**3GPP TSG- Meeting #**

**, , - was C1-242030**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
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| *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 | **x** | Radio Access Network |  | Core Network | **x** |

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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
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| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
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| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *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 can be 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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | This CR is adding adhoc group call to session release policy for group calls, it corrects the way how the PSI of the controlling function is determined by the originating participating function, and it adds necessary flexibility to modify the criteria when sending it from the controlling function to the termiinating participating function | | | | | | | | |
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| ***Summary of change:*** | | 6.3.8.1: Adding conditions specific for adhoc group call.  17.3.2.1.1: Added option to determine the PSI of the controlling function associated with the adhoc group identity.  17.3.2.2.1: Added option to determine the PSI of the controlling function associated with the adhoc group identity.  17.4.6.1: Adding option (based on local policy) to modify the criteria received from the client when passing it from the controlling function to the terminating participating function. This is necessary if the terminating participating function does not have information it needs to process the request (e.g. location of the originator of the call). | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Release policy for adhoc group call remains missing. Impossible to start an adhoc group call on a specific controlling function (this is necessary if an adhoc group call is started following an adhoc group emergency alert that has a controlling function that is not associated with the originating user's identity). Missing capability to pass the necessary criteria from the controlling function to the terminating participating function. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.3.8.1, 17.3.2.1.1, 17.3.2.2.1. 17.4.6.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

#### 6.3.8.1 Session release policy for group call

If:

1) the call is a pre-arranged group call and if the controlling MCPTT function receives an indication from the media plane that the T4 (Inactivity) timer specified in 3GPP TS 24.380 [5] expired;

2) there are only one or no participants in the MCPTT session;

3) the call is a pre-arranged group call and if it is according to local policy, the initiator of the group call leaves the MCPTT session;

4) the minimum number of affiliated MCPTT group members is not present;

5) timer TNG3 (group call timer) expires;

6) the call is a broadcast group call and if the controlling MCPTT function receives an indication from the media plane that the T4 (Inactivity) timer specified in 3GPP TS 24.380 [5] expired;

7) the call is an ad hoc group call and if the controlling MCPTT function receives an indication from the media plane that the T4 (Inactivity) timer specified in 3GPP TS 24.380 [5] expired;

8) the call is an ad hoc group call and if it is according to local policy, the initiator of the group call leaves the MCPTT session; or

9) the call is an ad hoc group call and if it is according to local policy, one or multiple specific user of the group call leave the MCPTT session;

the controlling MCPTT function shall release the MCPTT session for the group call.

\* \* \* Next Change \* \* \* \*

##### 17.3.2.1.1 Originating procedures

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 "adhoc", the participating MCPTT 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]. Otherwise, continue with the rest of the steps;

2) 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;

NOTE 1: 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.

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 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;

4) if through local policy in the participating MCPTT function, the user identified by the MCPTT ID is not authorised to initiate adhoc group calls, shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response to the SIP INVITE request, with warning text set to "184 user not authorised to make adhoc group calls" in a Warning header field as specified in clause 4.4;

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

6) shall check if the number of maximum simultaneous MCPTT group calls supported for the MCPTT user as specified in the <MaxSimultaneousCallsN6> element of the <MCPTT-group-call> element of the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) has been exceeded. If exceeded, the participating MCPTT function shall respond with a SIP 486 (Busy Here) response with the warning text set to "103 maximum simultaneous MCPTT group calls reached" in a Warning header field as specified in clause 4.4. Otherwise, continue with the rest of the steps;

7) shall determine the public service identity of the controlling MCPTT function for the adhoc group call service associated with:

a) the originating user's identity i.e. MCPTT ID, if the incoming SIP REFER request contained an application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element containing the <anyExt> element with a <call-participants-criterias> element or if the incoming SIP REFER request contained an application/resource-lists+xml MIME body without the <adhoc-grp-emg-alert-grp-ind> element set to "true" in application/vnd.3gpp.mcptt-info+xml MIME body;

b) the adhoc group identity i.e. MCPTT Group ID, if the incoming SIP REFER request contained an application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element containing the <anyExt> element with the <adhoc-grp-emg-alert-grp-ind> element set to "true"; and

c) in case of rejoining an ongoing adhoc group call, the session identity of the ongoing adhoc group call;

NOTE 2: The public service identity can identify the controlling MCPTT function in the primary MCPTT system or in a partner MCPTT system.

