**3GPP TSG-CT WG1 Meeting #134-eC1-221687**

**E-Meeting, 17th – 25th February 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | 0790 | **rev** | 1 | **Current version:** |  |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Group indication in notification on entry/exit of emergency alert area with | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | , Kontron Transportation France, UIC | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MCProtoc17 | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | TS 23.280 specifies that a notification can be sent upon entry to an alert area: “10.1.2.19 MC service emergency alert area notification Table 10.1.2.19-1 describes the information flow MC service emergency alert area notification from the MC service server to the MC service client.  Table 10.1.2.19-1 MC service emergency alert area notification information elements   |  |  |  | | --- | --- | --- | | Information Element | Status | Description | | MC service ID | M | MC service user identity of the party to be notified | | Emergency Alert Area Indicator | M | An indicator that the MC service user is in an Emergency Alert Area or out of an Emergency Alert Area. |   NOTE: Normally, the pre-defined area that triggers the emergency alert and the pre-defined area that triggers the out of MC service alert area notification is not the same.”  And in “10.10.1.2.3 Entering MC service emergency alert area 3.   If so, MC service server sends an MC service emergency alert area notification to MC service client 1 to notify that it has moved into the area in potential danger.”  However, in stage-3 this indication has been implemented as a boolean indication which is used simply to discriminate entry from exit. No means are provided to the server to indicate the group to which the alert is to be sent. This limits essentially the support to only a single emergency group.  Notice that for notification of entry into or exit from a group geographic area in clause 6.3.2.4.2 of TS24.379 no such limitation exists.  Besides, the exact criteria are not described and it should be clarified that the server can manage the participants in the group by taking into account additional local criteria,( e.g. activated functional alias, conditions of position, heading, etc ) while reusing the existing mechanism of notification for a user entering and exiting from the pre-defined group area.  For details on the potential use of the group indicated for FRMCS requiremtents please see the accompanying discussion paper in C1-221701. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1) Clarify that the server may consider additional criteria (e.g.as those specified in [R-6.6.4.2-002a]) for notification of entry into or exit from an emergency alert area or group area.  2) Enable the server to provide the group to be used for affiliation upon entry (or for de-affiliation upon exit) in emergency area. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The emergency alert mechanism is limited to a single predefined emergency alert area. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.3.2.4.1, 12.1.1.1, 12.1.1.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

1st change

##### 6.3.2.4.1 Generating a SIP MESSAGE request for notification of entry into or exit from an emergency alert area

This clause describes the procedures for generating a SIP MESSAGE request to notify an MCPTT client that it has entered a pre-defined emergency alert area or exited from a pre-defined emergency alert area. The procedure is initiated by the participating MCPTT function when the participating MCPTT function determines that the MCPTT client has entered a pre-defined emergency alert area or exited from a pre-defined emergency alert area.

NOTE: The participating MCPTT function can use additional implementation-specific selection criteria to decide the recipients of the notification, i.e., whether and when an entry/exit notification is sent. The additional criteria can be the activated functional alias, ongoing emergency or conditions related to position such as speed, heading etc.. The determination of the specific region is left to implementation.

The participating 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 user identity associated to the MCPTT ID of the targeted MCPTT user;

5) shall include a P-Asserted-Identity header field set to the public service identity of the participating 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:

a) the <mcptt-request-uri> element set to the value of the MCPTT ID of the targeted MCPTT user; and

b) optionally an <associated-group-id> element set to the MCPTT group ID of the group for which a pre-defined emergency alert area has been entered or exited;

8) shall include in the application/vnd.3gpp.mcptt-info+xml MIME body an <emergency-alert-area-ind> element:

a) set to a value of "true", if the MCPTT client has entered a pre-defined emergency alert area; or

b) set to a value of "false", if the MCPTT client has exited from a pre-defined emergency alert area; and

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

Upon receiving a SIP 200 (OK) response to the SIP MESSAGE request, if the <emergency-alert-area-ind> element of the application/vnd.3gpp.mcptt-info+xml MIME body in the SIP MESSAGE request was:

1) set to a value of "true", shall record that the MCPTT client has received the notification that it has entered the pre-defined emergency alert area; and

2) set to a value of "false", shall record that the MCPTT client has received the notification that it has exited the pre-defined emergency alert area.

