**3GPP TSG-CT WG1 Meeting #125-eC1-20wxyz**

**Electronic meeting, 20-28 August 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.379** | **CR** | **CR#** | **rev** | **-** | **Current version:** | **16.5.0** |  |
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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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Make regroup warning messages generic for MCX | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | FirstNet | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | enh2MCPTT-CT | | | | |  | ***Date:*** | | | 20 August 2020 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The new warning text created in subclause 4.4.2 for preconfigured regroup is useful and applicable to MCData and MCVideo as well. By removing the specific occurrences of "MCPTT", these warning messages can be reused for the other MCX services. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Modified the text and explanation for warnings 148, 160, 161, and 163 by removing the specific "MCPTT" wording. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The existing warning text will not be usable for the other MCX services and new warning numbers will need to be allocated for the same purposes in the other MCX services. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.4.2, 6.3.4.1.2, 10.1.1.4.2, 10.1.1.5.5, 10.1.2.5.1.8, 16.2.4.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \* \***

### 4.4.2 Warning texts

The text string included in a Warning header field consists of an explanatory text preceded by a 3-digit text code, according to the following format in Table 4.4.2-1.

Table 4.4.2-1 ABNF for the Warning text

warn-text =/ DQUOTE mcptt-warn-code SP mcptt-warn-text DQUOTE

mcptt-warn-code = DIGIT DIGIT DIGIT

mcptt-warn-text = \*( qdtext | quoted-pair )

Table 4.4.2-2 defines the warning texts that are defined for the Warning header field when a Warning header field is included in a response to a SIP INVITE request as specified in subclause 4.4.1.

Table 4.4.2-2: Warning texts defined for the Warning header field

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Code | | Explanatory text | | Description | |
| 100 | | function not allowed due to <detailed reason> | | The function is not allowed to this user.  The <detailed reason> will be either "group definition", "access policy", "local policy", "user authorisation" or "pre-established session not supported", or can be a free text string. | |
| 101 | | service authorisation failed | | The service authorisation of the MCPTT ID against the IMPU failed at the MCPTT server. | |
| 102 | | too many simultaneous affiliations | | The MCPTT user already has N2 maximum number of simultaneous affiliations. | |
| 103 | | maximum simultaneous MCPTT group calls reached | | The number of maximum simultaneous MCPTT group calls supported for the MCPTT user has been exceeded. | |
| 104 | | isfocus not assigned | | A controlling MCPTT function has not been assigned to the MCPTT session. | |
| 105 | | subscription not allowed in a broadcast group call | | Subscription to the conference event package rejected during a group call initiated as a broadcast group call. | |
| 106 | | user not authorised to join chat group | | The MCPTT user is not authorised to join this chat group. | |
| 107 | | user not authorised to make private calls | | The MCPTT user is not authorised to make private calls. | |
| 108 | | user not authorised to make chat group calls | | The MCPTT user is not authorised to make chat group calls. | |
| 109 | | user not authorised to make prearranged group calls | | The MCPTT user is not authorised to make group calls to a prearranged group. | |
| 110 | | user declined the call invitation | | The MCPTT user declined to accept the call. | |
| 111 | | group call proceeded without all required group members | | The required members of the group did not respond within the acknowledged call time, but the call still went ahead. | |
| 112 | | group call abandoned due to required group members not part of the group session | | The group call was abandoned, as the required members of the group did not respond within the acknowledged call time. | |
| 113 | | group document does not exist | | The group document requested from the group management server does not exist. | |
| 114 | | unable to retrieve group document | | The group document exists on the group management server but the MCPTT server was unable to retrieve it. | |
| 115 | | group is disabled | | The group has the <disabled> element set to "true" in the group management server. | |
| 116 | | user is not part of the MCPTT group | | The group exists on the group management server but the requesting user is not part of this group. | |
| 117 | | the group identity indicated in the request is a prearranged group | | The group id that is indicated in the request is for a prearranged group, but did not match the request from the MCPTT user. | |
| 118 | | the group identity indicated in the request is a chat group | | The group id that is indicated in the request is for a chat group, but did not match the request from the MCPTT user. | |
| 119 | | user is not authorised to initiate the group call | | The MCPTT user identified by the MCPTT ID is not authorised to initiate the group call. | |
| 120 | | user is not affiliated to this group | | The MCPTT user is not affiliated to the group. | |
| 121 | | user is not authorised to join the group call | | The MCPTT user identified by the MCPTT ID is not authorised to join the group call. | |
| 122 | | too many participants | | The group call has reached its maximum number of participants. | |
| 123 | | MCPTT session already exists | | Inform the MCPTT user that the group call is currently ongoing. | |
| 124 | | maximum number of private calls reached | | The maximum number of private calls allowed at the MCPTT server for the MCPTT user has been reached. | |
| 125 | | user not authorised to make private call with automatic commencement | | The MCPTT user is not authorised to make a private call with automatic commencement. | |
| 126 | | user not authorised to make private call with manual commencement | | The MCPTT user is not authorised to make a private call with manual commencement. | |
| 127 | | user not authorised to be called in private call | | The called MCPTT user is not allowed to be part of a private call. | |
| 128 | | isfocus already assigned | | The MCPTT server owning an MCPTT group received a SIP INVITE request destined to the MCPTT group from another MCPTT server already assigned as the controlling MCPTT function and the MCPTT server owning the MCPTT group does not support mutual aid or supports trusted mutual aid but does not authorise trusted mutual aid. | |
| 136 | | authentication of the MIKEY-SAKKE I\_MESSAGE failed | | The MCPTT client's application of the procedures of 3GPP TS 33.180 [78] to authenticate the received I\_MESSAGE fails. | |
| 137 | | the indicated group call does not exist | | The participating MCPTT function cannot find an ongoing group session associated with the received MCPTT session identity. | |
| 138 | | subscription of conference events not allowed | | The controlling MCPTT function could not allow the MCPTT user to subscribe to the conference event package. | |
| 139 | | integrity protection check failed | | The integrity protection of an XML MIME body failed. | |
| 140 | | unable to decrypt XML content | | The XML content cannot be decrypted. | |
| 141 | | user unknown to the participating function | | The participating function is unable to associate the public user identity with an MCPTT ID. | |
| 142 | | unable to determine the controlling function | | The participating function is unable to determine the controlling function for the group call or private call. | |
| 143 | | not authorised to force auto answer | | The calling user is not authorised to force auto answer on the called user. | |
| 144 | | user not authorised to call this particular user | | The calling user is not authorised to call this particular called user. | |
| 145 | | unable to determine called party | | The participating function was unable to determine the called party from the information received in the SIP request. | |
| 146 | | T-PF unable to determine the service settings for the called user | | The service settings have not been uploaded by the terminating client to the terminating participating server. | |
| 147 | | user is authorized to initiate a temporary group call | | The non-controlling MCPTT function has authorized a request from the controlling MCPTT function to authorize a user to initiate an temporary group session. | |
| 148 | | group is regrouped | | The group hosted by a non-controlling function is part of a temporary group session as the result of the group regroup function. | |
| 149 | | SIP-INFO request pending | | The MCPTT client needs to wait for a SIP-INFO request with specific content, before taking further action. | |
| 150 | | invalid combinations of data received in MIME body | | The MCPTT client included invalid combinations of data in the SIP request. | |
| 151 | | user not authorised to make a private call call-back request | | The MCPTT user is not authorised to make a private call call-back request. | |
| 152 | | user not authorised to make a private call call-back cancel request | | The MCPTT user is not authorised to make a private call call-back cancel request. | |
| 153 | | user not authorised to call any of the users requested in the first-to-answer call | | All users that were invited in the first-to-answer call cannot be involved in a private call with the inviting user. | |
| 154 | | user not authorised to make ambient listening call | | The MCPTT user is not authorised to make an ambient listening call. | |
| 155 | | user not authorised to change user's selected group | | The MCPTT user is not authorised to change the selected group of the targeted user. | |
| 156 | | user not authorised to originate a first-to-answer call | | The MCPTT user is not authorised to make a first-to-answer call. | |
| 157 | | user not authorised to request a remotely initiated group call | | The MCPTT user is not authorised to request a remotely initiated group call. | |
| 158 | | user not authorised to request a remotely initiated private call | | The MCPTT user is not authorised to request a remotely initiated private call. | |
| 159 | | user not authorised to be called by this originating user | | The called user is not authorised to receive a call by this originating user. | |
| 160 | | user not authorised to request creation of a regroup | | The user is not authorised to request creation of a regroup. | |
| 161 | | user not authorised to request removal of a regroup | | The user is not authorised to request removal of a regroup. | |
| 162 | | group call abandoned due to required group members not affiliated | | The group call was abandoned as the required number of affiliated group members is not met or some required members are not affiliated. | |
| 163 | | the group identity indicated in the request does not exist | | The server determines that the group identity indicates a user or group regroup based on a preconfigured group that does not exist. | |
| 164 | | maximum number of service authorizations reached | | The number of maximum simultaneous service authorizations for the MCPTT user has been reached. | |
| 165 | | group ID for regroup already in use | | The group ID proposed by the client for the user/group regroup based on a preconfigured group is already in use. | |