NOTE 3: If the controlling MCPTT function is in a partner MCPTT system in a different trust domain, then the public service identity can identify the MCPTT gateway server that acts as an entry point in the partner MCPTT system from the primary MCPTT system.

NOTE 4: If the controlling MCPTT function is in a partner MCPTT system in a different trust domain, then the primary MCPTT system can route the SIP request through an MCPTT gateway server that acts as an exit point from the primary MCPTT system to the partner MCPTT system.

NOTE 5: How the participating MCPTT function determines the public service identity of the targeted controlling MCPTT function or of the MCPTT gateway server in the partner MCPTT system is out of the scope of the present document.

NOTE 6: How the primary MCPTT system routes the SIP request through an exit MCPTT gateway server is out of the scope of the present document.

NOTE 7: The controlling MCPTT function is always in the same system as the adhoc group call was initiated.

8) if the participating MCPTT function is unable to identify the controlling MCPTT function for the adhoc group 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;

9) if the <allow-adhoc-group-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 adhoc group calls, shall reject the "SIP INVITE request for originating participating MCPTT function" with a SIP 403 (Forbidden) response, with warning text set to "185 user is not authorised to initiate the adhoc group call" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

10) shall generate a SIP INVITE request as specified in clause 6.3.2.1.3;

11) shall set the Request-URI to the public service identity of the controlling MCPTT function as determined in step 7;

12) shall not copy the following header fields from the incoming SIP INVITE request to the outgoing SIP INVITE request, if they were present in the incoming SIP INVITE request:

a) Answer-Mode header field as specified in IETF RFC 5373 [18]; and

b) Priv-Answer-Mode header field as specified in IETF RFC 5373 [18];

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

14) shall include in the SIP INVITE request an SDP offer based on the SDP offer in the received SIP INVITE request from the MCPTT client as specified in clause 6.3.2.1.1.1;

15) if the received SIP request contains a <functional-alias-URI> element of the application/vnd.3gpp.mcptt-info+xml MIME body, then check if the status of the functional alias is activated for the MCPTT ID. If the functional alias status is activated, then set the <functional-alias-URI> element of the application/vnd.3gpp.mcptt-info+xml MIME body in the outgoing SIP INVITE request to the received value, if the status is not activated then do not include a <functional-alias-URI> element;

NOTE 8: The participating MCPTT server learns the functional alias state for an MCPTT ID from procedures specified in clause 9A.2.2.2.7.

16) if a Resource-Priority header field was included in the received SIP INVITE request, 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 of the SIP INVITE request from the MCPTT client;

NOTE 9: The participating MCPTT function will leave the verification of the Resource-Priority header field to the controlling MCPTT function.

17) if, according to clause 6.4, the SIP INVITE request is regarded as being received with an implicit request to grant the floor to the originating MCPTT client:

if:

a) the incoming SIP INVITE request contained an application/vnd.3gpp.mcptt-location-info+xml MIME body with a <Report> element included in the <location-info> root element; and

b) the <allow-location-info-when-talking> element of the <ruleset> element of the MCPTT user profile document identified by the MCPTT ID of the calling MCPTT user (see the MCPTT user profile document in 3GPP TS 24.484 [50]) is set to a value of "true";

then shall copy the application/vnd.3gpp.mcptt-location-info+xml MIME body from the received SIP INVITE request into the outgoing SIP INVITE request;

otherwise:

if:

a) the participating MCPTT function has the location of the originating MCPTT client available; and

b) the <allow-location-info-when-talking> element of the <ruleset> element of the MCPTT user profile document identified by the MCPTT ID of the calling MCPTT user (see the MCPTT user profile document in 3GPP TS 24.484 [50]) is set to a value of "true";

then shall include an application/vnd.3gpp.mcptt-location-info+xml MIME body with a <Report> element included in the <location-info> root element; and

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

Upon receipt of a SIP 2xx response in response to the above SIP INVITE request, the participating MCPTT function:

1) shall generate a SIP 200 (OK) response as in clause 6.3.2.1.5.2 with the clarification that if an <MKFC-GKTPs> element was contained in the received SIP 2xx response it is not included in the generated SIP 200 (OK) response;

NOTE 10: If an <MKFC-GKTPs> element is received in a SIP 2xx response, the participating MCPTT function essentially ignores it and does not forward it, resulting in unicast media plane transmission being used for the originating client.

