**3GPP TSG-CT WG1 Meeting #136-eC1-223888**

**E-Meeting, 12th – 20th May 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **24.379** | **CR** | **0817** | **rev** | **-** | **Current version:** | **14.14.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:***  | Correcting the downgrade of first-to-answer call to private call |
|  |  |
| ***Source to WG:*** | Samsung |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | MCImp-eMCPTT-CT |  | ***Date:*** | 05-05-2022 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** | *Rel-14* |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | The participatig function is converting the first-to-answer call to a private call if only one of the MCPTT ID from the requested list of MCPTT IDs matches with the <entry> elements of the <PrivateCall> element of the MCPTT user profile document.The conversion of first-to-answer call to private call is not defined in the architecture requirements and result of it leads to the private call without the security establishment. Also the existing text has wrong conditions and inclusion of incorrect information elements.  |
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| ***Summary of change:*** | This CR proposes to remove the condition and reword the text to remove the conversion of first-to-answer call to private call |
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| ***Consequences if not approved:*** | The conversion of first-to-answer call to a private call result into the private call without the security establishment even if an end-to-end security context needs to be established. |
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| ***Clauses affected:*** | 11.1.1.3.1.1 & 11.1.1.3.1.2 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

**\*\*\*\*\*\*\***

\* \* \* First Change \* \* \* \*

###### 11.1.1.3.1.1 On-demand private call and first-to-answer call

Upon receipt of a "SIP INVITE request for originating participating MCPTT function" containing an application/vnd.3gpp.mcptt-info+xml MIME body with the <session-type> element set to a value of "private" or "first-to-answer", the participating MCPTT function:

1) may reject the SIP INVITE request depending on the value of the Resource-Priority header field if the Resource-Priority header field is included in the received SIP INVITE request according to rules and procedures specified in IETF RFC 4412 [29] and shall not continue with the rest of the steps;

2) if unable to process the request due to a lack of resources or a risk of congestion exists, may reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 500 (Server Internal Error) response. The participating MCPTT function may include a Retry-After header field to the SIP 500 (Server Internal Error) response as specified in IETF RFC 3261 [24] and shall not continue with the rest of the steps;

NOTE 1: If the received SIP INVITE request contains an emergency indication set to a value of "true", the participating MCPTT function can choose to accept the request.

NOTE 2: If the received SIP INVITE request contains an emergency indication set to a value of "true", the participating MCPTT function can choose to allow an exception to the limit on the number of private calls and accept the request.

3) shall determine the MCPTT ID of the calling user from public user identity in the P-Asserted-Identity header field of the SIP INVITE request and shall authorise the user;

NOTE 3: The MCPTT ID of the calling user is bound to the public user identity at the time of service authorisation, as documented in clause 7.3.

4) if the participating MCPTT function cannot find a binding between the public user identity and an MCPTT ID or if the validity period of an existing binding has expired, then the participating MCPTT function shall reject the SIP INVITE request with a SIP 404 (Not Found) response with the warning text set to "141 user unknown to the participating function" in a Warning header field as specified in clause 4.4, and shall not continue with any of the remaining steps;

5) shall:

a) if the <session-type> is set to "private", determine that the call is a private call; and

b) if the <session-type> is set to "first-to-answer", determine that the call is a first-to-answer-call;

6) if the call is a:

a) private call, determine the public service identity of the controlling MCPTT function for the private call service associated with the originating user's MCPTT ID identity; or

b) first-to-answer, determine the public service identity of the controlling MCPTT function for the first-to-answer call service associated with the originating user's MCPTT ID identity;

7) if the participating MCPTT function is unable to identify the controlling MCPTT function for the private call service or first-to-answer call service associated with the originating user's MCPTT ID identity, it shall reject the SIP INVITE request with a SIP 404 (Not Found) response with the warning text "142 unable to determine the controlling function" in a Warning header field as specified in clause 4.4, and shall not continue with any of the remaining steps;

8) if the incoming SIP INVITE request does not contain an application/resource-lists MIME body, shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "145 unable to determine called party" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

9) if the call is a private call and the incoming SIP INVITE request contains an application/resource-lists MIME body with more than one <entry> element, shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "145 unable to determine called party" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