##### **\* \* \* \* \* NEXT CHANGE \* \* \* \* \***

##### 6.3.4.1.2 Sending an INVITE request towards the MCPTT client

This subclause is referenced from other procedures.

The non-controlling MCPTT function of an MCPTT group shall generate initial SIP INVITE requests according to 3GPP TS 24.229 [4].

For each SIP INVITE request, the non-controlling MCPTT function of an MCPTT group:

1) shall generate a new MCPTT session identity for the MCPTT session with the invited MCPTT client and include it in the Contact header field together with the g.3gpp.mcptt media feature tag, the g.3gpp.icsi-ref media feature tag with the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt", and the isfocus media feature tag according to IETF RFC 3840 [16];

2) shall include an Accept-Contact header field containing the g.3gpp.mcptt media feature tag along with the "require" and "explicit" header field parameters according to IETF RFC 3841 [6];

3) 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] in the SIP INVITE request;

4) shall include an Accept-Contact header field with the media feature tag g.3gpp.icsi-ref with the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt" along with parameters "require" and "explicit" according to IETF RFC 3841 [6];

5) shall set the Request-URI to the public service identity of the terminating participating MCPTT function associated to the MCPTT ID of the MCPTT user to be invited;

NOTE 1: How the non-controlling MCPTT function finds the address of the terminating participating MCPTT function is out of the scope of the current release.

NOTE 2: If the terminating MCPTT user is part of a partner MCPTT system, then the public service identity can identify an entry point in the partner network that is able to identify the terminating participating MCPTT function.

6) shall copy the application/vnd.3gpp.mcptt-info+xml MIME body in the received SIP INVITE request to the outgoing SIP INVITE request;

7) shall update the application/vnd.3gpp.mcptt-info+xml MIME body with: a <mcptt-request-uri> element set to the MCPTT ID of the invited MCPTT user;

8) shall include the public service identity of the non-controlling MCPTT function in the P-Asserted-Identity header field;

9) shall include the received Referred-By header field with the public user identity of the inviting MCPTT client;

10) should include the Session-Expires header field according to rules and procedures of IETF RFC 4028 [7]. The refresher parameter shall be omitted;

11) shall include the Supported header field set to "timer";

12) void

13) shall include an unmodified Answer-Mode header field, if present in the incoming SIP INVITE request;and

14) shall include the warning text set to "148 group is regrouped" in a Warning header field as specified in subclause 4.4.

NOTE 3: As long as the MCPTT group is regrouped the floor control messages in the media plane includes a grouped regrouped indication as specified in 3GPP TS 24.380 [5].

##### **\* \* \* \* \* NEXT CHANGE \* \* \* \* \***

##### 10.1.1.4.2 Terminating Procedures

In the procedures in this subclause:

1) MCPTT ID in an incoming SIP INVITE request refers to the MCPTT ID of the originating user from the <mcptt-calling-user-id> element of the application/vnd.3gpp.mcptt-info+xml MIME body of the incoming SIP INVITE request;

2) group identity in an incoming SIP INVITE request refers to the group identity from the <mcptt-request-uri> element of the application/vnd.3gpp.mcptt-info+xml MIME body of the incoming SIP INVITE request;

3) MCPTT ID in an outgoing SIP INVITE request refers to the MCPTT ID of the called user in the <mcptt-request-uri> element of the application/vnd.3gpp.mcptt-info+xml MIME body of the outgoing SIP INVITE request;

4) indication of required group members in a SIP 183 (Session Progress) response refers to the <required> element of the application/vnd.3gpp.mcptt-info+xml MIME body set to "true" in a SIP 183 (Session Progress) sent by the non-controlling MCPTT function of an MCPTT group;

5) emergency indication in an incoming SIP INVITE request refers to the <emergency-ind> element of the application/vnd.3gpp.mcptt-info+xml MIME body; and

6) imminent peril indication in an incoming SIP INVITE request refers to the <imminentperil-ind> element of the application/vnd.3gpp.mcptt-info+xml MIME body.

Upon receipt of a "SIP INVITE request for controlling MCPTT function of an MCPTT group", the controlling 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 controlling 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 skip the rest of the steps;

NOTE 1: if the SIP INVITE request contains an emergency indication or an imminent peril indication set to a value of "true" and this is an authorised request for originating an MCPTT emergency group call as determined by subclause 6.3.3.1.13.2, or for originating an MCPTT imminent peril group call as determined by subclause 6.3.3.1.13.5, the controlling MCPTT function can according to local policy choose to accept the request.