2nd change

#### 12.1.1.1 Emergency alert origination

As the result of an action in clause 12.1.1.6 or upon receiving a request from the MCPTT user to send an MCPTT emergency alert to the indicated MCPTT group shall determine whether the group document contains a <list-service> element that contains a <preconfigured-group-use-only> element. If a <preconfigured-group-use-only> element exists and is set to the value "true", then the MCPTT client:

1) should indicate to the MCPTT user that alerts are not allowed on the indicated group; and

2) shall skip the remainder of this procedure.

If this is an authorised request for an MCPTT emergency alert as determined by clause 6.2.8.1.6, the MCPTT client shall generate a SIP MESSAGE request in accordance with 3GPP TS 24.229 [4] and IETF RFC 3428 [33] with the clarifications given below.

NOTE 1: This SIP MESSAGE request is assumed to be sent out-of-dialog.

The MCPTT client:

1) 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-Preferred-Service header field according to IETF RFC 6050 [9] in the SIP MESSAGE request;

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

3) may include a P-Preferred-Identity header field in the SIP MESSAGE request containing a public user identity as specified in 3GPP TS 24.229 [4];

4) shall include 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:

a) the <mcptt-request-uri> element set to:

i) if the <EmergencyAlert> element of the MCPTT user profile exists, then:

A) if the <entry-info> attribute of the <entry> element of the <EmergencyAlert> element is set to the value 'DedicatedGroup', the value in the <uri-entry> element of the <entry> element of the <EmergencyAlert> element; and

B) if the <entry-info> attribute of the <entry> element of the <EmergencyAlert> element is set to the value 'UseCurrentlySelectedGroup' and there is no currently selected group, the value in the <uri-entry> element of the <entry> element of the <EmergencyAlert> element; and

ii) if the <EmergencyAlert> element of the MCPTT user profile does not exist, the group identity selected by the MCPTT user;

b) the <alert-ind> element set to a value of "true";

c) the <mcptt-client-id> element set to the MCPTT client ID of the originating MCPTT client; and

d) if the MCPTT client needs to include an active functional alias in the SIP MESSAGE request, the <functional-alias-URI> set to the URI of the used functional alias;

NOTE 2: The MCPTT client learns the functional aliases that are activated for an MCPTT ID from procedures specified in clause 9A.2.1.3.

5) shall include in the SIP MESSAGE request the specific location information for MCPTT emergency alert as specified in clause 6.2.9.1;

6) shall set the MCPTT emergency state if not already set;

7) shall set the MCPTT emergency alert state to "MEA 2: emergency-alert-confirm-pending";

8) shall set the Request-URI to the public service identity identifying the participating MCPTT function serving the MCPTT user; and

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

On receiving a SIP 2xx response to the SIP MESSAGE request, the MCPTT client shall set the MCPTT emergency alert state to "MEA 3: emergency-alert-initiated".

On receiving a SIP 4xx response a SIP 5xx response or a SIP 6xx response to the SIP MESSAGE request, the MCPTT client shall set the MCPTT emergency alert state to "MEA 1: no-alert".

NOTE 3: The MCPTT emergency state is left set in this case as the MCPTT user presumably is in the best position to determine whether or not they are in a life-threatening condition. The assumption is that the MCPTT user can clear the MCPTT emergency state manually if need be.

NOTE 4: Based on implementation the MCPTT client can subsequently automatically originate an MCPTT emergency group call as specified in clause 10.1.1.2.

3rd change

#### 12.1.1.6 MCPTT client receives notification of entry into or exit from an emergency alert area

Upon receipt of a "SIP MESSAGE request for notification of entry into or exit from an emergency alert area", the MCPTT client:

1) if the received SIP MESSAGE request contains an application/vnd.3gpp.mcptt-info+xml MIME body with the <emergency-alert-area-ind> element value:

a) set to "true":

i) may display to the MCPTT user an indication that MCPTT client has entered a pre-defined emergency alert area; and

ii) shall initiate the emergency alert origination procedure as specified in clause 12.1.1.1 with the clarification that the <mcptt-request-uri> element is set to the the group identity value of the <associated-group-id> element if received in the SIP MESSAGE request; or

b) set to "false":

i) may display to the MCPTT user an indication that MCPTT client has exited a pre-defined emergency alert area;

NOTE: In this case, the MCPTT emergency state remains set, as the MCPTT user is in the best position to determine whether or not they are in a life-threatening condition. The MCPTT user can clear the MCPTT emergency state manually, if needed.

2) shall generate a SIP 200 (OK) response according to rules and procedures of 3GPP TS 24.229 [4]; and

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

End of changes