**3GPP TSG-CT WG1 Meeting #146C1-240061r2**

**Online, 22– 26 January 2024**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
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|  | **24.379** | **CR** | **0919** | **rev** | **-** | **Current version:** | **18.5.0** |  |
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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:***  | Emergency alert to client doing late affiliation |
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| ***Source to WG:*** | Motorola Solutions UK Ltd. |
| ***Source to TSG:*** | C1 |
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| ***Work item code:*** | enh4MCPTT |  | ***Date:*** | 2024-01-23 |
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| ***Category:*** | **B** |  | ***Release:*** | Rel-18 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | The reason for this change is [Observation #5 mentioned in in ETSI MCX Plugtests#8 event Wiki](https://wiki.plugtests.net/8th-MCX-Plugtests/index.php?title=Observations). When a client affiliates to a group which is already in emergency alert state, it is not notified about the emergency alert state in the group. |
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| ***Summary of change:*** | The procedure related to receipt of group affiliation status change in a controlling function is enhanced. It will now additionally check whether a user has affiliated to one or more group/s which is/are in emergency alert state. If so, the controlling function will send a message to the newly affiliated user about the emergency alert state. |
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| ***Consequences if not approved:*** | The clients which affiliate to a group after it has got into an emergency alert state, will not be aware of the emergency alert status. |
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| ***Clauses affected:*** | 6.3.3.1.11, 6.3.3.1.12, 9.2.2.3.3 |
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|  | **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 ...  |
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| ***Other comments:*** | None |
|  |  |
| ***This CR's revision history:*** | C1-240061 |

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

##### 6.3.3.1.11 Generating a SIP MESSAGE request for notification of in-progress emergency or imminent peril status

This clause is referenced from other procedures.

This clause describes the procedures for generating a SIP MESSAGE request to notify affiliated but not participating members of an MCPTT group the status of the in-progress emergency state, imminent peril state or emergency alert status of an MCPTT group. The procedure is initiated by the controlling MCPTT function when there has been a change of state, or to notify of a current outstanding in-progress imminent peril state, in-progress emergency state or the emergency alert status of an MCPTT group.

The controlling MCPTT function:

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

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 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];

4) shall set the Request-URI to the public service identity of the terminating participating function associated with the MCPTT ID of the targeted MCPTT user;

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 terminating participating MCPTT function associated with the targeted MCPTT user 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.

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

6) 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];

7) shall include an application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element with the <mcptt-request-uri> element set to the value of the MCPTT ID of the targeted MCPTT user; and

8) shall include in the application/vnd.3gpp.mcptt-info+xml MIME body an <mcptt-calling-group-id> element set to the MCPTT group ID of the MCPTT group on which the MCPTT emergency call, imminent peril call or the emergency alert state has changed or already exists.

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

##### 6.3.3.1.12 Populate mcptt-info and location-info MIME bodies for emergency alert

This clause is referenced from other procedures.

This clause describes the procedures for populating the application/vnd.3gpp.mcptt-info+xml and .application/vnd.3gpp.mcptt-location-info+xml MIME bodies for an MCPTT emergency alert. The procedure is initiated by the controlling MCPTT function when it has received a SIP request initiating an MCPTT emergency alert, or to notify an outstanding MCPTT emergency alert of the MCPTT user, and generates a message containing the MCPTT emergency alert information required by 3GPP TS 23.379 [3].

The controlling MCPTT function:

1) shall include, if not already present, an application/vnd.3gpp.mcptt-info+xml MIME body as specified in Annex F.1, and set the <alert-ind> element to a value of "true";

2) shall determine the value of the MCPTT user's Mission Critical Organization from the <MissionCriticalOrganization> element, of the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]);

3) shall include in the <mcpttinfo> element containing the <mcptt-Params> element containing an <mc-org> element set to the value of the MCPTT user's Mission Critical Organization; and

4) if the incoming SIP request contains an application/vnd.3gpp.mcptt-location-info+xml MIME body, shall copy the contents of the application/vnd.3gpp.mcptt-location-info+xml MIME body in the received SIP request into an application/vnd.3gpp.mcptt-location-info+xml MIME body included in the outgoing SIP request.

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

##### 9.2.2.3.3 Receiving group affiliation status change procedure

Upon receiving a SIP PUBLISH request such that:

1) Request-URI of the SIP PUBLISH request contains the public service identity of the controlling MCPTT function associated with the served MCPTT group;

2) the SIP PUBLISH request contains an application/vnd.3gpp.mcptt-info+xml MIME body containing the <mcptt-request-uri> element and the <mcptt-calling-user-id> element;

3) 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 header field according to IETF RFC 6050 [9];

4) the Event header field of the SIP PUBLISH request contains the "presence" event type; and

5) SIP PUBLISH request contains an application/pidf+xml MIME body indicating per-group affiliation information constructed according to clause 9.3.1.2;

then the MCPTT server:

1) shall identify the served MCPTT group ID in the <mcptt-request-uri> element of the application/vnd.3gpp.mcptt-info+xml MIME body of the SIP PUBLISH request;

2) shall identify the handled MCPTT ID in the <mcptt-calling-user-id> element of the application/vnd.3gpp.mcptt-info+xml MIME body of the SIP PUBLISH request;

3) if the Expires header field of the SIP PUBLISH request is not included or has nonzero value lower than 4294967295, shall send a SIP 423 (Interval Too Brief) response to the SIP PUBLISH request, where the SIP 423 (Interval Too Brief) response contains a Min-Expires header field set to 4294967295, and shall not continue with the rest of the steps;