2) shall determine if the media parameters are acceptable and the MCPTT speech codec is offered in the SDP offer and if not reject the request with a SIP 488 (Not Acceptable Here) response and skip the rest of the steps;

3) shall reject the SIP request with a SIP 403 (Forbidden) response and not process the remaining steps if:

a) an Accept-Contact header field does not include the g.3gpp.mcptt media feature tag; or

b) an Accept-Contact header field does not include the g.3gpp.icsi-ref media feature tag containing the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt";

4) if received SIP INVITE request includes an application/vnd.3gpp.mcptt-info+xml MIME body with an <emergency-ind> element included or an <imminentperil-ind> element included, shall validate the request as described in subclause 6.3.3.1.17;

5) if the group identity is associated with a group document maintained by the GMS:

NOTE 2: How the MCPTT server determines that a group identity represents a group for which a group document is stored in the GMS is an implementation detail.

a) shall retrieve the necessary group document(s) from the group management server for the group identity contained in the SIP INVITE request and carry out initial processing as specified in subclause 6.3.5.2;

b) if the group referred to by the group identity has been regrouped, shall:

i) stop processing the SIP INVITE request;

ii) shall reject the SIP INVITE request with a SIP 403 (Forbidden) response with the warning text set to "148 group is regrouped" as specified in subclause 4.4 "Warning header field";

iii) if the group referred to by the group identity has been regrouped based on a preconfigured group, shall send a copy of the notifying SIP MESSAGE that was generated and sent per subclause 16.2.4.1 to the participating function for the MCPTT ID of the incoming SIP INVITE request and and skip the rest of the steps;

c) if the result of the initial processing in subclause 6.3.5.2 was:

i) that authorization of the MCPTT ID is required at a non-controlling MCPTT function of an MCPTT group is required, perform the actions in subclause 6.3.3.1.13.7 and do not continue with the rest of the steps in this subclause; and

ii) that a SIP 3xx, 4xx, 5xx or 6xx response to the "SIP INVITE request for controlling MCPTT function of an MCPTT group" has been sent, do not continue with the rest of the steps in this subclause;

6) if the group identity is associated with a user or group regroup based on a preconfigured group:

a) shall retrieve the stored information for the group identity;

b) if there is no stored information for the group identity, the controlling MCPTT function:

i) shall return a SIP 404 (Not Found) response with the warning text set to "163 the group identity indicated in the request does not exist" as specified in subclause 4.4 "Warning header field" and shall not continue with the rest of the steps;

NOTE 3: The user or group regroup can have been removed very recently and the client has sent the group call request prior to receiving the removal notification.

7) shall perform the actions as described in subclause 6.3.3.2.2;

8) shall maintain a local counter of the number of SIP 200 (OK) responses received from invited members and shall initialise this local counter to zero;

9) shall determine if an MCPTT group call for the group identity is already ongoing by determining if an MCPTT session identity has already been allocated for the group call and the MCPTT session is active;

10) if the SIP INVITE request contains an unauthorised request for an MCPTT emergency group call as determined by subclause 6.3.3.1.13.2:

a) shall reject the SIP INVITE request with a SIP 403 (Forbidden) response as specified in subclause 6.3.3.1.14; and

b) shall send the SIP 403 (Forbidden) response as specified in 3GPP TS 24.229 [4] and skip the rest of the steps;

11) if the SIP INVITE request contains an unauthorised request for an MCPTT imminent peril group call as determined by subclause 6.3.3.1.13.5, shall reject the SIP INVITE request with a SIP 403 (Forbidden) response with the following clarifications:

a) shall include in the SIP 403 (Forbidden) response an application/vnd.3gpp.mcptt-info+xml MIME body as specified in clause F.1 with the <mcpttinfo> element containing the <mcptt-Params> element with the <imminentperil-ind> element set to a value of "false"; and

b) shall send the SIP 403 (Forbidden) response as specified in 3GPP TS 24.229 [4] and skip the rest of the steps;

12) if a Resource-Priority header field is included in the SIP INVITE request:

a) if the Resource-Priority header field is set to the value indicated for emergency calls and the SIP INVITE request does not contain an emergency indication and the in-progress emergency state of the group is set to a value of "false", shall reject the SIP INVITE request with a SIP 403 (Forbidden) response and skip the rest of the steps; or

b) if the Resource-Priority header field is set to the value indicated for imminent peril calls and the SIP INVITE request does not contain an imminent peril indication and the in-progress imminent peril state of the group is set to a value of "false", shall reject the SIP INVITE request with a SIP 403 (Forbidden) response and skip the rest of the steps;

13) if the received SIP INVITE request contains an application/vnd.3gpp.mcptt-location-info+xml MIME body with a <Report> element included in the <location-info> root element, the controlling MCPTT function can remember the location information contained in the <location-info> root element;

14) if the MCPTT group call is not ongoing then:

a) if:

i) the user identified by the MCPTT ID is not affiliated to the group identity contained in the SIP INVITE request as specified in subclause 6.3.6;

ii) the group identity contained in the SIP INVITE request is not a constituent MCPTT group ID;

iii) the received SIP INVITE request does not contain an emergency indication or imminent peril indication; or

iv) the received SIP INVITE request is an authorised request for an MCPTT emergency group call as determined by subclause 6.3.3.1.13.2 or MCPTT imminent peril group call as determined by steps subclause 6.3.3.1.13.5 and is determined to not be eligible for implicit affiliation as specified in subclause 9.2.2.3.6;

then shall return a SIP 403 (Forbidden) response with the warning text set to "120 user is not affiliated to this group" in a Warning header field as specified in subclause 4.4, and skip the rest of the steps below;

b) if the user identified by the MCPTT ID is not authorised to initiate the prearranged group session as specified in subclause 6.3.5.4, shall send a SIP 403 (Forbidden) response with the warning text set to: "119 user is not authorised to initiate the group call" in a Warning header field as specified in subclause 4.4 and skip the rest of the steps below;

c) if the received SIP INVITE request contains an authorised request for an MCPTT emergency group call as determined by subclause 6.3.3.1.13.2 or MCPTT imminent peril group call as determined by subclause 6.3.3.1.13.5 and the MCPTT user is eligible to be implicitly affiliated with the MCPTT group as determined in step 14) a) iv) above, shall perform the implicit affiliation as specified in subclause 9.2.2.3.7;

d) shall check if a Resource-Priority header field is included in the incoming SIP INVITE request and may apply any preferential treatment to the SIP request as specified in 3GPP TS 24.229 [4];

e) shall create a prearranged group session and allocate an MCPTT session identity for the prearranged group call, and shall handle timer TNG3 (group call timer) as specified in subclause 6.3.3.5;

f) if the group identity in the "SIP INVITE request for controlling MCPTT function of an MCPTT group" is a TGI:

i) shall for each of the constituent MCPTT groups homed on the primary MCPTT system:

A) if the controlling MCPTT function does not own the MCPTT group identified by the MCPTT group ID, then generate a SIP INVITE request towards the MCPTT server that owns the MCPTT group identity by following the procedures in subclause 10.1.1.4.1.2; and

NOTE 4: The MCPTT server that the SIP INVITE request is sent to acts as a non-controlling MCPTT function;

B) if the controlling MCPTT function owns the MCPTT group identified by the MCPTT group ID then:

I) determine the members to invite to the prearranged MCPTT group call as specified in subclause 6.3.5.5;

II) invite each group member determined in step A) above, to the group session, as specified in subclause 10.1.1.4.1.1; and

III) interact with the media plane as specified in 3GPP TS 24.380 [5] subclause 6.3; and

ii) shall for each of the constituent MCPTT groups homed on the partner MCPTT system generate a SIP INVITE request for the MCPTT group identity homed on the partner MCPTT system as specified in subclause 10.1.1.4.1.2; and

g) if the group identity in the SIP INVITE request for controlling MCPTT function of an MCPTT group is an MCPTT group ID:

i) shall determine the members to invite to the prearranged MCPTT group call as specified in subclause 6.3.5.5. If:

A) the number of affiliated members of the MCPTT group is lower than the value contained in the <on-network-minimum-number-of-affiliated-members> element of the group document as specified in 3GPP TS 24.481 [31]; or

B) the group document contains any <on-network-affiliation-to-group-required> group member as specified in 3GPP TS 24.481 [31] that is not affiliated;

then the controlling MCPTT function shall send a SIP 480 (Temporarily Unavailable) response to the MCPTT client that originated the group session with the warning text set to "112 group call abandoned due to required group members not part of the group session" in a Warning header field as specified in subclause 4.4 and skip the rest of the steps below;

ii) if necessary, shall start timer TNG1 (acknowledged call setup timer) according to the conditions stated in subclause 6.3.3.3;

iii) if the received SIP INVITE request includes an application/vnd.3gpp.mcptt-info+xml MIME body with an <emergency-ind> element set to a value of "true":

A) shall cache the information that the MCPTT user has initiated an MCPTT emergency call;

B) if the received SIP INVITE contains an alert indication set to a value of "true" and this is an authorised request for an MCPTT emergency alert meeting the conditions specified in subclause 6.3.3.1.13.1, shall cache the information that the MCPTT user has initiated an MCPTT emergency alert; and

C) if the in-progress emergency state of the group is set to a value of "false":

I) shall set the value of the in-progress emergency state of the group to "true"; and

II) shall start timer TNG2 (in-progress emergency group call timer) and handle its expiry as specified in subclause 6.3.3.1.16;

iv) if the in-progress emergency state of the group is set to a value of "false" and if the received SIP INVITE request contains an imminent peril indication set to a value of "true", the controlling MCPTT function shall:

A) shall cache the information that the MCPTT user has initiated an MCPTT imminent peril call; and

B) if the in-progress imminent peril state of the group is set to a value of "false", shall set the in-progress imminent peril state of the group to a value of "true";

v) shall invite each group member determined in step 13)g)i) above, to the group session, as specified in subclause 10.1.1.4.1.1; and

vi) shall interact with the media plane as specified in 3GPP TS 24.380 [5] subclause 6.3; and

15) if the MCPTT group call is ongoing then:

a) if:

i) the user identified by the MCPTT ID in the SIP INVITE request is not affiliated to the group identity contained in the SIP INVITE request as specified in subclause 6.3.6;

ii) the group identity contained in the SIP INVITE request is not a constituent MCPTT group ID;

iii) the received SIP INVITE request does not contain an emergency indication or imminent peril indication; or

iv) the received SIP INVITE request is an authorised request for an MCPTT emergency group call as determined by subclause 6.3.3.1.13.2 or MCPTT imminent peril group call as determined subclause 6.3.3.1.13.5 and is determined to not be eligible for implicit affiliation as specified in subclause 9.2.2.3.6;

then shall return a SIP 403 (Forbidden) response with the warning text set to "120 user is not affiliated to this group" in a Warning header field as specified in subclause 4.4, and skip the rest of the steps below;

b) if the user identified by the MCPTT ID in the SIP INVITE request is not authorised to join the prearranged group session as specified in subclause 6.3.5.3, shall send a SIP 403 (Forbidden) response with the warning text set to "121 user is not allowed to join the group call" in a Warning header field as specified in subclause 4.4 and skip the rest of the steps below;

c) shall check if a Resource-Priority header field is included in the incoming SIP INVITE request and may apply any preferential treatment to the SIP request as specified in 3GPP TS 24.229 [4];

d) if <on-network-max-participant-count> as specified in 3GPP TS 24.481 [31] is already reached:

i) if, according to local policy, the user identified by the MCPTT ID in the SIP INVITE request is deemed to have a higher priority than an existing user in the group session, may remove a participant from the session by following subclause 10.1.1.4.4.3, and skip the next step; and

NOTE 5: The local policy for deciding whether to admit a user to a call that has reached its maximum amount of participants can include the <user-priority> and the <participant-type> of the user as well as other information of the user from the group document as specified in 3GPP TS 24.481 [31]. The local policy decisions can also include taking into account whether the imminent-peril indicator or emergency indicator was received in the SIP INVITE request.

ii) shall return a SIP 486 (Busy Here) response with the warning text set to "122 too many participants" to the originating network as specified in subclause 4.4 and skip the rest of the steps;

e) if the received SIP INVITE request contains an authorised request for an MCPTT emergency group call as determined by subclause 6.3.3.1.13.2 or MCPTT imminent peril group call as determined by subclause 6.3.3.1.13.5 and the MCPTT user is eligible to be implicitly affiliated with the MCPTT group as determined in step 15) a) iv) above, shall perform the implicit affiliation as specified in subclause 9.2.2.3.7;

f) if the received SIP INVITE request includes an application/vnd.3gpp.mcptt-info+xml MIME body with an <emergency-ind> element set to a value of "true":

i) shall cache the information that the MCPTT user has initiated an MCPTT emergency call;

ii) if the received SIP INVITE contains an alert indication set to a value of "true" and this is an authorised request for an MCPTT emergency alert meeting the conditions specified in subclause 6.3.3.1.13.1, shall cache the information that the MCPTT user has initiated an MCPTT emergency alert;

iii) if the in-progress emergency state of the group is set to a value of "false":

A) shall set the value of the in-progress emergency state of the group to "true";

B) shall start timer TNG2 (in-progress emergency group call timer) and handle its expiry as specified in subclause 6.3.3.1.16; and

