Charging-Vector | [52] 4.6 | c7 | n/a | [52] 4.6 | c8 | n/a |
| 10E | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c2 | n/a |
| 10F | Privacy | [33] 4.2 | c5 | c5 | [33] 4.2 | c6 | c6 |
| 10G | Require | [26] 20.32 | m | m | [26] 20.32 | c13 | c13 |
| 10H | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. | | | | | | |
| c3: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c4: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. | | | | | | |
| c5: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c6: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c7: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c8: | IF A.162/46 THEN m ELSE IF A.162/45 THEN n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c9: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c10: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c11: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c12: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c13: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |

Prerequisite A.163/11 - - NOTIFY response

Prerequisite: A.164/6 AND A.164/7 - - 2xx

Table A.222: Supported headers within the NOTIFY response

| Item | Header | Sending | Receiving |
|------|--------|---------|-----------|
|------|--------|---------|-----------|

| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
|--|---------------------|------------|------------|----------------|------------|------------|----------------|
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 1A | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 2 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c3: IF A.162/15 THEN m ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. | | | | | | | |

Prerequisite A.163/11 - - NOTIFY response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.223: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|--|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | | |

Prerequisite A.163/11 - - NOTIFY response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.224: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/11 - - NOTIFY response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.225: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 3 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/11 - - NOTIFY response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.226: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/11 - - NOTIFY response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.227: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/11 - - NOTIFY response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.228: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/11 - - NOTIFY response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.229: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 5 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/18 THEN m ELSE i - - reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER. | | | | | | |

Prerequisite A.163/11 -- NOTIFY response

Prerequisite: A.164/28 OR A.164/41A -- 421 (Extension Required), 494 (Security Agreement Required)

Table A.229A: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|--|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: IF A.162/47 THEN m ELSE n/a -- security mechanism agreement for the session initiation protocol. | | | | | | | |

Prerequisite A.163/11 -- NOTIFY response

Prerequisite: A.164/34 -- 484 (Address Incomplete)

Table A.230: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/11 -- NOTIFY response

Prerequisite: A.164/39 -- 489 (Bad Event)

Table A.231: Supported headers within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|--|--------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| c1: IF A.4/20 THEN m ELSE i -- SIP specific event notification extension. | | | | | | | |
| NOTE: c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY. | | | | | | | |

Prerequisite A.163/11 -- NOTIFY response

Table A.232: Supported message bodies within the NOTIFY response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.9 OPTIONS method

Prerequisite A.163/12 - - OPTIONS request

Table A.233: Supported headers within the OPTIONS request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| <u>1A</u> | <u>Accept-Contact</u> | [xx] 9.2 | c28 | c28 | [xx] 9.2 | c28 | c29 |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 7 | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c4 | c4 |
| 8 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 9 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 10 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 11 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 12 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 13 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 14 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 15 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 16 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 17 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 18 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 19 | Organization | [26] 20.25 | m | m | [26] 20.25 | c3 | c3 |
| 19A | P-Access-Network-Info | [52] 4.4 | c23 | c23 | [52] 4.4 | c24 | c24 |
| 19B | P-Asserted-Identity | [34] 9.1 | c10 | c10 | [34] 9.1 | c11 | c11 |
| 19C | P-Called-Party-ID | [52] 4.2 | c14 | c14 | [52] 4.2 | c15 | c16 |
| 19D | P-Charging-Function-Addresses | [52] 4.5 | c21 | c21 | [52] 4.5 | c22 | c22 |
| 19E | P-Charging-Vector | [52] 4.6 | c19 | c19 | [52] 4.6 | c20 | c20 |
| 19F | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c9 | c9 |
| 19G | P-Visited-Network-ID | [52] 4.3 | c17 | n/a | [52] 4.3 | c18 | n/a |
| 19H | Privacy | [33] 4.2 | c12 | c12 | [33] 4.2 | c13 | c13 |
| 20 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c8 | c8 |
| 21 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 21A | Reason | [34A] 2 | c26 | c26 | [34A] 2 | c27 | c27 |
| 22 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| <u>22A</u> | <u>Reject-Contact</u> | [xx] 9.2 | c28 | c28 | [xx] 9.2 | c28 | c29 |
| <u>22B</u> | <u>Request-Disposition</u> | [xx] 9.1 | c28 | c28 | [xx] 9.1 | c28 | c28 |
| 23 | Require | [26] 20.32 | m | m | [26] 20.32 | c5 | c5 |
| 24 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 24A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c25 | c25 |
| 24B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c25 | c25 |
| 25 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 26 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 27 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 28 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 29 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. |
| c3: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. |
| c4: | IF A.162/19C OR A.162/19D THEN m ELSE i - - reading, adding or concatenating the Call-Info header. |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c6: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c7: | IF A.162/14 THEN o ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog. |
| c8: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c9: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. |
| c10: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c11: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. |
| c12: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c13: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c14: | IF A.162/37 THEN m ELSE n/a - - the P-Called-Party-ID header extension. |
| c15: | IF A.162/37 THEN i ELSE n/a - - the P-Called-Party-ID header extension. |
| c16: | IF A.162/37 AND A.3/2 THEN m ELSE IF A.162/37 AND A.3/3 THEN i ELSE n/a - - the P-Called-Party-ID header extension and P-CSCF or I-CSCF. |
| c17: | IF A.162/38 THEN m ELSE n/a - - the P-Visited-Network-ID header extension. |
| c18: | IF A.162/39 THEN m ELSE i - - reading, or deleting the P-Visited-Network-ID header before proxying the request or response. |
| c19: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c20: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c21: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c22: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c23: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c24: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c25: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c26: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c27: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c28: | IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol. |
| c29: | IF A.162/50 AND A.4/3 THEN m ELSE IF A.162/50 AND NOT A.4/3 THEN i ELSE n/a - - caller preferences for the session initiation protocol, and S-CSCF. |

NOTE: c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY.

Prerequisite A.163/12 - - OPTIONS request

Table A.234: Supported message bodies within the OPTIONS request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/1 - - 100 (Trying)

Table A.235: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 5 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

c1: IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses.

Prerequisite A.163/13 - - OPTIONS response

Table A.236: Supported headers within the OPTIONS response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c3 | c3 |
| 2 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 3 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 4 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 11 | Organization | [26] 20.25 | m | m | [26] 20.25 | c2 | c2 |
| 11A | P-Access-Network-Info | [52] 4.4 | c13 | c13 | [52] 4.4 | c14 | c14 |
| 11B | P-Asserted-Identity | [34] 9.1 | c5 | c5 | [34] 9.1 | c6 | c6 |
| 11C | P-Charging-Function-Addresses | [52] 4.5 | c11 | c11 | [52] 4.5 | c12 | c12 |
| 11D | P-Charging-Vector | [52] 4.6 | c9 | c9 | [52] 4.6 | c10 | c10 |
| 11E | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c4 | n/a |
| 11F | Privacy | [33] 4.2 | c7 | c7 | [33] 4.2 | c8 | c8 |
| 11G | Require | [26] 20.32 | m | m | [26] 20.32 | c15 | c15 |
| 11H | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 12 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 13 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 13A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 14 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 15 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. | | | | | | |
| c3: | IF A.162/19C OR A.162/19D THEN m ELSE i - - reading, adding or concatenating the Call-Info header. | | | | | | |
| c4: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. | | | | | | |
| c5: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c6: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. | | | | | | |
| c7: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c8: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c9: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c10: | IF A.162/46 THEN m ELSE IF A.162/45 THEN n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c11: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c12: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c13: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c14: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c15: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/6 - - 2xx

Table A.237: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 5 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 9 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 12 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c3: | IF A.162/15 THEN o ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. | | | | | | |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.238: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.239: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 10 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.240: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.241: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.242: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.243: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 4 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 5 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.244: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 7 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/18 THEN m ELSE i - - reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER. | | | | | | |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/28 OR A.164/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.244A: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/13 - - OPTIONS response

Prerequisite: A.164/34 - - 484 (Address Incomplete)

Table A.245: Supported headers within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/13 - - OPTIONS response

Table A.246: Supported message bodies within the OPTIONS response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.10 PRACK method