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) that were received in the incoming SIP 200 (OK) response;

4) shall include a P-Asserted-Identity header field in the outgoing SIP 200 (OK) response set to the public service identity of the participating MCPTT function;

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;

6) 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;

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

8) shall interact with Media Plane as specified in 3GPP TS 24.380 [5]; and

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

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

1) shall generate a SIP response according to 3GPP TS 24.229 [4];

2) shall include Warning header field(s) that were received in the incoming SIP response; and

3) shall forward the SIP response to the MCPTT client according to 3GPP TS 24.229 [4].

\* \* \* Next Change \* \* \* \*

##### 17.3.2.2.1 Originating procedures

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:

a) points to an application/resource-lists+xml MIME body as specified in IETF RFC 5366 [20] containing one or more <entry> element(s) in the <list> element in the <resource-lists> element, where the <entry> element contains a "uri" attribute containing a SIP URI set to the MCPTT ID of the called user(s) or ;

b) points to an MIME body section which conatins one or more MIME bodies and Content-Type header filed set to "application/vnd.3gpp.mcptt-info+xml" or set to "multipart/mixed";

2) an hname "body" parameter in the headers portion of the SIP URI specified above containing an application/vnd.3gpp.mcptt-info MIME body with the <session-type> element set to "adhoc"; and

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

the participating MCPTT function:

1) if unable to process the request due to a lack of resources or a risk of congestion exists, may reject the SIP REFER 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;

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;

NOTE 1: 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.

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 through local policy in the participating MCPTT function, the user identified by the MCPTT ID is not authorised to initiate adhoc group calls, shall reject the "SIP REFER request for pre-established session" with a SIP 403 (Forbidden) response to the SIP REFER request, with warning text set to "184 user not authorised to make adhoc group calls" in a Warning header field as specified in clause 4.4;

5) shall check if the number of maximum simultaneous MCPTT group calls supported for the MCPTT user as specified in the <MaxSimultaneousCallsN6> element of the <MCPTT-group-call> element of the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]) has been exceeded. If exceeded, the participating MCPTT function shall respond with a SIP 486 (Busy Here) response with the warning text set to "103 maximum simultaneous MCPTT group calls reached" in a Warning header field as specified in clause 4.4. Otherwise, continue with the rest of the steps;

6) shall determine the public service identity of the controlling MCPTT function for the adhoc group call service associated with:

a) the originating user's identity i.e. MCPTT ID, if the incoming SIP REFER request contained an application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element containing the <anyExt> element with a <call-participants-criterias> element or if the incoming SIP REFER request contained an application/resource-lists+xml MIME body without the <adhoc-grp-emg-alert-grp-ind> element set to "true" in application/vnd.3gpp.mcptt-info+xml MIME body;

b) the adhoc group identity i.e. MCPTT Group ID, if the incoming SIP REFER request contained an application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element containing the <anyExt> element with the <adhoc-grp-emg-alert-grp-ind> element set to "true"; and

c) in case of rejoining an ongoing adhoc group call, the session identity of the ongoing adhoc group call;

NOTE 2: The public service identity can identify the controlling MCPTT function in the primary MCPTT system or in a partner MCPTT system.

NOTE 3: If the controlling MCPTT function is in a partner MCPTT system in a different trust domain, then the public service identity can identify the MCPTT gateway server that acts as an entry point in the partner MCPTT system from the primary MCPTT system.

NOTE 4: If the controlling MCPTT function is in a partner MCPTT system in a different trust domain, then the primary MCPTT system can route the SIP request through an MCPTT gateway server that acts as an exit point from the primary MCPTT system to the partner MCPTT system.

NOTE 5: How the participating MCPTT function determines the public service identity of the targeted controlling MCPTT function or of the MCPTT gateway server in the partner MCPTT system is out of the scope of the present document.