10) if the <allow-private-call> element of the <ruleset> element is not present in the MCPTT user profile document on the participating MCPTT function or is present with the value "false" (see the MCPTT user profile document in 3GPP TS 24.484 [50]), indicating that the user identified by the MCPTT ID is not authorised to initiate private calls, shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response, with warning text set to "107 user not authorised to make private calls" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

11) if the call is a private call and:

a) if the received SIP INVITE request includes an Answer-Mode header field as specified in IETF RFC 5373 [18] with the value "Auto" and the <allow-automatic-commencement> element of the <ruleset> element is not present in the MCPTT user profile document on the participating MCPTT function or is present with the value "false" (see the MCPTT user profile document in 3GPP TS 24.484 [50]) indicating that the user identified by the MCPTT ID is not authorised to initiate private call with automatic commencement, shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "125 user not authorised to make private call with automatic commencement" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

b) if the received SIP INVITE request includes an Answer-Mode header field as specified in IETF RFC 5373 [18] with the value "Manual" and the <allow-manual-commencement> element of the <ruleset> element is not present in the MCPTT user profile document on the participating MCPTT function or is present with the value "false" (see the MCPTT user profile document in 3GPP TS 24.484 [50]), indicating that the user identified by the MCPTT ID is not authorised to initiate private call with manual commencement, shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "126 user not authorised to make private call with manual commencement" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

c) if the <PrivateCall> element exists in the MCPTT user profile document with one more <entry> elements (see the MCPTT user profile document in 3GPP TS 24.484 [50]) and:

i) if the "uri" attribute of the <entry> element of the application/resource-lists MIME body does not match with one of the <entry> elements of the <PrivateCall> element of the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]); and

ii) if configuration is not set in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) that allows the MCPTT user to make a private call to users not contained within the <entry> elements of the <PrivateCall> element;

then:

i) shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "144 user not authorised to call this particular user" in a Warning header field as specified in clause 4.4 and shall not continue with the rest of the steps;

12) if the call is a first-to-answer call and if the <PrivateCall> element exists in the MCPTT user profile document with one or more <entry> elements (see the MCPTT user profile document in 3GPP TS 24.484 [50]) and:

a) if:

i) the "uri" attribute of each and every <entry> element of the application/resource-lists MIME body does not match with any of the <entry> elements of the <PrivateCall> element of the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]); and

ii) if configuration is not set in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) that allows the MCPTT user to make a private call to users not contained within the <entry> elements of the <PrivateCall> element;

then:

i) shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "153 user not authorised to call any of the users requested in the first-to-answer call" in a Warning header field as specified in clause 4.4 and shall not continue with the rest of the steps;

13) if the call is a first-to-answer call and:

a) if the <allow-request-first-to-answer-call> element of the <ruleset> element is not present in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) or is set to a value of "false", (see the MCPTT user profile document in 3GPP TS 24.484 [50]);

then:

a) shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "156 user not authorised to originate a first-to-answer call" in a Warning header field as specified in clause 4.4 and shall not continue with the rest of the steps;

14) shall validate the media parameters and if the MCPTT speech codec is not offered in the "SIP INVITE request for originating participating MCPTT function" shall reject the request with a SIP 488 (Not Acceptable Here) response. Otherwise, continue with the rest of the steps;

15) shall generate a SIP INVITE request as specified in clause 6.3.2.1.3 with the following clarifications:

a) if the call is a first-to-answer call and if the <PrivateCall> element exists in the MCPTT user profile document with one or more <entry> elements (see the MCPTT user profile document in 3GPP TS 24.484 [50]), then only the <entry> elements of the application/resource-lists MIME body that have a "uri" attribute that matched with the <entry> elements of the <PrivateCall> element are included in the application/resource-lists MIME body and the <session-type> is set to "first-to-answer" in the application/vnd.3gpp.mcptt-info+xml MIME body of the SIP INVITE request generated in clause 6.3.2.1.3;

16) shall set the Request-URI to the public service identity of the controlling MCPTT function hosting the private call service or first-to-answer call service as determined by step 6);

17) shall set the <mcptt-calling-user-id> element in an application/vnd.3gpp.mcptt-info+xml MIME body of the SIP INVITE request to the MCPTT ID of the calling user;