Prerequisite A.163/14 - - PRACK request

Table A.247: Supported headers within the PRACK request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| <u>1A</u> | <u>Accept-Contact</u> | <u>[xx] 9.2</u> | <u>c18</u> | <u>c18</u> | <u>[xx] 9.2</u> | <u>c19</u> | <u>c19</u> |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 7 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | c3 |
| 8 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | c3 |
| 9 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | c3 |
| 10 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 11 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | c3 |
| 12 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 13 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 14 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 15 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 16 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | c3 |
| 16A | P-Access-Network-Info | [52] 4.4 | c14 | c14 | [52] 4.4 | c15 | c15 |
| 16B | P-Charging-Function-Addresses | [52] 4.5 | c12 | c12 | [52] 4.5 | c13 | c13 |
| 16C | P-Charging-Vector | [52] 4.6 | c10 | n/a | [52] 4.6 | c11 | n/a |
| 16D | Privacy | [33] 4.2 | c8 | c8 | [33] 4.2 | c9 | c9 |
| 17 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c4 | c4 |
| 18 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 19 | Rack | [27] 7.2 | m | m | [27] 7.2 | i | i |
| 19A | Reason | [34A] 2 | c16 | c16 | [34A] 2 | c17 | c17 |
| 20 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| <u>20A</u> | <u>Reject-Contact</u> | <u>[xx] 9.2</u> | <u>c18</u> | <u>c18</u> | <u>[xx] 9.2</u> | <u>c19</u> | <u>c19</u> |
| <u>20B</u> | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c18</u> | <u>c18</u> | <u>[xx] 9.1</u> | <u>c19</u> | <u>c19</u> |
| 21 | Require | [26] 20.32 | m | m | [26] 20.32 | c5 | c5 |
| 22 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 23 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 24 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 25 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 26 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 27 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. |
| c3: | IF A.3/2 OR A.3/4 THEN m ELSE i - - P-CSCF or S-CSCF. |
| c4: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c6: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c7: | IF A.162/14 THEN 0 ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog. |
| c8: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c9: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c10: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c11: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c12: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c13: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c14: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c15: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c16: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c17: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c18: | <u>IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol.</u> |
| c19: | <u>IF A.162/50 THEN i ELSE n/a - - caller preferences for the session initiation protocol.</u> |

NOTE: c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY.

Prerequisite A.163/14 - - PRACK request

Table A.248: Supported message bodies within the PRACK request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/1 - - 100 (Trying)

Table A.249: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 5 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |

Prerequisite A.163/15 - - PRACK response

Table A.250: Supported headers within the PRACK response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | c2 |
| 3 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | c2 |
| 4 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | c2 |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | c2 |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | c2 |
| 10A | P-Access-Network-Info | [52] 4.4 | c9 | c9 | [52] 4.4 | c10 | c10 |
| 10B | P-Charging-Function-Addresses | [52] 4.5 | c7 | c7 | [52] 4.5 | c8 | c8 |
| 10C | P-Charging-Vector | [52] 4.6 | c5 | n/a | [52] 4.6 | c6 | n/a |
| 10D | Privacy | [33] 4.2 | c3 | c3 | [33] 4.2 | c4 | c4 |
| 10E | Require | [26] 20.32 | m | m | [26] 20.32 | c11 | c11 |
| 10F | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.3/2 OR A.3/4 THEN m ELSE i - - P-CSCF or S-CSCF. | | | | | | |
| c3: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c4: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c5: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c6: | IF A.162/46 THEN m ELSE IF A.162/45 THEN n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c7: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c8: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c9: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c10: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c11: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/6 - - 2xx

Table A.251: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|---------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 0B | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 1 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

| | |
|-----|--|
| c3: | IF A.162/15 THEN o ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. |
|-----|--|

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.252: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.253: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.254: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 3 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.255: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.256: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.257: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.258: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/28 OR A.164/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.258A: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/15 - - PRACK response

Prerequisite: A.164/34 - - 484 (Address Incomplete)

Table A.259: Supported headers within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/15 - - PRACK response

Table A.260: Supported message bodies within the PRACK response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.11 REFER method

Prerequisite A.163/16 - - REFER request

Table A.261: Supported headers within the REFER request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| <u>OB</u> | <u>Accept-Contact</u> | <u>[xx] 9.2</u> | <u>c27</u> | <u>c27</u> | <u>[xx] 9.2</u> | <u>c27</u> | <u>c28</u> |
| <u>OCB</u> | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 1 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 1A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 3 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 4 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 5 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 5A | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 5B | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 5C | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 6 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 7 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 8 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 9 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 10 | Expires | [26] 20.19 | m | m | [26] 20.19 | i | i |
| 11 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 12 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 13 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 14 | Organization | [26] 20.25 | m | m | [26] 20.25 | c3 | c3 |
| 14A | P-Access-Network-Info | [52] 4.4 | c22 | c22 | [52] 4.4 | c23 | c23 |
| 14B | P-Asserted-Identity | [34] 9.1 | c9 | c9 | [34] 9.1 | c10 | c10 |
| 14C | P-Called-Party-ID | [52] 4.2 | c13 | c13 | [52] 4.2 | c14 | c15 |
| 14D | P-Charging-Function-Addresses | [52] 4.5 | c20 | c20 | [52] 4.5 | c21 | c21 |
| 14E | P-Charging-Vector | [52] 4.6 | c18 | c18 | [52] 4.6 | c19 | c19 |
| 14F | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c8 | c8 |
| 14G | P-Visited-Network-ID | [52] 4.3 | c16 | n/a | [52] 4.3 | c17 | n/a |
| 14H | Privacy | [33] 4.2 | c11 | c11 | [33] 4.2 | c12 | c12 |
| 15 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c4 | c4 |
| 16 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 16A | Reason | [34A] 2 | c25 | c25 | [34A] 2 | c26 | c26 |
| 17 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| 18 | Refer-To | [36] 3 | c3 | c3 | [36] 3 | c4 | c4 |
| <u>18A</u> | <u>Reject-Contact</u> | <u>[xx] 9.2</u> | <u>c27</u> | <u>c27</u> | <u>[xx] 9.2</u> | <u>c27</u> | <u>c28</u> |
| <u>18B</u> | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c27</u> | <u>c27</u> | <u>[xx] 9.1</u> | <u>c27</u> | <u>c27</u> |
| 19 | Require | [26] 20.32 | m | m | [26] 20.32 | c5 | c5 |
| 20 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 20A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c24 | c24 |
| 20B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c24 | c24 |
| 20C | Subject | [26] 20.36 | m | m | [26] 20.36 | i | i |
| 21 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 22 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 23 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 24 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 25 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|-------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. |
| c3: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. |
| c4: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c6: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c7: | IF A.162/14 THEN m ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog. |
| c8: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. |
| c9: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c10: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. |
| c11: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c12: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c13: | IF A.162/37 THEN m ELSE n/a - - the P-Called-Party-ID header extension. |
| c14: | IF A.162/37 THEN i ELSE n/a - - the P-Called-Party-ID header extension. |
| c15: | IF A.162/37 AND A.3/2 THEN m ELSE IF A.162/37 AND A.3/3 THEN i ELSE n/a - - the P-Called-Party-ID header extension and P-CSCF or I-CSCF. |
| c16: | IF A.162/38 THEN m ELSE n/a - - the P-Visited-Network-ID header extension. |
| c17: | IF A.162/39 THEN m ELSE i - - reading, or deleting the P-Visited-Network-ID header before proxying the request or response. |
| c18: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c19: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c20: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c21: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c22: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c23: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c24: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c25: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c26: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c27: | IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol. |
| c28: | IF A.162/50 AND A.4/3 THEN m ELSE IF A.162/50 AND NOT A.4/3 THEN i ELSE n/a - - caller preferences for the session initiation protocol, and S-CSCF. |
| NOTE: | c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY. |

Prerequisite A.163/16 - - REFER request

Table A.262: Supported message bodies within the REFER request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/1 - - 100 (Trying)

Table A.263: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 5 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

c1: IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses.

Prerequisite A.163/17 - - REFER response

Table A.264: Supported headers within the REFER response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 2 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 3 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 4 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 5 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 6 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 7 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 8 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 9 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 10 | Organization | [26] 20.25 | m | m | [26] 20.25 | c2 | c2 |
| 10A | P-Access-Network-Info | [52] 4.4 | c12 | c12 | [52] 4.4 | c13 | c13 |
| 10B | P-Asserted-Identity | [34] 9.1 | c4 | c4 | [34] 9.1 | c5 | c5 |
| 10C | P-Charging-Function-Addresses | [52] 4.5 | c10 | c10 | [52] 4.5 | c11 | c11 |
| 10D | P-Charging-Vector | [52] 4.6 | c8 | c8 | [52] 4.6 | c9 | c9 |
| 10E | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c3 | n/a |
| 10F | Privacy | [33] 4.2 | c6 | c6 | [33] 4.2 | c7 | c7 |
| 10G | Require | [26] 20.32 | m | m | [26] 20.32 | c14 | c14 |
| 10H | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. | | | | | | |
| c3: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. | | | | | | |
| c4: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c5: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. | | | | | | |
| c6: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c7: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c8: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c9: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c10: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c11: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c12: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c13: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c14: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/7 - - 202 (Accepted)

Table A.265: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 3 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 5 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c3: | IF A.162/15 THEN m ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. | | | | | | |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.266: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 - - 401 (Unauthorized)

Table A.267: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 10 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.268: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 6 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.269: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.270: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Proxy-Authenticate | [26] 20.27 | o | | [26] 20.27 | o | |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.271: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.272: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/18 THEN m ELSE i - - reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER. | | | | | | |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/28 OR A.164/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.272A: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/17 - - REFER response

Prerequisite: A.164/34 - - 484 (Address Incomplete)

Table A.273: Supported headers within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/17 - - REFER response