NOTE 6: How the primary MCPTT system routes the SIP request through an exit MCPTT gateway server is out of the scope of the present document.

NOTE 7: The controlling MCPTT function is always in the same system as the adhoc group call was initiated.

7) if the participating MCPTT function is unable to identify the controlling MCPTT function for the adhoc group call service associated with the originating user's MCPTT ID identity, it shall reject the SIP 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;

8) if the <allow-adhoc-group-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 adhoc group calls, shall reject the "SIP REFER request for a pre-established session" with a SIP 403 (Forbidden) response, with warning text set to "185 user is not authorised to initiate the adhoc group call" in a Warning header field as specified in clause 4.4, and shall not continue with the rest of the steps;

9) 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;

10) 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 8: 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.

11) shall wait for the receipt of a SIP response to the SIP INVITE request that will be generated and sent in subsequent steps;

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

a) if the <adhoc-grp-emg-alert-grp-ind> element of the <anyExt> element of <mcptt-Params> element of <mcpttinfo> element of the application/vnd.3gpp.mcptt-info+xml MIME body in the SIP INVITE request set to a value of "true", shall copy the identity of adhoc group from the "uri" attribute of the <entry> element of a <list> element of the <resource-lists> element of the application/resource-lists+xml MIME body pointed to by the "cid" URL in the Refer-to header field of the SIP REFER request, to the <mcptt-request-uri> element of the application/vnd.3gpp.mcptt-info+xml MIME body in the SIP INVITE request and do not include application/resource-lists+xml MIME body;

NOTE 9: The MCPTT client can include either a list of MCPTT users or the criteria for determining the list of MCPTT users to be called. These two information elements are not included if the call setup request follows an adhoc group for emergency alerts.

13) shall set the Request-URI to the public service identity of the controlling MCPTT function as determined in step 6;

14) shall not copy the following header fields from the incoming SIP INVITE request to the outgoing SIP INVITE request, if they were present in the incoming SIP INVITE request:

a) Answer-Mode header field as specified in IETF RFC 5373 [18]; and

b) Priv-Answer-Mode header field as specified in IETF RFC 5373 [18];

15) 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 from the MCPTT client;

NOTE 10: The participating MCPTT function will leave verification of the Resource-Priority header field to the controlling MCPTT function.

16) if, according to clause 6.4, the SIP REFER request is regarded as being received with an implicit request to grant the floor to the initiating MCPTT client:

if:

a) the incoming SIP REFER request contained an application/vnd.3gpp.mcptt-location-info+xml MIME body with a <Report> element included in the <location-info> root element; and

b) the <allow-location-info-when-talking> element of the <ruleset> element of the MCPTT user profile document identified by the MCPTT ID of the calling MCPTT user (see the MCPTT user profile document in 3GPP TS 24.484 [50]) is set to a value of "true";

then shall copy the application/vnd.3gpp.mcptt-location-info+xml MIME body from the received SIP REFER request into the outgoing SIP INVITE request;

otherwise:

if:

a) the participating MCPTT function has available the location of the initiating MCPTT client; and

b) the <allow-location-info-when-talking> element of the <ruleset> element of the MCPTT user profile document identified by the MCPTT ID of the calling MCPTT user (see the MCPTT user profile document in 3GPP TS 24.484 [50]) is set to a value of "true";

then shall include an application/vnd.3gpp.mcptt-location-info+xml MIME body with a <Report> element included in the <location-info> root element; and

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

2) shall include the application/vnd.3gpp.mcptt-info+xml MIME body received in the SIP 200 (OK) response into the generated final SIP 200 (OK) response to the "SIP REFER request for a pre-established session";

3) shall send the generated final SIP 200 (OK) response to 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, the participating MCPTT function:

1) shall generate a SIP response according to 3GPP TS 24.229 [4]; and

2) shall forward the SIP response to the MCPTT client according to 3GPP TS 24.229 [4].