C) shall generate SIP re-INVITE requests for the MCPTT emergency group call to the other call participants of the MCPTT group as specified in subclause 6.3.3.1.6;

iv) if the in-progress imminent peril state of the group is set to a value of "true":

A) for each of the other affiliated member of the group generate a SIP MESSAGE request notification of the MCPTT user's imminent peril indication as specified in subclause 6.3.3.1.11, setting the <imminentperil-ind> element of the application/vnd.3gpp.mcptt-info+xml MIME body to a value of "true"; and

B) send the SIP MESSAGE request as specified in 3GPP TS 24.229 [4]; and

v) upon receiving a SIP 200 (OK) response to the SIP re-INVITE request the controlling MCPTT function shall interact with the media plane as specified in 3GPP TS 24.380 [5];

g) if the in-progress emergency state of the group is set to a value of "false" and if the SIP INVITE request contains an imminent peril indication set to a value of "true", the controlling MCPTT function:

i) shall cache the information that the MCPTT user has initiated an MCPTT imminent peril call; and

ii) if the in-progress imminent peril state of the group is set to a value of "false":

A) shall set the in-progress imminent peril state of the group to a value of "true";

B) shall generate SIP re-INVITE requests for the MCPTT imminent peril group call to the other call participants of the MCPTT group as specified in subclause 6.3.3.1.15; and

C) upon receiving a SIP 200 (OK) response to the SIP re-INVITE request the controlling MCPTT function shall interact with the media plane as specified in 3GPP TS 24.380 [5]; and

iii) if the in-progress imminent peril state of the group is set to a value of "true":

A) for each of the other affiliated member of the group generate a SIP MESSAGE request notification of the MCPTT user's imminent peril indication as specified in subclause 6.3.3.1.11, setting the <imminentperil-ind> element of the application/vnd.3gpp.mcptt-info+xml MIME body to a value of "true"; and

B) send the SIP MESSAGE request as specified in 3GPP TS 24.229 [4];

h) shall generate a SIP 200 (OK) response as specified in the subclause 6.3.3.2.3.2;

i) shall include in the SIP 200 (OK) response an SDP answer to the SDP offer in the incoming SIP INVITE request as specified in the subclause 6.3.3.2.1;

j) shall include in the SIP 200 (OK) response with the warning text set to "123 MCPTT session already exists" as specified in subclause 4.4;

k) if the received SIP re-INVITE request contains an alert indication set to a value of "true" and this is an unauthorised request for an MCPTT emergency alert as specified in subclause 6.3.3.1.13.1, shall include in the SIP 200 (OK) response the warning text set to "149 SIP INFO request pending" in a Warning header field as specified in subclause 4.4;

l) if the received SIP re-INVITE request contains an application/vnd.3gpp.mcptt-info+xml MIME body with the <imminentperil-ind> element set to a value of "true" and if the in-progress emergency state of the group is set to a value of "true", shall include in the SIP 200 (OK) response the warning text set to "149 SIP INFO request pending" in a Warning header field as specified in subclause 4.4;

NOTE 6: In this case, the request was for an imminent peril call but a higher priority MCPTT emergency call was already in progress on the group. Hence, the imminent peril call request aspect of the request is denied but the request is granted with emergency level priority.

m) shall interact with media plane as specified in 3GPP TS 24.380 [5] subclause 6.3;

NOTE 7: Resulting media plane processing is completed before the next step is performed.

n) shall send the SIP 200 (OK) response towards the inviting MCPTT client or inviting non-controlling MCPTT function according to 3GPP TS 24.229 [4];

o) shall generate a notification to the MCPTT clients, which have subscribed to the conference event package that the inviting MCPTT User has joined in the MCPTT group session, as specified in subclause 6.3.3.4;

NOTE 8: As a group document can potentially have a large content, the controlling MCPTT function can notify using content-indirection as defined in IETF RFC 4483 [32].

p) shall send a SIP NOTIFY request to each MCPTT client according to 3GPP TS 24.229 [4];

q) Upon receiving a SIP ACK to the above SIP 200 (OK) response and the SIP 200 (OK) response contained a Warning header field as specified in subclause 4.4 with the warning text containing the mcptt-warn-code set to "149", shall follow the procedures in subclause 6.3.3.1.18; and

r) shall not continue with the rest of the subclause.

Upon receiving a SIP 183 (Session Progress) response to the SIP INVITE request specified in subclause 10.1.1.4.1 containing a P-Answer-State header field with the value "Unconfirmed" as specified in IETF RFC 4964 [34], the timer TNG1 (acknowledged call setup timer) is not running, the controlling MCPTT function supports media buffering and the SIP final response is not yet sent to the inviting MCPTT client:

1) shall generate a SIP 200 (OK) response to SIP INVITE request as specified in the subclause 6.3.3.2.3.2;

2) shall include the warning text set to "122 too many participants" as specified in subclause 4,4 in the SIP 200 (OK) response, if the prearranged MCPTT group has more than <on-network-max-participant-count> members as specified in 3GPP TS 24.481 [31];

3) shall include in the SIP 200 (OK) response an SDP answer to the SDP offer in the incoming SIP INVITE request as specified in the subclause 6.3.3.2.1;

4) shall include a P-Answer-State header field with the value "Unconfirmed";

5) if the SIP INVITE request contains an alert indication set to a value of "true" and this is an unauthorised request for an MCPTT emergency alert as specified in subclause 6.3.3.1.13.1, shall include in the SIP 200 (OK) response the warning text set to "149 SIP INFO request pending" in a Warning header field as specified in subclause 4.4;

6) if the received SIP INVITE request contains an application/vnd.3gpp.mcptt-info+xml MIME body with the <imminentperil-ind> element set to a value of "true" and if the in-progress emergency state of the group is set to a value of "true", shall include in the SIP 200 (OK) response the warning text set to "149 SIP INFO request pending" in a Warning header field as specified in subclause 4.4;

7) shall interact with the media plane as specified in 3GPP TS 24.380 [5] subclause 6.3;

NOTE 9: Resulting user plane processing is completed before the next step is performed.

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

9) shall generate a notification to the MCPTT clients, which have subscribed to the conference event package that the inviting MCPTT User has joined in the MCPTT group session, as specified in subclause 6.3.3.4; and

NOTE 10: As a group document can potentially have a large content, the controlling MCPTT function can notify using content-indirection as defined in IETF RFC 4483 [32].

10) shall send a SIP NOTIFY request to each MCPTT client according to 3GPP TS 24.229 [4].