Table A.274: Supported message bodies within the REFER response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.12 REGISTER method

Prerequisite A.163/18 - - REGISTER request

Table A.275: Supported headers within the REGISTER request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|--------------------|------------|----------------|--------------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7, [49] | m | m | [26] 20.7, [49] | i | i |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 7 | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c2 | c2 |
| 8 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 9 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 10 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 11 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 12 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 13 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 14 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 15 | Date | [26] 20.17 | m | m | [26] 20.17 | m | m |
| 16 | Expires | [26] 20.19 | m | m | [26] 20.19 | i | i |
| 17 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 18 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 19 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 20 | Organization | [26] 20.25 | m | m | [26] 20.25 | c3 | c3 |
| 20A | P-Access-Network-Info | [52] 4.4 | c16 | c16 | [52] 4.4 | c17 | c17 |
| 20B | P-Charging-Function-Addresses | [52] 4.5 | c14 | c14 | [52] 4.5 | c15 | c15 |
| 20C | P-Charging-Vector | [52] 4.6 | c12 | c12 | [52] 4.6 | c13 | c13 |
| 20D | P-Visited-Network-ID | [52] 4.3 | c10 | c10 | [52] 4.3 | c11 | c11 |
| 20E | Path | [35] 4.2 | c6 | c6 | [35] 4.2 | c6 | c6 |
| 20F | Privacy | [33] 4.2 | c8 | c8 | [33] 4.2 | c9 | c9 |
| 21 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c7 | c7 |
| 22 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 22A | Reason | [34A] 2 | c19 | c19 | [34A] 2 | c20 | c20 |
| 22B | Request-Disposition | [xx] 9.1 | c21 | c21 | [xx] 9.1 | c21 | c21 |
| 23 | Require | [26] 20.32 | m | m | [26] 20.32 | c4 | c4 |
| 24 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 24A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c18 | c18 |
| 24B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c18 | c18 |
| 25 | Supported | [26] 20.37 | m | m | [26] 20.37 | c5 | c5 |
| 26 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 27 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 28 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 29 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|-------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/19C OR A.162/19D THEN m ELSE i - - reading, adding or concatenating the Call-Info header. |
| c3: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. |
| c4: | IF A.162/11 OR A.162/12 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c5: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c6: | IF A.162/29 THEN m ELSE n/a - - PATH header support. |
| c7: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c8: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c9: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c10: | IF A.162/38 THEN m ELSE n/a - - the P-Visited-Network-ID header extension. |
| c11: | IF A.162/39 THEN m ELSE i - - reading, or deleting the P-Visited-Network-ID header before proxying the request or response. |
| c12: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c13: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c14: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c15: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c16: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c17: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c18: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c19: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c20: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c21: | IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol. |
| NOTE: | c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY. |

Prerequisite A.163/18 - - REGISTER request

Table A.276: Supported message bodies within the REGISTER request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/1 - - 100 (Trying)

Table A.277: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 3 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 4 | Date | [26] 20.17 | m | m | [26] 20.17 | m | m |
| 5 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 6 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 7 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

Prerequisite A.163/19 - - REGISTER response

Table A.278: Supported headers within the REGISTER response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c2 | c2 |
| 2 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 3 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 4 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | m | m | [26] 20.17 | m | m |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 11 | Organization | [26] 20.25 | m | m | [26] 20.25 | c1 | c1 |
| 11A | P-Access-Network-Info | [52] 4.4 | c9 | c9 | [52] 4.4 | c10 | c10 |
| 11B | P-Charging-Function-Addresses | [52] 4.5 | c7 | c7 | [52] 4.5 | c8 | c8 |
| 11C | P-Charging-Vector | [52] 4.6 | c5 | c5 | [52] 4.6 | c6 | c6 |
| 11D | Privacy | [33] 4.2 | c3 | c3 | [33] 4.2 | c4 | c4 |
| 11E | Require | [26] 20.32 | m | m | [26] 20.32 | c11 | c11 |
| 11F | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 12 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 13 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 13A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 14 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 15 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |

c1: IF A.162/19A OR A.162/19B THEN m ELSE i -- reading, adding or concatenating the Organization header.
c2: IF A.162/19C OR A.162/19D THEN m ELSE i -- reading, adding or concatenating the Call-Info header.
c3: IF A.162/31 THEN m ELSE n/a -- a privacy mechanism for the Session Initiation Protocol (SIP).
c4: IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a -- application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently.
c5: IF A.162/45 THEN m ELSE n/a -- the P-Charging-Vector header extension.
c6: IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a -- adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension.
c7: IF A.162/44 THEN m ELSE n/a -- the P-Charging-Function-Addresses header extension.
c8: IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a -- adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension.
c9: IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a -- act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension.
c10: IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a -- act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension.
c11: IF A.162/11 OR A.162/12 THEN m ELSE i -- reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER.

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/6 - - 2xx

Table A.279: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 1A | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 1B | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 5 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 5A | P-Associated-URI | [52] 4.1 | c8 | c8 | [52] 4.1 | c9 | c10 |
| 6 | Path | [35] 4.2 | c3 | c3 | [35] 4.2 | c4 | c4 |
| 8 | Service-Route | [38] 5 | c5 | c5 | [38] 5 | c6 | c7 |
| 9 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c2: | IF A.3/2 OR A.3/3A THEN m ELSE n/a - - P-CSCF or I-CSCF (THIG). | | | | | | |
| c3: | IF A.162/29 THEN m ELSE n/a - - Path extension support. | | | | | | |
| c4: | IF A.162/29 THEN i ELSE n/a - - Path extension support. | | | | | | |
| c5: | IF A.162/32 THEN m ELSE n/a - - Service-Route extension support. | | | | | | |
| c6: | IF A.162/32 THEN i ELSE n/a - - Service-Route extension support. | | | | | | |
| c7: | IF A.162/32 THEN (IF A.3/2 THEN m ELSE i) ELSE n/a - - Service-Route extension and P-CSCF. | | | | | | |
| c8: | IF A.162/36 THEN m ELSE n/a - - the P-Associated-URI extension. | | | | | | |
| c9: | IF A.162/36 THEN i ELSE n/a - - the P-Associated-URI extension. | | | | | | |
| c10: | IF A.162/36 AND A.3/2 THEN m ELSE IF A.162/36 AND A.3/3 THEN i ELSE n/a - - the P-Associated-URI extension and P-CSCF or I-CSCF. | | | | | | |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.280: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Contact | [26] 20.10 | m | m | [26] 20.10 | c2 | c2 |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c2: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.281: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 6 | Security-Server | [48] 2 | x | c1 | [48] 2 | n/a | n/a |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 10 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.282: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 6 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.283: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 2 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.284: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 9 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.285: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 4 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 5 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 9 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.286: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|---------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/17 THEN m ELSE.i | | | | | | |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/28 OR A.164/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.286A: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/29 - - 423 (Interval Too Brief)

Table A.287: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC Status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | o | | [26] 20.18 | o | |
| 5 | Min-Expires | [26] 20.23 | m | m | [26] 20.23 | i | i |
| 8 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/19 - - REGISTER response

Prerequisite: A.164/34 - - 484 (Address Incomplete)

Table A.288: Supported headers within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/19 - - REGISTER response

Table A.289: Supported message bodies within the REGISTER response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.13 SUBSCRIBE method