\* \* \* Next Change \* \* \* \*

#### 17.4.6.1 Call participants determination procedures

When the controlling MCPTT function needs to determine the MCPTT users meeting the specified criteria, then the controlling MCPTT function shall create a list of terminating participating MCPTT functions from which users are to be determined to be involved in an adhoc group session. For each terminating participating MCPTT function in the list, the controlling MCPTT function:

1) shall generate an outgoing SIP MESSAGE request in accordance with 3GPP TS 24.229 [4] and IETF RFC 3428 [33];

2) shall set the Request-URI of the outgoing SIP MESSAGE request to the public service identity of the terminating participating MCPTT function;

NOTE 1: The public service identity can identify the terminating participating MCPTT function in the primary MCPTT system or in a partner MCPTT system.

NOTE 2: If the terminating participating MCPTT function is in a partner MCPTT system in a different trust domain, then the public service identity can identify the MCPTT gateway server that acts as an entry point in the partner MCPTT system from the primary MCPTT system.

NOTE 3: If the terminating participating MCPTT function is in a partner MCPTT system in a different trust domain, then the primary MCPTT system can route the SIP request through an MCPTT gateway server that acts as an exit point from the primary MCPTT system to the partner MCPTT system.

NOTE 4: How the controlling MCPTT function determines the public service identity of the targeted terminating participating MCPTT function or of the MCPTT gateway server in the partner MCPTT system is out of the scope of the present document.

NOTE 5: How the primary MCPTT system routes the SIP request through an exit MCPTT gateway server is out of the scope of the present document.

3) shall include a P-Asserted-Identity header field set to the public service identity of controlling MCPTT function;

4) shall include the ICSI value "urn:urn-7:3gpp-service.ims.icsi.mcptt" (coded as specified in 3GPP TS 24.229 [4]), in a P-Asserted-Service-Id header field according to IETF RFC 6050 [9];

5) shall include an application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element with:

a) the <mcptt-request-uri> element set to the adhoc group identity;

b) shall copy or modify based on local policy the criteria for determining the list of MCPTT users to be called that exists in the incoming SIP INVITE request included in the <call-participants-criterias> element of the <anyExt> element of <mcptt-Params> element of <mcpttinfo> element of the application/vnd.3gpp.mcptt-info+xml MIME body, into the application/vnd.3gpp.mcptt-info+xml MIME body of the outgoing SIP MESSAGE request; and

c) an <anyExt> element containing:

i) the <req-type> element set to a value of "get-userlist-adhoc-group-call-request"; and

6) shall send the SIP MESSAGE request according to rules and procedures of 3GPP TS 24.229 [4].

On receiving a SIP 4xx response a SIP 5xx response or a SIP 6xx response to the SIP MESSAGE request, the controlling MCPTT function shall consider the user served by the terminating participating MCPTT function are not available and remove from the created list of of terminating participating MCPTT functions.

NOTE 6: Based on implementation the controlling MCPTT function can reattempt again before removing from the created list of of terminating participating MCPTT functions.

Upon receipt of SIP 2xx responses to the outgoing SIP MESSAGE requests, the controlling MCPTT function shall follow the procedures specified in 3GPP TS 24.229 [4].

On receipt of a "SIP MESSAGE request to get userlist for adhoc group call response for controlling MCPTT function" containing an application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element containing the <anyExt> element with the <resp-type> element set to a value of "get-userlist-adhoc-group-call-response" and an <mcptt-request-uri> matching the adhoc group identity included in the sent SIP MESSAGE request:

1) if the application/resource-lists+xml MIME body with the MCPTT ID of the MCPTT users meeting the specified criteria exists in the incoming SIP MESSAGE request, shall consider the each entry of the MCPTT users meeting the specified criteria to be invited to the adhoc group session; and

2) shall generate the SIP 200 (OK) response to the received SIP MESSAGE according to rules and procedures of 3GPP TS 24.229 [4] with the following clarifications:

a) if the criteria got modified in step 5)/b), shall include in the <anyExt> element of the <mcptt-Params> element of the <mcpttinfo> element contained in the application/vnd.3gpp.mcptt-info+xml MIME body a <call-participants-criterias> element set to the value of the modified criteria

3) shall send the SIP 200 (OK) response to the received SIP MESSAGE according to rules and procedures of 3GPP TS 24.229 [4].

\* \* \* Next Change \* \* \* \*