18) if the call is a private call and:

a) if a Priv-Answer-Mode header field specified in IETF RFC 5373 [18] was received in the incoming SIP INVITE request with a value of "Manual", shall not include a Priv-Answer-Mode header field in the outgoing SIP INVITE request;

b) if the <allow-force-auto-answer> element of the <ruleset> element is not present in the MCPTT user profile document on the participating MCPTT function or is present with the value "false" (see the MCPTT user profile document in 3GPP TS 24.484 [50]), and the Priv-Answer-Mode header field specified in IETF RFC 5373 [18] was received in the incoming SIP INVITE request with a value of "Auto", shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "143 not authorised to force auto answer" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

c) if the <allow-force-auto-answer> element of the <ruleset> element is present in the MCPTT user profile document with the value "true" (see the MCPTT user profile document in 3GPP TS 24.484 [50]) on the participating MCPTT function, and the Priv-Answer-Mode header field specified in IETF RFC 5373 [18] was received in the incoming SIP INVITE request with a value of "Auto", shall include the Priv-Answer-Mode header field set to a value of "Auto" in the outgoing SIP INVITE request;

d) if a Priv-Answer-Mode header field containing the value of "Auto" has not been included in the outgoing SIP INVITE request as specified in step 17) above and the incoming "SIP INVITE request for originating participating MCPTT function" contained an Answer-Mode header field as specified in IETF RFC 5373 [18], then shall populate the Answer-Mode header field of the outgoing SIP INVITE request with the contents of the Answer-Mode header field from the incoming "SIP INVITE request for originating participating MCPTT function";

19) shall include in the SIP INVITE request an SDP offer based on the SDP offer in the received "SIP INVITE request for originating participating MCPTT function", as specified in clause 6.3.2.1.1.1;

20) shall include a Resource-Priority header field according to rules and procedures of 3GPP TS 24.229 [4] set to the value indicated in the Resource-Priority header field if included in the SIP INVITE request from the MCPTT client; and

21) shall forward the SIP INVITE request, according to 3GPP TS 24.229 [4].

Upon receiving a SIP 180 (Ringing) response, the participating MCPTT function:

1) shall generate a SIP 180 (Ringing) response to the SIP INVITE request as specified in the clause 6.3.2.1.5.1;

2) shall include the P-Asserted-Identity header field as received in the incoming SIP 180 (Ringing) response;

3) shall include Warning header field(s) received in the incoming SIP 180 (Ringing) response; and

4) shall send the SIP 180 (Ringing) response to the inviting MCPTT client according to 3GPP TS 24.229 [4].

Upon receiving a SIP 200 (OK) response, the participating MCPTT function:

1) shall generate a SIP 200 (OK) response as specified in the clause 6.3.2.1.5.2;

2) shall include in the SIP 200 (OK) response an SDP answer as specified in the clause 6.3.2.1.2.1;

3) shall include Warning header field(s) received in the incoming SIP 200 (OK) response;

4) shall include the P-Asserted-Identity header field received in the incoming SIP 200 (OK) response into the outgoing SIP 200 (OK) response;

5) shall include an MCPTT session identity mapped to the MCPTT session identity provided in the Contact header field of the received SIP 200 (OK) response;

5A) shall include the answer state into the P-Answer-State header field of the outgoing SIP 200 (OK) response, if received in the P-Answer-State header field of the incoming SIP 200 (OK) response;

6) shall send the SIP 200 (OK) response to the inviting MCPTT client according to 3GPP TS 24.229 [4];

7) shall interact with the media plane as specified in 3GPP TS 24.380 [5]; and

8) shall start the SIP session timer according to rules and procedures of IETF RFC 4028 [7].

The participating MCPTT function shall forward any other SIP response that does not contain SDP, including any MIME bodies contained therein, along the signalling path to the originating network according to 3GPP TS 24.229 [4].