Upon receiving a SIP 183 (Session Progress) response for a SIP INVITE request as specified in subclause 10.1.1.4.1.2 containing an indication of required group members, the timer TNG1 (acknowledged call setup timer) is running and all SIP 200 (OK) responses have been received to all SIP INVITE requests sent to MCPTT clients specified in subclause 10.1.1.4.1.1, then the controlling MCPTT function shall wait until the SIP 200 (OK) response has been received to the SIP INVITE request specified in subclause 10.1.1.4.1.2 before generating a SIP 200 (OK) response to the "SIP INVITE request for controlling MCPTT function of an MCPTT group".

Upon receiving a SIP 200 (OK) response for a SIP INVITE request as specified in subclause 10.1.1.4.1 that was sent to an affiliated and <on-network-required> group member as specified in 3GPP TS 24.481 [31]; and

1) if the MCPTT ID in the SIP 200 (OK) response matches to the MCPTT ID in the corresponding SIP INVITE request;

2) there are no outstanding SIP 200 (OK) responses to SIP INVITE requests which were sent to affiliated and <on-network-required> group members as specified in 3GPP TS 24.481 [31]; and

3) there is no outstanding SIP 200 (OK) response to a SIP INVITE request sent in subclause 10.1.1.4.1.2 where the SIP 183 (Session Progress) response contained an indication of required group members;

the controlling MCPTT function:

1) shall stop timer TNG1 (acknowledged call setup timer) as described in subclause 6.3.3.3;

2) shall generate SIP 200 (OK) response to the SIP INVITE request as specified in the subclause 6.3.3.2.3.2 before continuing with the rest of the steps;

3) shall include the warning text set to "122 too many participants" as specified in subclause 4.4 in the SIP 200 (OK) response, if all members were not invited because the prearranged MCPTT group has been exceeded the <on-network-max-participant-count> members as specified in 3GPP TS 24.481 [31];

4) shall include in the SIP 200 (OK) response an SDP answer to the SDP offer in the incoming SIP INVITE request as specified in the subclause 6.3.3.2.1;

5) shall interact with the media plane as specified in 3GPP TS 24.380 [5] subclause 6.3;

NOTE 11: Resulting media plane processing is completed before the next step is performed.

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

7) shall generate a notification to the MCPTT clients, which have subscribed to the conference event package that the inviting MCPTT user has joined in the MCPTT group session, as specified in subclause 6.3.3.4; and

NOTE 12: As a group document can potentially have a large content, the controlling MCPTT function can notify using content-indirection as defined in IETF RFC 4483 [32].

8) shall send the SIP NOTIFY request to the MCPTT clients according to 3GPP TS 24.229 [4].

Upon:

1) receiving a SIP 200 (OK) response for a SIP INVITE request as specified in subclause 10.1.1.4.1;

2) the timer TNG1 (acknowledged call setup timer) is not running;

3) the local counter of the number of SIP 200 (OK) responses received from invited members is equal to the value of the <on-network-minimum-number-to-start> element of the group document;

4) the controlling MCPTT function supports media buffering; and

5) the SIP final response has not yet been sent to the inviting MCPTT client;

the controlling MCPTT function according to local policy:

1) shall generate SIP 200 (OK) response to the SIP INVITE request as specified in the subclause 6.3.3.2.2;

2) shall include the warning text set to "122 too many participants" as specified in subclause 4.4 in the SIP 200 (OK) response, if all members were not invited because the prearranged MCPTT group has exceeded the <max-participant-count> members as specified in 3GPP TS 24.481 [31];

3) shall include in the SIP 200 (OK) response an SDP answer to the SDP offer in the incoming SIP INVITE request as specified in the subclause 6.3.3.2.1;

4) if the SIP INVITE request contains an alert indication set to a value of "true" and this is an unauthorised request for an MCPTT emergency alert as specified in subclause 6.3.3.1.13.1, shall include in the SIP 200 (OK) response the warning text set to "149 SIP INFO request pending" in a Warning header field as specified in subclause 4.4;

5) if the received SIP INVITE request contains an application/vnd.3gpp.mcptt-info+xml MIME body with the <imminentperil-ind> element set to a value of "true" and if the in-progress emergency state of the group is set to a value of "true", shall include in the SIP 200 (OK) response the warning text set to "149 SIP INFO request pending" in a Warning header field as specified in subclause 4.4;

6) shall interact with the media plane as specified in 3GPP TS 24.380 [5] subclause 6.3;

NOTE 13: Resulting media plane processing is completed before the next step is performed.

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

8) shall generate a notification to the MCPTT clients, which have subscribed to the conference event package that the inviting MCPTT user has joined in the MCPTT group session, as specified in subclause 6.3.3.4; and

NOTE 14: As a group document can potentially have a large content, the controlling MCPTT function can notify using content-indirection as defined in IETF RFC 4483 [32].

9) shall send the SIP NOTIFY request to the MCPTT clients according to 3GPP TS 24.229 [4].

Upon expiry of timer TNG1 (acknowledged call setup timer), if there are outstanding SIP 200 (OK) responses to SIP INVITE requests sent to affiliated and <on-network-required> group members as specified in 3GPP TS 24.481 [31], the controlling MCPTT function shall follow the procedures specified in subclause 6.3.3.3*.*

If timer TNG1 (acknowledged call setup timer) is running and a final SIP 4xx, 5xx or 6xx response is received from an affiliated and <on-network-required> group member as specified in 3GPP TS 24.481 [31], the controlling MCPTT function shall follow the relevant procedures specified in subclause 6.3.3.3*.*

If:

1) timer TNG1 (acknowledged call setup timer) is not running;

2) the local counter of the number of SIP 200 (OK) responses received from invited members is equal to the value of the <on-network-minimum-number-to-start> element of the group document; and

3) a final SIP 4xx, 5xx or 6xx response is received from an invited MCPTT client;

then the controlling MCPTT function shall perform one of the following based on policy:

1) send the SIP final response towards the inviting MCPTT client, according to 3GPP TS 24.229 [4], if a SIP final response was received from all the other invited MCPTT clients and the SIP 200 (OK) response is not yet sent; or

2) remove the invited MCPTT client from the MCPTT Session as specified in subclause 6.3.3.1.5, if a SIP final response other than 2xx or 3xx was received from all the invited MCPTT clients and the SIP 200 (OK) response is already sent. The controlling MCPTT function may invite an additional member of the prearranged MCPTT group as specified in subclause 10.1.1.4.1 that has not already been invited, if the prearranged MCPTT group has more than <on-network-max-participant-count> members as specified in 3GPP TS 24.481 [31], and all members have not yet been invited.

If the group identity in the "SIP INVITE request for controlling MCPTT function of an MCPTT group" is a TGI and constituent MCPTT groups were invited as specified in subclause 10.1.1.4.1.2 and,

1) if all non-controlling MCPTT functions hosting the constituent MCPTT groups have responded with a SIP 2xx, SIP 3xx, SIP 4xx, SIP 5xx or SIP 6xx responses to the "SIP INVITE request for non-controlling MCPTT function of an MCPTT group"; and

2) if all expected SIP INFO requests containing a floor request are received;

then the controlling MCPTT function shall indicate to the media plane that all final responses are received.