Prerequisite A.163/20 - - SUBSCRIBE request

Table A.290: Supported headers within the SUBSCRIBE request

| Item | Header | Sending | | | Receiving | | |
|------------|-------------------------------|-----------------|------------|----------------|-----------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| <u>1A</u> | <u>Accept-Contact</u> | <u>[xx] 9.2</u> | <u>c27</u> | <u>c27</u> | <u>[xx] 9.2</u> | <u>c27</u> | <u>c28</u> |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 3A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 4 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 5 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 6 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 6A | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 7 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 8 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 9 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 10 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 11 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 12 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 13 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 14 | Event | [28] 7.2.1 | m | m | [28] 7.2.1 | m | m |
| 15 | Expires | [26] 20.19 | m | m | [26] 20.19 | i | i |
| 16 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 17 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 18 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 18A | Organization | [26] 20.25 | m | m | [26] 20.25 | c3 | c3 |
| 18B | P-Access-Network-Info | [52] 4.4 | c22 | c22 | [52] 4.4 | c23 | c23 |
| 18C | P-Asserted-Identity | [34] 9.1 | c9 | c9 | [34] 9.1 | c10 | c10 |
| 18D | P-Called-Party-ID | [52] 4.2 | c13 | c13 | [52] 4.2 | c14 | c15 |
| 18E | P-Charging-Function-Addresses | [52] 4.5 | c20 | c20 | [52] 4.5 | c21 | c21 |
| 18F | P-Charging-Vector | [52] 4.6 | c18 | c18 | [52] 4.6 | c19 | c19 |
| 18G | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c8 | c8 |
| 18H | P-Visited-Network-ID | [52] 4.3 | c16 | n/a | [52] 4.3 | c17 | n/a |
| 18I | Privacy | [33] 4.2 | c11 | c11 | [33] 4.2 | c12 | c12 |
| 19 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c4 | c4 |
| 20 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 20A | Reason | [34A] 2 | c25 | c25 | [34A] 2 | c26 | c26 |
| 21 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| <u>21A</u> | <u>Reject-Contact</u> | <u>[xx] 9.2</u> | <u>c27</u> | <u>c27</u> | <u>[xx] 9.2</u> | <u>c27</u> | <u>c28</u> |
| <u>21B</u> | <u>Request-Disposition</u> | <u>[xx] 9.1</u> | <u>c27</u> | <u>c27</u> | <u>[xx] 9.1</u> | <u>c27</u> | <u>c27</u> |
| 22 | Require | [26] 20.32 | m | m | [26] 20.32 | c5 | c5 |
| 23 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 23A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c24 | c24 |
| 23B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c24 | c24 |
| 24 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 25 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 26 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 27 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 28 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|-------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. |
| c3: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. |
| c4: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c6: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c7: | IF A.162/14 THEN m ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog. |
| c8: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. |
| c9: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. |
| c10: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. |
| c11: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c12: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c13: | IF A.162/37 THEN m ELSE n/a - - the P-Called-Party-ID header extension. |
| c14: | IF A.162/37 THEN i ELSE n/a - - the P-Called-Party-ID header extension. |
| c15: | IF A.162/37 AND A.3/2 THEN m ELSE IF A.162/37 AND A.3/3 THEN i ELSE n/a - - the P-Called-Party-ID header extension and P-CSCF or I-CSCF. |
| c16: | IF A.162/38 THEN m ELSE n/a - - the P-Visited-Network-ID header extension. |
| c17: | IF A.162/39 THEN m ELSE i - - reading, or deleting the P-Visited-Network-ID header before proxying the request or response. |
| c18: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c19: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c20: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c21: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c22: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c23: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c24: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c25: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c26: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c27: | IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol. |
| c28: | IF A.162/50 AND A.4/3 THEN m ELSE IF A.162/50 AND NOT A.4/3 THEN i ELSE n/a - - caller preferences for the session initiation protocol, and S-CSCF. |
| NOTE: | c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY. |

Prerequisite A.163/20 - - SUBSCRIBE request

Table A.291: Supported message bodies within the SUBSCRIBE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/21 - - SUBSCRIBE response

Table A.292: Supported headers within the SUBSCRIBE response - all status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 2 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | i |
| 3 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | i |
| 4 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | i |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | i |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | i |
| 10A | Organization | [26] 20.25 | m | m | [26] 20.25 | c2 | c2 |
| 10B | P-Access-Network-Info | [52] 4.4 | c12 | c12 | [52] 4.4 | c13 | c13 |
| 10C | P-Asserted-Identity | [34] 9.1 | c4 | c4 | [34] 9.1 | c5 | c5 |
| 10D | P-Charging-Function-Addresses | [52] 4.5 | c10 | c10 | [52] 4.5 | c11 | c11 |
| 10E | P-Charging-Vector | [52] 4.6 | c8 | c8 | [52] 4.6 | c9 | c9 |
| 10F | P-Preferred-Identity | [34] 9.2 | x | x | [34] 9.2 | c3 | n/a |
| 10G | Privacy | [33] 4.2 | c6 | c6 | [33] 4.2 | c7 | c7 |
| 10H | Require | [26] 20.32 | m | m | [26] 20.32 | c14 | c14 |
| 10I | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. | | | | | | |
| c3: | IF A.162/30A THEN m ELSE n/a - - act as first entity within the trust domain for asserted identity. | | | | | | |
| c4: | IF A.162/30 THEN m ELSE n/a - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks. | | | | | | |
| c5: | IF A.162/30A or A.162/30B THEN m ELSE i - - extensions to the Session Initiation Protocol (SIP) for asserted identity within trusted networks or subsequent entity within trust network that can route outside the trust network. | | | | | | |
| c6: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c7: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c8: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c9: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c10: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c11: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c12: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c13: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c14: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |

Prerequisite A.163/21 - - SUBSCRIBE response

Prerequisite: A.164/6 AND A.164/7 - - 2xx

Table A.293: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 1A | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 2 | Expires | [26] 20.19 | m | m | [26] 20.19 | i | i |
| 3 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c3 | c3 |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c3: | IF A.162/15 THEN m ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. | | | | | | |

Prerequisite A.163/21 - - SUBSCRIBE response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 OR A.164/35 - - 3xx or 485 (Ambiguous)

Table A.294: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/21 - - SUBSCRIBE response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.295: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/21 - - SUBSCRIBE response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 600, 603

Table A.296: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 3 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/18 -- 405 (Method Not Allowed)

Table A.297: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/20 -- 407 (Proxy Authentication Required)

Table A.298: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/25 -- 415 (Unsupported Media Type)

Table A.299: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 4 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 5 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/27 -- 420 (Bad Extension)

Table A.300: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 5 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/18 THEN m ELSE i -- reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER. | | | | | | |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/28 OR A.164/41A -- 421 (Extension Required), 494 (Security Agreement Required)

Table A.300A: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|--|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: IF A.162/47 THEN m ELSE n/a -- security mechanism agreement for the session initiation protocol. | | | | | | | |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/29 -- 423 (Interval Too Brief)

Table A.301: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 2 | Min-Expires | [26] 20.23 | m | m | [26] 20.23 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/34 -- 484 (Address Incomplete)

Table A.302: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/39 -- 489 (Bad Event)

Table A.303: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|--|--------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| c1: IF A.4/20 THEN m ELSE i -- SIP specific event notification extension. | | | | | | | |
| NOTE: c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY. | | | | | | | |

Prerequisite A.163/21 -- SUBSCRIBE response

Prerequisite: A.164/45 -- 503 (Service Unavailable)

Table A.303A: Supported headers within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 1 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 3 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/21 -- SUBSCRIBE response

Table A.304: Supported message bodies within the SUBSCRIBE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

A.2.2.4.14 UPDATE method

Prerequisite A.163/22 - - UPDATE request

Table A.305: Supported headers within the UPDATE request

| Item | Header | Sending | | | Receiving | | |
|------|-------------------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 1A | <u>Accept-Contact</u> | [xx] 9.2 | c21 | c21 | [xx] 9.2 | c22 | c22 |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 4 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 5 | Allow-Events | [28] 7.2.2 | m | m | [28] 7.2.2 | c1 | c1 |
| 6 | Authorization | [26] 20.7 | m | m | [26] 20.7 | i | i |
| 7 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 8 | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c8 | c8 |
| 9 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 10 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | c4 | c4 |
| 11 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | c4 | c4 |
| 12 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | c4 | c4 |
| 13 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 14 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | c4 | c4 |
| 15 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 16 | Date | [26] 20.17 | m | m | [26] 20.17 | c2 | c2 |
| 17 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 18 | Max-Forwards | [26] 20.22 | m | m | [26] 20.22 | m | m |
| 19 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | c4 |
| 20 | Organization | [26] 20.25 | m | m | [26] 20.25 | c3 | c3 |
| 20A | P-Access-Network-Info | [52] 4.4 | c16 | c16 | [52] 4.4 | c17 | c17 |
| 20B | P-Charging-Function-Addresses | [52] 4.5 | c14 | c14 | [52] 4.5 | c15 | c15 |
| 20C | P-Charging-Vector | [52] 4.6 | c12 | c12 | [52] 4.6 | c13 | c13 |
| 20D | Privacy | [33] 4.2 | c10 | c10 | [33] 4.2 | c11 | c11 |
| 21 | Proxy-Authorization | [26] 20.28 | m | m | [26] 20.28 | c9 | c9 |
| 22 | Proxy-Require | [26] 20.29 | m | m | [26] 20.29 | m | m |
| 22A | Reason | [34A] 2 | c19 | c19 | [34A] 2 | c20 | c20 |
| 23 | Record-Route | [26] 20.30 | m | m | [26] 20.30 | c7 | c7 |
| 23A | <u>Reject-Contact</u> | [xx] 9.2 | c21 | c21 | [xx] 9.2 | c22 | c22 |
| 23B | <u>Request-Disposition</u> | [xx] 9.1 | c21 | c21 | [xx] 9.1 | c22 | c22 |
| 24 | Require | [26] 20.32 | m | m | [26] 20.32 | c5 | c5 |
| 25A | Security-Client | [48] 2.3.1 | x | x | [48] 2.3.1 | c18 | c18 |
| 25B | Security-Verify | [48] 2.3.1 | x | x | [48] 2.3.1 | c18 | c18 |
| 25 | Route | [26] 20.34 | m | m | [26] 20.34 | m | m |
| 26 | Supported | [26] 20.37 | m | m | [26] 20.37 | c6 | c6 |
| 27 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 28 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 29 | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 30 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |

| | |
|------|---|
| c1: | IF A.4/20 THEN m ELSE i - - SIP specific event notification extension. |
| c2: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. |
| c3: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. |
| c4: | IF A.3/2 OR A.3/4 THEN m ELSE i - - P-CSCF or S-CSCF. |
| c5: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. |
| c6: | IF A.162/16 THEN m ELSE i - - reading the contents of the Supported header before proxying the response. |
| c7: | IF A.162/14 THEN o ELSE i - - the requirement to be able to insert itself in the subsequent transactions in a dialog. |
| c8: | IF A.162/19C OR A.162/19D THEN m ELSE i - - reading, adding or concatenating the Call-Info header. |
| c9: | IF A.162/8A THEN m ELSE i - - authentication between UA and proxy. |
| c10: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). |
| c11: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. |
| c12: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. |
| c13: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. |
| c14: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. |
| c15: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. |
| c16: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c17: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. |
| c18: | IF A.4/37 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. |
| c19: | IF A.162/48 THEN m ELSE n/a - - the Reason header field for the session initiation protocol. |
| c20: | IF A.162/48 THEN i ELSE n/a - - the Reason header field for the session initiation protocol. |
| c21: | IF A.162/50 THEN m ELSE n/a - - caller preferences for the session initiation protocol. |
| c22: | IF A.162/50 THEN i ELSE n/a - - caller preferences for the session initiation protocol. |