###### 11.1.1.3.1.2 Private call and first-to-answer call initiation using pre-established session

Upon receipt of a "SIP REFER request for a pre-established session", with:

1) the Refer-To header field containing a Content-ID ("cid") Uniform Resource Locator (URL) as specified in IETF RFC 2392 [62] that points to an application/resource-lists MIME body as specified in IETF RFC 5366 [20] containing one or more <entry> element(s) with a "uri" attribute containing a SIP-URI set to the MCPTT ID of the called user(s);

2) a body" URI header field of the SIP-URI specified above containing an application/vnd.3gpp.mcptt-info MIME body with the <session-type> element set to "private" or "first-to-answer"; and

3) a Content-ID header field set to the "cid" URL;

the participating function:

1) if unable to process the request due to a lack of resources or a risk of congestion exists, may reject the SIP INVITE request with a SIP 500 (Server Internal Error) response. The participating MCPTT function may include a Retry-After header field to the SIP 500 (Server Internal Error) response as specified in IETF RFC 3261 [24] and shall not continue with the rest of the steps;

NOTE 1: If the application/vnd.3gpp.mcptt-info MIME body included in the SIP REFER request as described at the top of the present clause contains an <emergency-ind> element or <imminentperil-ind> element set to a value of "true", and this is an authorised request for originating a priority call as determined by clause 6.3.2.1.8.1, the participating MCPTT function can according to local policy choose to accept the request.

2) shall determine the MCPTT ID of the calling user from public user identity in the P-Asserted-Identity header field of the SIP REFER request;

3) if the participating MCPTT function cannot find a binding between the public user identity and an MCPTT ID or if the validity period of an existing binding has expired, then the participating MCPTT function shall reject the SIP REFER request with a SIP 404 (Not Found) response with the warning text set to "141 user unknown to the participating function" in a Warning header field as specified in clause 4.4, and shall not continue with any of the remaining steps;

4) if the received SIP REFER request does not contain an application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field, shall reject the "SIP REFER request for pre-established session" with a SIP 403 (Forbidden) response including warning text set to "145 unable to determine called party" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

5) if the received SIP REFER request contains an application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field with more than one <entry> element each with an application/vnd.3gpp.mcptt-info MIME body with the <session-type> element:

a) not set to "first-to-answer", shall reject the "SIP REFER request for pre-established session" with a SIP 403 (Forbidden) response including warning text set to "145 unable to determine called party" in a Warning header field as specified in clause 4.4, and shall not continue with any of the remaining steps; or

b) set to "first-to-answer", determine that the call is a first-to-answer call;

6) if the received SIP REFER request contains an application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field with only one <entry> element with an application/vnd.3gpp.mcptt-info MIME body with the <session-type> element:

a) not set to "private", shall reject the "SIP REFER request for pre-established session" with a SIP 403 (Forbidden) response including warning text set to "145 unable to determine called party" in a Warning header field as specified in clause 4.4, and shall not continue with any of the remaining steps; or

b) set to "private", determine that the call is a private call;

7) if the call is a:

a) private call, shall determine the public service identity of the controlling MCPTT function for the private call service associated with the originating user's MCPTT ID; or

b) first-to-answer call, shall determine the public service identity of the controlling MCPTT function for the first-to-answer call service associated with the originating user's MCPTT ID;

NOTE 2: How the participating MCPTT server discovers the public service identity of the controlling MCPTT function associated with the private call service or first-to-answer service of the calling user is out of scope of the current document.

8) if the participating MCPTT function is unable to identify the controlling MCPTT function for the private call service or first-to-answer call service associated with the originating user's MCPTT ID, it shall reject the REFER request with a SIP 404 (Not Found) response with the warning text "142 unable to determine the controlling function" in a Warning header field as specified in clause 4.4, and shall not continue with any of the remaining steps;

9) if the <allow-private-call> element of the <ruleset> element is not present in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) on the participating MCPTT function or is present with the value "false", indicating that the user identified by the MCPTT ID is not authorised to initiate private calls, shall reject the "SIP REFER request for pre-established session" with a SIP 403 (Forbidden) response to the SIP INVITE request, with warning text set to "107 user not authorised to make private calls" in a Warning header field as specified in clause 4.4;

10) if the call is a private call:

a) if the received SIP REFER request includes an Answer-Mode header field as specified in IETF RFC 5373 [18] set to "Auto" contained in the header portion of the SIP URI present in the application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field, and the <allow-automatic-commencement> element of the <ruleset> element is not present in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) on the participating MCPTT function or is present with the value "false" (indicating that the user identified by the MCPTT ID is not authorised to initiate private call with automatic commencement), shall reject the "SIP REFER request for pre-established session” with a SIP 403 (Forbidden) response including warning text set to "125 user not authorised to make private call with automatic commencement" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