NOTE 15: If the SIP 200 (OK) response to the SIP INVITE request for non-controlling MCPTT function of an MCPTT group included the application/vnd.3gpp.mcptt-info+xml MIME body with the <floor-state> element set to "floor-taken", the controlling MCPTT function expects that the non-controlling MCPTT functions sends a SIP INFO request containing a floor request.

Upon receiving a SIP ACK to the SIP 200 (OK) response sent towards the inviting MCPTT client, and the SIP 200 (OK) response was sent with the warning text set to "149 SIP INFO request pending" in a Warning header field as specified in subclause 4.4, the controlling MCPTT function shall follow the procedures in subclause 6.3.3.1.18.

##### **\* \* \* \* \* NEXT CHANGE \* \* \* \* \***

##### 10.1.1.5.5 Initiating a temporary group session

Upon receiving a "SIP INVITE request for non-controlling MCPTT function of an MCPTT group" when a prearranged group session is not ongoing, the non-controlling MCPTT-function shall:

NOTE 1: The difference between a "SIP INVITE request for controlling MCPTT function of an MCPTT group" and a "SIP INVITE request for non-controlling MCPTT function of an MCPTT group" is that the latter SIP INVITE request contains the isfocus media feature tag in the Contact header field.

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 non-controlling 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 if the media parameters are acceptable and the MCPTT speech codec is offered in the SDP offer and if not reject the request with a SIP 488 (Not Acceptable Here) response. Otherwise, continue with the rest of the steps;

3) shall reject the SIP request with a SIP 403 (Forbidden) response and not process the remaining steps if:

a) an Accept-Contact header field does not include the g.3gpp.mcptt media feature tag; or

b) an Accept-Contact header field does not include the g.3gpp.icsi-ref media feature tag containing the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt";

4) shall retrieve the group document from the group management server for the MCPTT group ID contained in the <mcptt-request-uri> element of the application/vnd.3gpp.mcptt-info+xml MIME body of the SIP INVITE request and carry out initial processing as specified in subclause 6.3.5.2 and continue with the rest of the steps if the checks in subclause 6.3.5.2 succeed;

NOTE 2: If the checks are not successful, the SIP response to the "SIP INVITE request for controlling MCPTT function of an MCPTT group" is already sent in the subclause 6.3.5.2.

5) shall cache the content of the SIP INVITE request;

6) shall check if a Resource-Priority header field is included in the incoming SIP INVITE request and may apply any preferential treatment to the SIP request as specified in 3GPP TS 24.229 [4];

7) shall authorize the MCPTT user in the <mcptt-calling-user-id> element in the application/vnd.3gpp.mcptt-info+xml MIME body of the "SIP INVITE request for controlling MCPTT function of an MCPTT group" as specified in subclause 6.3.5.4, if the MCPTT user is unauthorized to initiated a pre-arranged group session the non-controlling MCPTT function shall send a SIP 403 (Forbidden) response with the warning text set to "119 user is not authorised to initiate the group call" in a Warning header field as specified in subclause 4.4.

8) shall generate a SIP INVITE request to the controlling MCPTT function as specified in subclause 6.3.4.1.4; and

9) shall send the SIP INVITE request to the controlling MCPTT function as specified in 3GPP TS 24.229 [4].

Upon receipt of a SIP 2xx response to the SIP INVITE request sent to the controlling MCPTT function as specified above, the non-controlling MCPTT function:

1) shall send the SIP ACK request to the controlling MCPTT function as specified in 3GPP TS 24.229 [4];

2) shall generate a SIP 200 (OK) to the "SIP INVITE request for controlling MCPTT function of an MCPTT group" as specified in 3GPP TS 24.229 populated as follows:

a) shall include an SDP answer as specified in subclause 6.3.4.2.1 based on the SDP answer in the SIP 200 (OK) response;

b) shall include the public service identifier of the non-controlling MCPTT function in the P-Asserted-Identity header field;

c) shall include the warning text set to "148 group is regrouped" in a Warning header field as specified in subclause 4.4; and

d) shall send the SIP 200 (OK) request according to 3GPP TS 24.229;

NOTE 3: As long as the MCPTT group is regrouped the floor control messages in the media plane includes a grouped regrouped indication as specified in 3GPP TS 24.380 [5].

3) shall start acting as a non-controlling MCPTT function and interact with the media plane as specified in 3GPP TS 24.380 [5] subclause 6.5;

4) shall determine the members to invite to the prearranged MCPTT group call as specified in subclause 6.3.5.5; and

5) shall invite each group member determined in step 4) immediately above, to the group session, as specified in subclause 10.1.1.5.1.

Upon receipt of other final SIP responses with the exception of the SIP 2xx response to the INVITE request sent to the controlling MCPTT function as specified above, the non-controlling MCPTT function:

1) shall send the SIP ACK response to the controlling MCPTT function as specified in 3GPP TS 24.229 [4]; and

2) shall start acting as a controlling MCPTT function as specified in subclause 10.1.1.4 and invite members as specified in subclause 6.3.4.1.2.

NOTE 4: Regardless if the controlling MCPTT function accepts or rejects the SIP INVITE request sent above the prearranged group session continues to be initiated with only the members of the group homed on the non-controlling MCPTT function of the group being invited to the group call.

The non-controlling MCPTT function shall handle SIP responses (other than the SIP 2xx response) to the SIP INVITE requests sent to invited members as specified in 3GPP TS 24.229.

Upon receipt of a SIP 2xx response to SIP INVITE requests sent to invited members, the non-controlling MCPTT function:

1) shall send the SIP ACK request as specified in 3GPP TS 24.229 [4]; and

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

##### **\* \* \* \* \* NEXT CHANGE \* \* \* \* \***

###### 10.1.2.5.1.8 Initiating a temporary group session

Upon receiving a "SIP INVITE request for controlling MCPTT function of an MCPTT group" when a chat group session is not ongoing, the non-controlling MCPTT-function shall:

NOTE 1: The difference between a "SIP INVITE request for controlling MCPTT function of an MCPTT group" and a "SIP INVITE request for non-controlling MCPTT function of an MCPTT group" is that the latter SIP INVITE request contains the isfocus media feature tag in the Contact header field.