NOTE: c1 refers to the UA role major capability as this is the case of a proxy that also acts as a UA specifically for SUBSCRIBE and NOTIFY.

Prerequisite A.163/22 - - UPDATE request

Table A.306: Supported message bodies within the UPDATE request

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

Prerequisite A.163/22 - - UPDATE response

Table A.307: Supported headers within the UPDATE response - all remaining status-codes

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Call-ID | [26] 20.8 | m | m | [26] 20.8 | m | m |
| 1A | Call-Info | [26] 20.9 | m | m | [26] 20.9 | c4 | c4 |
| 2 | Content-Disposition | [26] 20.11 | m | m | [26] 20.11 | i | c3 |
| 3 | Content-Encoding | [26] 20.12 | m | m | [26] 20.12 | i | c3 |
| 4 | Content-Language | [26] 20.13 | m | m | [26] 20.13 | i | c3 |
| 5 | Content-Length | [26] 20.14 | m | m | [26] 20.14 | m | m |
| 6 | Content-Type | [26] 20.15 | m | m | [26] 20.15 | i | c3 |
| 7 | Cseq | [26] 20.16 | m | m | [26] 20.16 | m | m |
| 8 | Date | [26] 20.17 | m | m | [26] 20.17 | c1 | c1 |
| 9 | From | [26] 20.20 | m | m | [26] 20.20 | m | m |
| 10 | MIME-Version | [26] 20.24 | m | m | [26] 20.24 | i | c3 |
| 10A | Organization | [26] 20.25 | m | m | [26] 20.25 | c2 | c2 |
| 10B | P-Access-Network-Info | [52] 4.4 | c11 | c11 | [52] 4.4 | c12 | c12 |
| 10C | P-Charging-Function-Addresses | [52] 4.5 | c9 | c9 | [52] 4.5 | c10 | c10 |
| 10D | P-Charging-Vector | [52] 4.6 | c7 | n/a | [52] 4.6 | c8 | n/a |
| 10E | Privacy | [33] 4.2 | c5 | c5 | [33] 4.2 | c6 | c6 |
| 10F | Require | [26] 20.32 | m | m | [26] 20.32 | c13 | c13 |
| 10G | Server | [26] 20.35 | m | m | [26] 20.35 | i | i |
| 11 | Timestamp | [26] 20.38 | m | m | [26] 20.38 | i | i |
| 12 | To | [26] 20.39 | m | m | [26] 20.39 | m | m |
| 12A | User-Agent | [26] 20.41 | m | m | [26] 20.41 | i | i |
| 13 | Via | [26] 20.42 | m | m | [26] 20.42 | m | m |
| 14 | Warning | [26] 20.43 | m | m | [26] 20.43 | i | i |
| c1: | IF A.162/9 THEN m ELSE i - - insertion of date in requests and responses. | | | | | | |
| c2: | IF A.162/19A OR A.162/19B THEN m ELSE i - - reading, adding or concatenating the Organization header. | | | | | | |
| c3: | IF A.3/2 OR A.3/4 THEN m ELSE i - - P-CSCF or S-CSCF. | | | | | | |
| c4: | IF A.162/19C OR A.162/19D THEN m ELSE i - - reading, adding or concatenating the Call-Info header. | | | | | | |
| c5: | IF A.162/31 THEN m ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP). | | | | | | |
| c6: | IF A.162/31D OR A.162/31G THEN m ELSE IF A.162/31C THEN i ELSE n/a - - application of the privacy option "header" or application of the privacy option "id" or passing on of the Privacy header transparently. | | | | | | |
| c7: | IF A.162/45 THEN m ELSE n/a - - the P-Charging-Vector header extension. | | | | | | |
| c8: | IF A.162/46 THEN m ELSE IF A.162/45 THEN i ELSE n/a - - adding, deleting, reading or modifying the P-Charging-Vector header before proxying the request or response or the P-Charging-Vector header extension. | | | | | | |
| c9: | IF A.162/44 THEN m ELSE n/a - - the P-Charging-Function-Addresses header extension. | | | | | | |
| c10: | IF A.162/44A THEN m ELSE IF A.162/44 THEN i ELSE n/a - - adding, deleting or reading the P-Charging-Function-Addresses header before proxying the request or response, or the P-Charging-Function-Addresses header extension. | | | | | | |
| c11: | IF A.162/43 THEN x ELSE IF A.162/41 THEN m ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c12: | IF A.162/43 THEN m ELSE IF A.162/41 THEN i ELSE n/a - - act as subsequent entity within trust network for access network information that can route outside the trust network, the P-Access-Network-Info header extension. | | | | | | |
| c13: | IF A.162/11 OR A.162/13 THEN m ELSE i - - reading the contents of the Require header before proxying the request or response or adding or modifying the contents of the Require header before proxying the request or response for methods other than REGISTER. | | | | | | |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/6 - - 2xx

Table A.308: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|-----------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 0A | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |

| | | | | | | | |
|-----|--|------------|---|---|------------|---|---|
| 0B | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 0C | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Authentication-Info | [26] 20.6 | m | m | [26] 20.6 | i | i |
| 3 | Contact | [26] 20.10 | m | m | [26] 20.10 | i | i |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c3: | IF A.162/15 THEN o ELSE i - - the requirement to be able to use separate URIs in the upstream direction and downstream direction when record routeing. | | | | | | |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/8 OR A.164/9 OR A.164/10 OR A.164/11 OR A.164/12 - - 3xx

Table A.309: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/14 - - 401 (Unauthorized)

Table A.309A: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 3 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 5 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 6 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/17 OR A.164/23 OR A.164/30 OR A.164/36 OR A.164/42 OR A.164/45 OR A.164/50 OR A.164/51 - - 404, 413, 480, 486, 500, 503, 600, 603

Table A.310: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|-------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 5 | Retry-After | [26] 20.33 | m | m | [26] 20.33 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/18 - - 405 (Method Not Allowed)

Table A.311: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/20 - - 407 (Proxy Authentication Required)

Table A.312: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--------------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 4 | Proxy-Authenticate | [26] 20.27 | m | m | [26] 20.27 | m | m |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 8 | WWW-Authenticate | [26] 20.44 | m | m | [26] 20.44 | i | i |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/25 - - 415 (Unsupported Media Type)

Table A.313: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|-----------------|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Accept | [26] 20.1 | m | m | [26] 20.1 | i | i |
| 2 | Accept-Encoding | [26] 20.2 | m | m | [26] 20.2 | i | i |
| 3 | Accept-Language | [26] 20.3 | m | m | [26] 20.3 | i | i |
| 4 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 6 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 10 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/27 - - 420 (Bad Extension)

Table A.314: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 6 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| 7 | Unsupported | [26] 20.40 | m | m | [26] 20.40 | c3 | c3 |
| c3: | IF A.162/18 THEN m ELSE i - - reading the contents of the Unsupported header before proxying the 420 response to a method other than REGISTER. | | | | | | |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/28 OR A.164/41A - - 421 (Extension Required), 494 (Security Agreement Required)

Table A.314A: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|---|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | o | o | [26] 20.5 | m | m |
| 2 | Error-Info | [26] 20.18 | o | o | [26] 20.18 | o | o |
| 3 | Security-Server | [48] 2 | c1 | c1 | [48] 2 | n/a | n/a |
| 4 | Supported | [26] 20.37 | m | m | [26] 20.37 | m | m |
| c1: | IF A.162/47 THEN m ELSE n/a - - security mechanism agreement for the session initiation protocol. | | | | | | |

Prerequisite A.163/23 - - UPDATE response

Prerequisite: A.164/35 - - 485 (Ambiguous)