b) if the received SIP REFER request includes an Answer-Mode header field as specified in IETF RFC 5373 [18] set to "Manual" contained in the header portion of the SIP URI present in the application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field, and the <allow-manual-commencement> element of the <ruleset> element is not present in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) on the participating MCPTT function or is present with the value "false" (indicating that the user identified by the MCPTT ID is not authorised to initiate private call with manual commencement), shall reject the "SIP REFER request for pre-established session” with a SIP 403 (Forbidden) response including warning text set to "126 user not authorised to make private call with manual commencement" in a Warning header field as specified in clause 4.4 and shall not continue with the rest of the steps;

c) if the <allow-force-auto-answer> element of the <ruleset> element is not present in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) on the participating MCPTT function or is present with the value "false", and the SIP REFER request contained a Priv-Answer-Mode header field as specified in IETF RFC 5373 [18] set to "Auto" in the header portion of the SIP URI in the application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field, shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "143 not authorised to force auto answer" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

d) if the <PrivateCall> element exists in the MCPTT user profile document with one more <entry> elements (see the MCPTT user profile document in 3GPP TS 24.484 [50]) and:

i) if the SIP-URI in the application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field not match with one of the <entry> elements of the <PrivateCall> element of the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]); and

ii) if configuration is not set in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) that allows the MCPTT user to make a private call to users not contained within the <entry> elements of the <PrivateCall> element;

then:

i) shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "144 user not authorised to call this particular user" in a Warning header field as specified in clause 4.4 and shall not continue with the rest of the steps;

11) if the call is a first-to-answer call and if the <PrivateCall> element exists in the MCPTT user profile document with one or more <entry> elements (see the MCPTT user profile document in 3GPP TS 24.484 [50]) and:

a) the "uri" attribute of each and every <entry> element of the application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field does not match with any of the <entry> elements of the <PrivateCall> element of the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]); and

b) if configuration is not set in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) that allows the MCPTT user to make a private call to users not contained within the <entry> elements of the <PrivateCall> element;

then:

a) shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "153 user not authorised to call any of the users requested in the first-to-answer call" in a Warning header field as specified in clause 4.4 and shall not continue with the rest of the steps;

12) if the call is a first-to-answer call and:

a) if the <allow-request-first-to-answer-call> element of the <ruleset> element is not present in the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) or is set to a value of "false", (see the MCPTT user profile document in 3GPP TS 24.484 [50]);

then:

a) shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response including warning text set to "156 user not authorised to originate a first-to-answer call" in a Warning header field as specified in clause 4.4 and shall not continue with the rest of the steps;

13) if the "SIP REFER request for a pre-established session" contained a Refer-Sub header field containing "false" value and a Supported header field containing "norefersub" value, shall handle the SIP REFER request as specified in 3GPP TS 24.229 [4], IETF RFC 3515 [25] as updated by IETF RFC 6665 [26], and IETF RFC 4488 [22] without establishing an implicit subscription;

14) shall generate a final SIP 200 (OK) response to the "SIP REFER request for a pre-established session" according to 3GPP TS 24.229 [4];

NOTE 3: In accordance with IETF RFC 4488 [22], the participating MCPTT function inserts the Refer-Sub header field containing the value "false" in the SIP 200 (OK) response to the SIP REFER request to indicate that it has not created an implicit subscription.

15) shall send the response to the "SIP REFER request for a pre-established session" towards the MCPTT client according to 3GPP TS 24.229 [4];

16) shall generate a SIP INVITE request as specified in clause 6.3.2.1.4 with the following clarifications:

a) if the call is a first-to-answer call and if the <PrivateCall> element exists in the MCPTT user profile document with one or more <entry> elements (see the MCPTT user profile document in 3GPP TS 24.484 [50]), only the <entry> elements of the application/resource-lists MIME body that have a "uri" attribute that matched with the <entry> elements of the <PrivateCall> element are included in the application/resource-lists MIME body and the <session-type> is set to "first-to-answer" in the application/vnd.3gpp.mcptt-info+xml MIME body of the SIP INVITE request generated in clause 6.3.2.1.4;

17) shall set the Request-URI of the SIP INVITE request to the public service identity of the controlling MCPTT function hosting the private call service or first-to-answer call service for the calling MCPTT user as determined above in step 7);