4) if an MCPTT group for the served MCPTT group ID does not exist in the group management server according to 3GPP TS 24.481 [31], shall reject the SIP PUBLISH request with SIP 403 (Forbidden) response to the SIP PUBLISH request according to 3GPP TS 24.229 [4], IETF RFC 3903 [37] and IETF RFC 3856 [51] and skip the rest of the steps;

5) if the handled MCPTT ID is not a member of the MCPTT group identified by the served MCPTT group ID, shall reject the SIP PUBLISH request with SIP 403 (Forbidden) response to the SIP PUBLISH request according to 3GPP TS 24.229 [4], IETF RFC 3903 [37] and IETF RFC 3856 [51] and skip the rest of the steps;

6) shall respond with SIP 200 (OK) response to the SIP PUBLISH request according to 3GPP TS 24.229 [4], IETF RFC 3903 [37]. In the SIP 200 (OK) response, the MCPTT server:

a) shall set the Expires header field according to IETF RFC 3903 [37], to the selected expiration time;

7) if the "entity" attribute of the <presence> element of the application/pidf+xml MIME body of the SIP PUBLISH request is different than the served MCPTT group ID, shall not continue with the rest of the steps;

8) if the handled MCPTT ID is different from the MCPTT ID in the "id" attribute of the <tuple> element of the <presence> root element of the application/pidf+xml MIME body of the SIP PUBLISH request, shall not continue with the rest of the steps;

9) shall consider an MCPTT group information entry such that:

a) the MCPTT group information entry is in the list of MCPTT group information entries described in clause 9.2.2.3.2; and

b) the MCPTT group ID of the MCPTT group information entry is equal to the served MCPTT group ID;

 as the served MCPTT group information entry;

10) if the selected expiration time is zero:

a0) if the MCPTT group identity configuration for the served MCPTT group ID found in the group management server according to 3GPP TS 24.481 [31] contains:

i) a <forbidden-deaffiliation-FAs> element and the handled MCPTT ID has activated a functional alias that matches with one of the <entry> elements of the <forbidden-deaffiliation-FAs> element; or

ii) a <forbidden-deaffiliation-if-last-FAs> element and the handled MCPTT ID has activated a functional alias that matches with one of the <entry> elements of the <forbidden-deaffiliation-if-last-FAs> element and corresponds to the last user that has bound the functional alias to the served MCPTT group ID;

 shall reject the SIP PUBLISH request with SIP 403 (Forbidden) response to the SIP PUBLISH request according to 3GPP TS 24.229 [4], IETF RFC 3903 [37] and IETF RFC 3856 [51] and skip the rest of the steps;

NOTE: The MCPTT server learns the functional aliases that are activated for an MCPTT ID from procedures specified in clause 9A.2.2.2.7.

a) shall remove the MCPTT user information entry such that:

i) the MCPTT user information entry is in the list of the MCPTT user information entries of the served MCPTT group information entry; and

ii) the MCPTT user information entry has the MCPTT ID set to the served MCPTT ID;

11) if the selected expiration time is not zero:

a) shall consider an MCPTT user information entry such that:

i) the MCPTT user information entry is in the list of the MCPTT user information entries of the served MCPTT group information entry; and

ii) the MCPTT ID of the MCPTT user information entry is equal to the handled MCPTT ID;

 as the served MCPTT user information entry;

b) if the MCPTT user information entry does not exist:

i) shall insert an MCPTT user information entry with the MCPTT ID set to the handled MCPTT ID into the list of the MCPTT user information entries of the served MCPTT group information entry; and

ii) shall consider the inserted MCPTT user information entry as the served MCPTT user information entry; and

c) shall set the following information in the served MCPTT user information entry:

i) set the MCPTT client ID list according to the "client" attributes of the <affiliation> elements of the <status> element of the <tuple> element of the <presence> root element of the application/pidf+xml MIME body of the SIP PUBLISH request; and

ii) set the expiration time according to the selected expiration time;

12) shall identify the handled p-id in the <p-id> child element of the <presence> root element of the application/pidf+xml MIME body of the SIP PUBLISH request; and

13) shall perform the procedures specified in clause 9.2.2.3.5 for the served MCPTT group ID.

14) if there is an outstanding MCPTT emergency alert for the MCPTT group to which the user affiliated, shall perform the procedures specified in clause 12.1.3.4.

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

#### 12.1.3.4 Late entry notified to controlling MCPTT function

When controlling MCPTT function is notified that an MCPTT client is newly affiliated or comes back from out of coverage, the controlling MCPTT function:

NOTE: How the MCPTT function is informed when an MCPTT client is coming back from out of coverage is out of scope of present document.

1) if there is an outstanding MCPTT emergency alert for the MCPTT group to which the user affiliated, and the call is not ongoing on associated group on which outstanding alert exists, for the newly affiliated client:

a) generate an outgoing SIP MESSAGE request notification of the MCPTT user's emergency alert indication as specified in clause 6.3.3.1.11 with the clarifications of clause 6.3.3.1.12;

b) shall include in the application/vnd.3gpp.mcptt-info+xml MIME body with the <mcpttinfo> element containing the <mcptt-Params> element with the <mcptt-calling-user-id> element set to the MCPTT ID of the MCPTT user who has initiated an MCPTT emergency alert; and

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

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