Table A.315: Supported headers within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--|------------|------------|----------------|------------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | Allow | [26] 20.5 | m | m | [26] 20.5 | i | i |
| 2 | Contact | [26] 20.10 | m | m | [26] 20.10 | c1 | c1 |
| 3 | Error-Info | [26] 20.18 | m | m | [26] 20.18 | i | i |
| 7 | Supported | [26] 20.37 | m | m | [26] 20.37 | i | i |
| c1: | IF A.162/19E THEN m ELSE i - - deleting Contact headers. | | | | | | |

Prerequisite A.163/23 - - UPDATE response

Table A.316: Supported message bodies within the UPDATE response

| Item | Header | Sending | | | Receiving | | |
|------|--------|---------|------------|----------------|-----------|------------|----------------|
| | | Ref. | RFC status | Profile status | Ref. | RFC status | Profile status |
| 1 | | | | | | | |

CHANGE REQUEST

⌘ 24229 CR CR 588 ⌘ rev 1 ⌘ Current version: 6.1.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ⌘ ME ⌘ Radio Access Network ⌘ Core Network

| | | |
|------------------------|---|--|
| Title: | ⌘ Reauthentication - Abnormal cases | |
| Source: | ⌘ Lucent Technologies | |
| Work item code: | ⌘ IMS2 | Date: ⌘ 8/02/2004 |
| Category: | ⌘ F <i>Use one of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) <i>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</i> | Release: ⌘ Rel-6 <i>Use one of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

| | |
|---------------------------|--|
| Reason for change: | ⌘ The current <u>reauthentication failure</u> procedures described in subclauses 5.4.1.2.2 and 5.4.1.2.3 specify that for each public user identity " <u>If the UE was registered before, it stays registered until the registration expiration time expires.</u> " Since the registration lifetime was shortened, the respective public user identity will be promptly and automatically deregistered. Hence , the text in the NOTE 3: " The operator's policy will specify when will, upon authentication failure, the currently registered public user identity or the user be de-registered by the S-CSCF", should be removed. Second modification: The procedure "Whenever the S-CSCF terminates the registration procedure by sending a 403 (Forbidden) response, it will keep the registration state unchanged and it will not update the registration time of the subscriber," applies to all three cases and not only to first two cases. |
|---------------------------|--|

| | |
|---------------------------|------------------------------------|
| Summary of change: | ⌘ Correction of the existing text. |
|---------------------------|------------------------------------|

| | |
|--------------------------------------|---|
| Consequences if not approved: | ⌘ Following the specification may result in wrong implementation. |
|--------------------------------------|---|

| | | | | | | | | | | | |
|-------------------------------------|---|---|---|-------------------------------------|--|-------------------------------------|---------------------------|-------------------------------------|---------------------|-------------------------------------|--------------------|
| Clauses affected: | ⌘ 5.4.1.2.3 | | | | | | | | | | |
| Other specs affected: | <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Other core specifications</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Test specifications</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>O&M Specifications</td> </tr> </table> | Y | N | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | Other core specifications | <input checked="" type="checkbox"/> | Test specifications | <input checked="" type="checkbox"/> | O&M Specifications |
| Y | N | | | | | | | | | | |
| <input checked="" type="checkbox"/> | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | Other core specifications | | | | | | | | | | |
| <input checked="" type="checkbox"/> | Test specifications | | | | | | | | | | |
| <input checked="" type="checkbox"/> | O&M Specifications | | | | | | | | | | |
| Other comments: | ⌘ | | | | | | | | | | |

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- 1) Fill out the above form. The symbols above marked * contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

5.4.1.2.3 Abnormal cases

The S-CSCF need not challenge an unprotected REGISTER request for a private user identity that already has a registration in process, but instead return a 500 (Server Internal Error) response. The response shall contain a Retry-After header with a value indicating a time the UE shall wait before resending the request.

In the case that the authentication challenge response from the UE does not match with the expected authentication challenge response and the request was correctly integrity protected (it is indicated by the P-CSCF), the S-CSCF shall:

- send a 403 (Forbidden) response to the UE. The S-CSCF shall consider this authentication attempt as failed. The S-CSCF shall not update the registration statetime of the subscriber.

NOTE 1: If the UE was registered before, it stays registered until the registration expiration time expires.

In the case that the REGISTER request, which was supposed to carry the response to the challenge, contains no authentication challenge response and no AUTC parameters indicating that the MAC parameter was invalid in the challenge, the S-CSCF shall:

- respond with a 403 (Forbidden) response to the UE. The S-CSCF shall not update the registration statetime of the subscriber.

NOTE 2: If the UE was registered before, it stays registered until the registration expiration time expires.

In the case that the REGISTER request from the UE containing an authentication challenge response indicates that the authentication challenge was invalid (contains the AUTC parameter indicating this), the S-CSCF will fetch new authentication vectors from the HSS. In order to indicate a resynchronisation, the S-CSCF shall include the AUTC received from the UE and the stored RAND when fetching the new authentication vectors. On receipt of the new authentication vectors from the HSS, the S-CSCF shall either:

- send a 401 (Unauthorized) response to initiate a further authentication attempt, using these new vectors; or
- respond with a 403 (Forbidden) response if the authentication attempt is to be abandoned. The S-CSCF shall not update the registration state of the subscriber.

NOTE 3: If the UE was registered before, it stays registered until the registration expiration time expires.

NOTE 43: Since the UE responds only to two consecutive invalid challenges, the S-CSCF will send a 401 (Unauthorized) response that contains a new challenge only twice.

In the case that the expiration timer from the UE is too short to be accepted by the S-CSCF, the S-CSCF shall:

- reject the REGISTER request with a 423 (Interval Too Brief) response, containing a Min-Expires header with the minimum registration time the S-CSCF will accept.

On receiving a failure response to one of the third-party REGISTER requests, the S-CSCF may initiate network-initiated deregistration procedure based on the information in the Filter Criteria. If the Filter Criteria does not contain instruction to the S-CSCF regarding the failure of the contact to the AS, the S-CSCF shall not initiate network-initiated deregistration procedure.

In the case that the REGISTER request from the UE contains more than one SIP URIs as Contact header entries, the S-CSCF shall only store the entry with the highest "q" value and include it in the 200 (OK) response.

NOTE 54: If the timer reg-await-auth expires, the S-CSCF will consider the authentication to have failed. If the public user identity was already registered, the S-CSCF will leave it as registered described in 3GPP TS 33.203 [19]. The operator's policy will specify when will, upon authentication failure, the currently registered public user identity or the user be de-registered by the S-CSCF.

CHANGE REQUEST

⌘ 24.229 CR 596 ⌘ rev 1 ⌘ Current version: 6.1.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ⌘ ME ⌘ Radio Access Network ⌘ Core Network

| | | |
|------------------------|---|--|
| Title: | ⌘ sec-agree parameter in "Proxy-Require" header | |
| Source: | ⌘ Orange | |
| Work item code: | ⌘ IMS2 | Date: ⌘ 19/01/2004 |
| Category: | ⌘ F Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 . | Release: ⌘ Rel-6 Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

| | |
|--------------------------------------|--|
| Reason for change: | ⌘ According to RFC 3329, a proxy receiving "sec-agree" value in Require and Proxy-Require header fields shall remove it from those headers before forwarding the request. As P-CSCF behaviour on this point is compliant with RFC 3329, this should not be duplicated in TS 24.229. |
| Summary of change: | ⌘ Removal of the fact that P-CSCF shall remove "sec-agree" value from Require header. |
| Consequences if not approved: | ⌘ Partial duplication of RFC3329 |

| | | | | | | | | | |
|------------------------------|---|---|---|---|--|---|--|---|--|
| Clauses affected: | ⌘ 5.2.2 | | | | | | | | |
| Other specs affected: | ⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Y</td><td>N</td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr></table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘ | Y | N | X | | X | | X | |
| Y | N | | | | | | | | |
| X | | | | | | | | | |
| X | | | | | | | | | |
| X | | | | | | | | | |
| Other comments: | ⌘ | | | | | | | | |

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- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~ CHANGES ~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~

5.2.2 Registration

When the P-CSCF receives a REGISTER request from the UE, the P-CSCF shall:

- 1) insert a Path header in the request including an entry containing:
 - the SIP URI identifying the P-CSCF;
 - an indication that requests routed in this direction of the path (i.e. from the S-CSCF to the P-CSCF) are expected to be treated as for the mobile-terminating case. This indication may e.g. be in a parameter in the URI, a character string in the user part of the URI, or be a port number in the URI;
- 2) insert a Require header containing the option tag "path";
- 3) insert a P-Charging-Vector header with the icid parameter populated as specified in 3GPP TS 32.260 [17];
- 4) insert the parameter "integrity-protected" (described in subclause 7.2A.2) with a value "yes" into the Authorization header field in case the REGISTER request was either received integrity protected with the security association created during an ongoing authentication procedure and includes an authentication response, or it was received on the security association created during the last successful authentication procedure and with no authentication response, otherwise insert the parameter with the value "no";
- 5) in case the REGISTER request was received without integrity protection, then check the existence of the Security-Client header. If the header is present, then remove and store it. ~~The P-CSCF shall remove the 'sec-agree' item from the Require header, and the header itself if this is the only entry.~~ If the header is not present, then the P-CSCF shall return a suitable 4xx response;
- 6) in case the REGISTER request was received integrity protected, then the P-CSCF shall:
 - a) check the security association which protected the request. If the security association is a temporary one, then the request is expected to contain a Security-Verify header in addition to a Security-Client header. If there are no such headers, then the P-CSCF shall return a suitable 4xx response. If there are such headers, then the P-CSCF shall compare the content of the Security-Verify header with the content of the Security-Server header sent earlier and the content of the Security-Client header with the content of the Security-Client header received in the challenged REGISTER. If those do not match, then there is a potential man-in-the-middle attack. The request should be rejected by sending a suitable 4xx response. If the contents match, the P-CSCF shall remove the Security-Verify and the Security-Client header, ~~and the "sec-agree" item from the Require header, and the header itself if this is the only entry~~;
 - b) if the security association the REGISTER request was received on, is an already established one, then:
 - the P-CSCF shall remove the Security-Verify header if it is present, ~~and the "sec-agree" item from the Require header, and the header itself if this is the only entry~~;
 - a Security-Client header containing new parameter values is expected. If this header or any required parameter is missing, then the P-CSCF shall return a suitable 4xx response;
 - the P-CSCF shall remove and store the Security-Client header before forwarding the request to the S-CSCF; and
 - c) check if the private user identity conveyed in the integrity-protected REGISTER request is the same as the private user identity which was previously challenged or authenticated. If the private user identities are different, the P-CSCF shall reject the REGISTER request by returning a 403 (Forbidden) response;
- 7) insert a P-Visited-Network-ID header field, with the value of a pre-provisioned string that identifies the visited network at the home network; and
- 8) determine the I-CSCF of the home network and forward the request to that I-CSCF.

When the P-CSCF receives a 401 (Unauthorized) response to a REGISTER request, the P-CSCF shall:

- 1) delete any temporary set of security associations established towards the UE;
- 2) remove the CK and IK values contained in the 401 (Unauthorized) response and bind them to the proper private user identity and to the temporary set of security associations which will be setup as a result of this challenge. The P-CSCF shall forward the 401 (Unauthorized) response to the UE if and only if the CK and IK have been removed;
- 3) insert a Security-Server header in the response, containing the P-CSCF static security list and the parameters needed for the security association setup, as specified in Annex H of 3GPP TS 33.203 [19]. The P-CSCF shall support the "ipsec-3gpp" security mechanism, as specified in RFC 3329 [48]. The P-CSCF shall support the HMAC-MD5-96 (RFC 2403 [20C]) and HMAC-SHA-1-96 (RFC 2404 [20D]) IPsec layer algorithms;
- 4) set up the temporary set of security associations with a temporary SIP level lifetime between the UE and the P-CSCF for the user identified with the private user identity. For further details see 3GPP TS 33.203 [19] and RFC 3329 [48]. The P-CSCF shall set the temporary SIP level lifetime for the temporary set of security associations to the value of reg-await-auth timer; and
- 5) send the 401 (Unauthorized) response to the UE using the security association with which the associated REGISTER request was protected, or unprotected in case the REGISTER request was received unprotected.

NOTE 1: The challenge in the 401 (Unauthorized) response sent back by the S-CSCF to the UE as a response to the REGISTER request is piggybacked by the P-CSCF to insert the Security-Server header field in it. The S-CSCF authenticates the UE, while the P-CSCF negotiates and sets up two pairs of security associations with the UE during the same registration procedure. For further details see 3GPP TS 33.203 [19].

When the P-CSCF receives a 200 (OK) response to a REGISTER request, the P-CSCF shall check the value of the Expires header field and/or Expires parameter in the Contact header. When the value of the Expires header field and/or expires parameter in the Contact header is different than zero, then the P-CSCF shall:

- 1) save the list of Service-Route headers preserving the order. The P-CSCF shall store this list during the entire registration period of the respective public user identity. The P-CSCF shall use this list to validate the routeing information in the requests originated by the UE. If this registration is a reregistration, the P-CSCF shall replace the already existing list of Service-Route headers with the new list;
- 2) associate the Service-Route header list with the registered public user identity;
- 3) store the public user identities found in the P-Associated-URI header value, as those that are authorized to be used by the UE;
- 4) store the default public user identity for use with procedures for the P-Asserted-Identity header. The default public user identity is the first on the list of URIs present in the P-Associated-URI header;

NOTE 2: There may be more than one default public user identities stored in the P-CSCF, as the result of the multiple registrations of public user identities.

- 5) store the values received in the P-Charging-Function-Addresses header;
- 6) if a temporary set of security associations exists, change the temporary set of security associations to a newly established set of security associations, i.e. set its SIP level lifetime to the longest of either the previously existing set of security associations SIP level lifetime, or the lifetime of the just completed registration plus 30 seconds; and
- 7) protect the 200 (OK) response to the REGISTER request within the same security association to that in which the request was protected.

When receiving a SIP message (including REGISTER requests) from the UE over the newly established set of security associations that have not yet been taken into use, the P-CSCF shall:

- 1) reduce the SIP level lifetime of the old set of security associations towards the same UE to $64*T1$ (if currently longer than $64*T1$); and
- 2) use the newly established set of security associations for further messages sent towards the UE as appropriate (i.e. take the newly established set of security associations into use).

NOTE 3: In this case, the P-CSCF will send requests towards the UE over the newly established set of security associations. Responses towards the UE that are sent via UDP will be sent over the newly established set of security associations. Responses towards the UE that are sent via TCP will be sent over the same set of security associations that the related request was received on.

NOTE 4: When receiving a SIP message (including REGISTER requests) from the UE over a set of security associations that is different from the newly established set of security associations, the P-CSCF will not take any action on any set of security associations.

When the SIP level lifetime of an old set of security associations is about to expire, i.e. their SIP level lifetime is shorter than $64*T1$ and a newly established set of security associations has not been taken into use, the P-CSCF shall use the newly established set of security associations for further messages towards the UE as appropriate (see NOTE 3).

When sending the 200 (OK) response for a REGISTER request that concludes a re-authentication, the P-CSCF shall:

- 1) keep the set of security associations that was used for the REGISTER request that initiated the re-authentication;
- 2) keep the newly established set of security associations created during this authentication;
- 3) delete, if existing, any other set of security associations towards this UE immediately; and
- 4) go on using for further requests sent towards the UE the set of security associations that was used to protect the REGISTER request that initiated the re-authentication.

When sending the 200 (OK) response for a REGISTER request that concludes an initial authentication, i.e. the initial REGISTER request was received unprotected, the P-CSCF shall:

- 1) keep the newly established set of security associations created during this authentication;
- 2) delete, if existing, any other set of security associations towards this UE immediately; and
- 3) use the kept newly established set of security associations for further messages sent towards the UE.

NOTE 5: The P-CSCF will maintain two Route header lists. The first Route header list - created during the registration procedure - is used only to validate the routing information in the initial requests that originate from the UE. This list is valid during the entire registration of the respective public user identity. The second Route list - constructed from the Record Route headers in the initial INVITE and associated response - is used during the duration of the call. Once the call is terminated, the second Route list is discarded.

The P-CSCF shall delete any security association from the IPsec database when their SIP level lifetime expires.

The handling of the security associations at the P-CSCF is summarized in table 5.2.2-1.

Table 5.2.2-1: Handling of security associations at the P-CSCF

| | Temporary set of security associations | Newly established set of security associations | Old set of security associations |
|--|--|--|--|
| SIP message received over newly established set of security associations that have not yet been taken into use | No action | Take into use | Reduce SIP level lifetime to $64*T1$, if lifetime is larger than $64*T1$ |
| SIP message received over old set of security associations | No action | No action | No action |
| Old set of security associations currently in use will expire in $64*T1$ | No action | Take into use | No action |
| Sending an authorization challenge within a 401 (Unauthorized) response for a REGISTER request | Create Remove any previously existing temporary set of security associations | No action | No action |
| Sending 200 (OK) response for REGISTER request that concludes re-authentication | Change to a newly established set of security associations | Convert to and treat as old set of security associations (see next column) | Continue using the old set of security associations over which the REGISTER request, that initiated the re-authentication was received. Delete all other old sets of security associations immediately |
| Sending 200 (OK) response for REGISTER request that concludes initial authentication | Change to a newly established set of security associations and take into use immediately | Convert to old set of security associations, i.e. delete | Delete |