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 non-controlling 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 if the media parameters are acceptable and the MCPTT speech codec is offered in the SDP offer and if not reject the request with a SIP 488 (Not Acceptable Here) response. Otherwise, continue with the rest of the steps;

3) shall reject the SIP request with a SIP 403 (Forbidden) response and not process the remaining steps if:

a) an Accept-Contact header field does not include the g.3gpp.mcptt media feature tag; or

b) an Accept-Contact header field does not include the g.3gpp.icsi-ref media feature tag containing the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt";

4) shall retrieve the group document from the group management server for the MCPTT group ID contained in the <mcptt-request-uri> element of the application/vnd.3gpp.mcptt-info+xml MIME body of the SIP INVITE request and carry out initial processing as specified in subclause 6.3.5.2 and continue with the rest of the steps if the checks in subclause 6.3.5.2 succeed;

NOTE 2: If the checks are not successful, the SIP response to the "SIP INVITE request for controlling MCPTT function of an MCPTT group" is already sent in the subclause 6.3.5.2.

5) shall cache the content of the SIP INVITE request;

6) shall check if a Resource-Priority header field is included in the incoming SIP INVITE request and may apply any preferential treatment to the SIP request as specified in 3GPP TS 24.229 [4];

7) shall authorize the MCPTT user in the <mcptt-calling-user-id> element in the application/vnd.3gpp.mcptt-info+xml MIME body of the "SIP INVITE request for controlling MCPTT function of an MCPTT group" as specified in subclause 6.3.5.2, if the MCPTT user is unauthorized to join a chat group session, the non-controlling MCPTT function shall send a SIP 403 (Forbidden) response with the warning text set to "106 user not authorised to join chat group" in a Warning header field as specified in subclause 4.4.

8) shall generate a SIP INVITE request to the controlling MCPTT function as specified in subclause 6.3.4.1.4; and

9) shall send the SIP INVITE request to the controlling MCPTT function as specified in 3GPP TS 24.229 [4].

Upon receipt of a SIP 2xx response to the SIP INVITE request sent to the controlling MCPTT function as specified above, the non-controlling MCPTT function:

1) shall send the SIP ACK request to the controlling MCPTT function as specified in 3GPP TS 24.229 [4];

2) shall generate a SIP 200 (OK) to the "SIP INVITE request for controlling MCPTT function of an MCPTT group" as specified in 3GPP TS 24.229 populated as follows:

a) shall include an SDP answer as specified in subclause 6.3.4.2.1 based on the SDP answer in the SIP 200 (OK) response;

b) shall include the public service identifier of the non-controlling MCPTT function in the P-Asserted-Identity header field; and

c) shall include the warning text set to "148 group is regrouped" in a Warning header field as specified in subclause 4.4; and

NOTE 3: As long as the MCPTT group is regrouped the floor control messages in the media plane includes a grouped regrouped indication as specified in 3GPP TS 24.380 [5].

3) shall start acting as a non-controlling MCPTT function and interact with the media plane as specified in 3GPP TS 24.380 [5] subclause 6.5.

Upon receipt of other final SIP responses with the exception of the SIP 2xx response to the INVITE request sent to the controlling MCPTT function as specified above, the non-controlling MCPTT function:

1) shall send the SIP ACK response to the controlling MCPTT function as specified in 3GPP TS 24.229 [4]; and

2) perform the actions in the subclause 10.1.1.5.2.4.

NOTE 4: Regardless if the controlling MCPTT function accepts or rejects the SIP INVITE request sent above the prearranged group session continues to be initiated with only the members of the group homed on the non-controlling MCPTT function of the group being invited to the group call.

##### **\* \* \* \* \* NEXT CHANGE \* \* \* \* \***

#### 16.2.4.1 Notification of creation of a group regroup using preconfigured group

When receiving a "SIP MESSAGE request to a non-controlling MCPTT function to request creation of a group regroup using preconfigured group" the non-controlling 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 MESSAGE request with a SIP 500 (Server Internal Error) response. The non-controlling MCPTT function may include a Retry-After header field to the SIP 500 (Server Internal Error) response as specified in IETF RFC 3261 [24]. The non-controlling MCPTT function shall skip the rest of the steps;

2) or each group identified in the <groups-for-regroup> element of an application/vnd.3gpp.mcptt-regroup+xml MIME body in the incoming SIP MESSAGE request for which the MCPTT function is the non-controlling MCPTT function:

a) shall determine if the group is already regrouped, and if the group is already regrouped:

i) shall reject the SIP request with a SIP 403 (Forbidden) response including warning text set to "148 group is regrouped" in a Warning header field as specified in subclause 4.4; and

ii) shall not process the remaining steps;

3) shall store:

a) the list of group identities contained in the <groups-for-regroup> element;

b) the value of the <mcptt-regroup-uri> element as the identity of the group regroup;

c) the value of the preconfigured-group> element of the application/vnd.3gpp.mcptt-regroup+xml MIME body as the identity of the preconfigured group; and

d) information that each of the groups identified in the <groups-for-regroup> element has been regrouped using a preconfigured group;

4) shall send a SIP 200 (OK) response in accordance with 3GPP TS 24.229 [4] and IETF RFC 3428 [33]:

5) for each group identified in the <groups-for-regroup> element of an application/vnd.3gpp.mcptt-regroup+xml MIME body in the incoming SIP MESSAGE request for which the MCPTT function is the non-controlling MCPTT function shall create a separate list of MCPTT IDs for users belonging to and affiliated with the identified group who are served by the same terminating participating MCPTT function;

6) shall merge the lists of MCPTT IDs associated with each terminating participating MCPTT function such that the resulting list associated with a participating MCPTT function contains the MCPTT IDs of all users served by the participating MCPTT function that belong to and are affiliated with any of the groups identified in the <groups-for-regroup> element; and

7) for each terminating participating MCPTT function identified in step 3):

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

b) shall include in the SIP MESSAGE request all Accept-Contact header fields and all Reject-Contact header fields, with their feature tags and their corresponding values along with parameters according to rules and procedures of IETF RFC 3841 [6] that were received (if any) in the incoming SIP MESSAGE request;

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

d) shall copy the contents of the application/vnd.3gpp.mcptt-info+xml MIME body received in the incoming SIP MESSAGE request into an application/vnd.3gpp.mcptt-info+xml MIME body included in the outgoing SIP MESSAGE request;

e) shall copy the contents of the application/vnd.3gpp.mcptt-regroup+xml MIME body received in the incoming SIP MESSAGE request into an application/vnd.3gpp.mcptt-regroup+xml MIME body included in the outgoing SIP MESSAGE request;

f) shall use the list of MCPTT IDs for this participating MCPTT function as generated in step 3) to create and include the <users-for-regroup> element in the application/vnd.3gpp.mcptt-regroup+xml MIME body;

g) shall copy the contents of the P-Asserted-Identity header field of the incoming SIP MESSAGE request to the P-Asserted-Identity header field of the outgoing SIP MESSAGE request; and

h) shall send the SIP MESSAGE request as specified in 3GPP TS 24.229 [4].

##### **\* \* \* \* \* END CHANGES \* \* \* \* \***