18) if the call is a private call:

a) if the SIP REFER request contained a Priv-Answer-Mode header field as specified in IETF RFC 5373 [18] set to "Manual" in the header portion of the SIP URI in the application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field, shall copy the Priv-Answer-Mode header field from the incoming SIP REFER request to the outgoing SIP INVITE request;

b) if the <allow-force-auto-answer> element of the <ruleset> element is present in the MCPTT user profile document with the value "true" (see the MCPTT user profile document in 3GPP TS 24.484 [50]) on the participating MCPTT function, and the Priv-Answer-Mode header field specified in IETF RFC 5373 [18] was received in the header portion of the SIP URI in the application/resource-lists MIME body referenced by a "cid" URL in the Refer-To header field, with a value set to "Auto", shall copy the Priv-Answer-Mode header field to the outgoing SIP INVITE request; and

c) if a Priv-Answer-Mode header field containing the value of "Auto" has not been copied to the outgoing SIP INVITE request as specified in step 16) above, and the incoming SIP REFER request contained an Answer-Mode header field in the headers portion of the SIP URI in the application/resource-lists referenced by a "cid" URL in the Refer-To header field, then copy the Answer-Mode header field to the outgoing SIP INVITE request;

19) if the received SIP REFER request contained a Resource-Priority header field, shall include in the outgoing SIP INVITE request a Resource-Priority header field according to rules and procedures of 3GPP TS 24.229 [4] set to the value indicated in the Resource-Priority header field of the received SIP REFER request; and

NOTE 4: The participating MCPTT function will leave verification of the Resource-Priority header field to the controlling MCPTT function.

20) shall forward the SIP INVITE request according to 3GPP TS 24.229 [4].

Upon receiving SIP provisional responses for the SIP INVITE request the participating MCPTT function:

1) shall discard the received SIP responses without forwarding them.

Upon receiving a SIP 200 (OK) response for the SIP INVITE request the participating MCPTT function:

1) if:

a) the received SIP 2xx response was in response to a request for an MCPTT private call; or

b) the received SIP 2xx response was in response to a SIP INVITE request for a first-to-answer call which did not include an a=key-mgmt "mikey" attribute value containing a MIKEY-SAKKE I\_MESSAGE in the SDP answer;

then:

a) shall interact with the media plane as specified in 3GPP TS 24.380 [5];

2) if the received SIP 2xx response was in response to a request for an MCPTT emergency private call and does not contain a Warning header field as specified in clause 4.4 with the warning text containing the mcptt-warn-code set to "149":

a) shall generate a SIP re-INVITE request to be sent towards the MCPTT client within the pre-established session as specified in clause 6.3.2.1.8.6;

b) shall send the SIP re-INVITE request towards the MCPTT client within the pre-established session according to 3GPP TS 24.229 [4]; and

c) if the received SIP 2xx response was in response to a request for a first-to-answer call, upon receipt of a SIP 2xx response to the SIP re-INVITE, shall interact with the media plane as specified in 3GPP TS 24.380 [5]; and

3) if the received SIP 2xx response was in response to a SIP INVITE request for a first-to-answer call which was not a request for an MCPTT emergency private call and contains an SDP answer including an a=key-mgmt "mikey" attribute value containing a MIKEY-SAKKE I\_MESSAGE, the participating MCPTT function:

a) shall generate a SIP re-INVITE request as specified in clause 6.3.2.1.8.7;

b) shall send the SIP re-INVITE request towards the originating MCPTT client according to 3GPP TS 24.229 [4]; and

c) upon receipt of a SIP 2xx response to the SIP re-INVITE, shall interact with the media plane as specified in 3GPP TS 24.380 [5].

Upon receiving a SIP INFO request from the controlling MCPTT function within the dialog of the SIP INVITE request for an MCPTT emergency private call, the participating MCPTT function shall:

1) shall send a SIP 200 (OK) response to the SIP INFO request to the controlling MCPTT function as specified in 3GPP TS 24.229 [4];

2) shall generate a SIP re-INVITE request to be sent towards the MCPTT client within the pre-established session as specified in clause 6.3.2.1.8.6; and

3) shall send the SIP re-INVITE request the MCPTT client according to 3GPP TS 24.229 [4].

Upon receipt of a SIP 4xx, 5xx or 6xx response to the above SIP INVITE request in step 20) the participating MCPTT function:

1) shall interact with the media plane as specified in 3GPP TS 24.380 [5].

\* \* \* End of Changes \* \* \* \*