XXXXXXXXXXXXXXXXXXXXXXXXXXXX END of CHANGES XXXXXXXXXXXXXXXXXXXXXXX

CHANGE REQUEST

⌘ 24.229 CR 604 ⌘ ⌘ Current version: 6.1.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ⌘ ME Radio Access Network ⌘ Core Network

| | | |
|------------------------|---|--|
| Title: | ⌘ Forking in S-CSCF | |
| Source: | ⌘ Nokia | |
| Work item code: | ⌘ IMS2 | Date: ⌘ 10/02/2004 |
| Category: | ⌘ B Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 . | Release: ⌘ Rel-6 Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

| | |
|--------------------------------------|---|
| Reason for change: | ⌘ The document 23.228 subclause 4.2.7 states that: “ When multiple contact addresses have been registered,and ...If the UE has not indicated any preference for the contact addresses upon registration, or if the preferences for the contact addresses have equal value, then it is up to the S-CSCF if parallel or sequential forking is to be performed. This is not correctly specified in the subclause 5.4.3.3 in 24.229. |
| Summary of change: | ⌘ So if the the UE has not indicated any preference for the contact addresses upon registration, the S-CSCF will forward the request to the default public user identity. |
| Consequences if not approved: | ⌘ Misleading statement in the specification. |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|--|---|--|---|--|---|---|---|--|---|--|---|--|---|---|---|--|---|--|---|--|
| Clauses affected: | ⌘ Subclause 5.4.3.3. | | | | | | | | | | | | | | | | | | | | | | | | |
| Other specs affected: | ⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Y</td><td>N</td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr></table> Other core specifications ⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Y</td><td>N</td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr></table> Test specifications ⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Y</td><td>N</td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr><tr><td>X</td><td></td></tr></table> O&M Specifications ⌘ | Y | N | X | | X | | X | | Y | N | X | | X | | X | | Y | N | X | | X | | X | |
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| Other comments: | ⌘ | | | | | | | | | | | | | | | | | | | | | | | | |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked  contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

******FIRST CHANGE*****

2 ******NEXT CHANGE*****

5.4.3.3 Requests terminated at the served user

When the S-CSCF receives, destined for a registered served user, an initial request for a dialog or a request for a standalone transaction, prior to forwarding the request, the S-CSCF shall:

- 1) determine whether the request contains a barred public user identity in the Request-URI of the request or not. In case the Request URI contains a barred public user identity for the user, then the S-CSCF shall reject the request by generating a 404 (Not Found) response. Otherwise, continue with the rest of the steps;
- 2) remove its own URI from the topmost Route header;
- 3) check if an original dialog identifier that the S-CSCF previously placed in a Route header is present in the topmost Route header of the incoming request.
 - If present, it indicates an association with an existing dialog, the request has been sent from an AS in response to a previously sent request.
 - If not present, it indicates that the request is visiting the S-CSCF for the first time, and in this case the S-CSCF shall save the Request-URI from the request;
- 4) check whether the initial request matches the next unexecuted initial filter criteria in the priority order and apply the filter criteria on the SIP method as described in 3GPP TS 23.218 [5] subclause 6.5. If there is a match, then insert the AS URI to be contacted into the Route header as the topmost entry followed by its own URI populated as specified in the subclause 5.4.3.4;

NOTE 1: Depending on the result of the previous process, the S-CSCF may contact one or more AS(s) before processing the outgoing Request-URI.

- 5) insert a P-Charging-Function-Addresses header field, if not present, populated with values received from the HSS if the message is forwarded within the S-CSCF home network, including towards AS;
- 6) store the value of the icid parameter received in the P-Charging-Vector header and retain the icid parameter in the P-Charging-Vector header;
- 7) store the value of the orig-roi parameter received in the P-Charging-Vector header, if present. The orig-roi parameter identifies the sending network of the request message. The orig-roi parameter shall only be retained in the P-Charging-Vector header if the next hop is to an AS;
- 8) check whether the Request-URI equals to the saved value of the Request-URI. If there is no match, then:
 - a) if the request is an INVITE request, save the Contact, CSeq and Record-Route header field values received in the request such that the S-CSCF is able to release the session if needed; and
 - b) forward the request based on the Request-URI and skip the following steps;

If there is a match, then continue with the further steps;

- 9) in case there are no Route headers in the request, then determine, from the destination public user identity, the list of preloaded routes saved during registration or re-registration, as described in subclause 5.4.1.2. Furthermore, the S-CSCF shall:
 - a) build the Route header field with the values determined in the previous step;
 - b) determine, from the destination public user identity, the saved Contact URI where the user is reachable saved at registration or reregistration, as described in subclause 5.4.1.2. If there is more than one contact address saved for the destination public user identity, the S-CSCF shall either fork the request or perform sequential search based on the relative preference indicated by the qvalue parameter of the Contact header in the

original REGISTER request, as described in RFC3261 [26]. In case no qvalue parameter was provided, the n
the S-CSCF shall decide locally whether to fork or perform sequential search among the contact addresses.
~~S-CSCF shall look into the user profile of the user to find the indication about the default handling of the request;~~

- c) build a Request-URI with the contents of the saved Contact URI determined in the previous step; and
 - d) insert a P-Called-Party-ID SIP header field including the Request-URI received in the INVITE;
- 10) if the request is an INVITE request, save the Contact, CSeq and Record-Route header field values received in the request such that the S-CSCF is able to release the session if needed;
- 11) optionally, apply any privacy required by RFC 3323 [33] to the P-Asserted-Identity header; and
- NOTE 2: The optional procedure above is in addition to any procedure for the application of privacy at the edge of the trust domain specified by RFC 3323 [33].
- 12) forward the request based on the topmost Route header.

When the S-CSCF receives, destined for an unregistered user, an initial request for a dialog or a request for a standalone transaction, the S-CSCF shall:

- 1) execute the procedures described in the steps 1, 2 and 3 in the above paragraph (when the S-CSCF receives, destined for the registered served user, an initial request for a dialog or a request for a standalone transaction);
- 2) if the S-CSCF does not have the user profile, then initiate the S-CSCF Registration/deregistration notification with the purpose of downloading the relevant user profile (i.e. for unregistered user) and informing the HSS that the user is unregistered, but this S-CSCF will assess triggering of services for the unregistered user, as described in 3GPP TS 29.228 [14]; and
- 3) execute the procedure described in step 4, 5, 6, 7, 8, 9, 11 and 12 in the above paragraph (when the S-CSCF receives, destined for the registered served user, an initial request for a dialog or a request for a standalone transaction).

In case that no AS needs to be contacted, then S-CSCF shall return an appropriate unsuccessful SIP response. This response may be a 480 (Temporarily unavailable) and terminate these procedures.

When the S-CSCF receives a 1xx or 2xx response to the initial request for a dialog (whether the user is registered or not), it shall:

- 1) if the response corresponds to an INVITE request, save the Contact and Record-Route header field values in the response such that the S-CSCF is able to release the session if needed;
- 2) in the case where the S-CSCF has knowledge of an associated tel-URL for a SIP URI contained in the received P-Asserted-Identity header, the S-CSCF shall add a second P-Asserted-Identity header containing this tel-URL; and
- 3) in case the response is forwarded to an AS that is located within the trust domain, the S-CSCF shall retain the P-Access-Network-Info header; otherwise, the S-CSCF shall remove the P-Access-Network-Info header.

When the S-CSCF receives a response to a request for a standalone transaction (whether the user is registered or not), in the case where the S-CSCF has knowledge of an associated tel-URL for a SIP URI contained in the received P-Asserted-Identity header, the S-CSCF shall add a second P-Asserted-Identity header containing this tel-URL. In case the response is forwarded to an AS that is located within the trust domain, the S-CSCF shall retain the P-Access-Network-Info header; otherwise, the S-CSCF shall remove the P-Access-Network-Info header.

When the S-CSCF receives the 200 (OK) response for a standalone transaction request, the S-CSCF shall insert a P-Charging-Function-Addresses header populated with values received from the HSS if the message is forwarded within the S-CSCF home network, including towards an AS.

When the S-CSCF receives, destined for a served user, a target refresh request for a dialog, prior to forwarding the request, the S-CSCF shall:

- 1) remove its own URI from the topmost Route header;

- 2) if the request is an INVITE request, save the Contact, Cseq and Record-Route header field values received in the request such that the S-CSCF is able to release the session if needed;
- 3) create a Record-Route header containing its own SIP URI; and
- 4) forward the request based on the topmost Route header.

When the S-CSCF receives a 1xx or 2xx response to the target refresh request for a dialog (whether the user is registered or not), the S-CSCF shall:

- 1) if the response corresponds to an INVITE request, save the Record-Route and Contact header field values in the response such that the S-CSCF is able to release the session if needed; and
- 2) in case the response is forwarded to an AS that is located within the trust domain, the S-CSCF shall retain the P-Access-Network-Info header; otherwise, the S-CSCF shall remove the P-Access-Network-Info header.

When the S-CSCF receives, destined for the served user, a subsequent request other than target refresh request for a dialog, prior to forwarding the request, the S-CSCF shall:

- 1) remove its own URI from the topmost Route header; and
- 2) forward the request based on the topmost Route header.

When the S-CSCF receives a response to a subsequent request other than target refresh request for a dialog, in case the response is forwarded to an AS that is located within the trust domain, the S-CSCF shall retain the P-Access-Network-Info header; otherwise, the S-CSCF shall remove the P-Access-Network-Info header.