**3GPP TSG-SA WG6 Meeting #39-bis-e S6-201895**

**e-meeting, 12th – 20th October 2020 (revision of S6-201761)**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** | **0275** | **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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | MC service emergency alert clarifications | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | FirstNet | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | enh3MCPTT | | | | |  | ***Date:*** | | | 2020-10-16 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **C** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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:*** | | A note in the MC service group emergency alert cancel procedure has caused some confusion in Stage 3. The note needs clarification.    A note in the MC service individual emergency alert initiation procedure that states that the emergency state of the user is retained by the system until cancelled is not supported by Stage 1 requirements. The note is deleted and the corresponding note in the MC service individual emergency alert cancellation procedure is also deleted. | | | | | | | | |
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| ***Summary of change:*** | | The MC service group and individual emergency alert cancel procedures and the MC service individual emergency alert initiation procedure are modified to provide clarifications and to remove unsupported elements. | | | | | | | | |
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| ***Consequences if not approved:*** | | Stage 3 will continue to be confused about emergency operation. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.10.1.2.2.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  |  | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  |  | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  |  | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

###### 10.10.1.2.2.2 MC service group emergency alert cancel

Figure 10.10.1.2.2.2-1 illustrates the procedure for the MC service client cancelling an MC service emergency alert with an MC service group i.e., MC service users on MC service client 1, MC service client 2 and MC service client 3 belong to the same MC service group which is defined on MC service group management server.

NOTE 1: For simplicity, a single MC service server is shown in place of a user home MC service server and a group hosting MC service server.

Pre-conditions:

1. The MC service client 1 had previously successfully initiated an MC service emergency alert targeted to a group.

2. The MC service client 1 is still in the emergency state.

3. The initiating MC service client 1 has affiliated with the MC service group designated as the MC service emergency group.



Figure 10.10.1.2.2.2-1 MC service group emergency alert cancel

1. The MC service user at the MC service client 1 initiates an MC service emergency alert cancel to inform the server that MC service client 1 is no longer in the emergency state.

NOTE 2: The MC service emergency alert cancel request can carry an indication to also request that the in-progress emergency of the group is to be cancelled. The MC service server can accept or deny the request to cancel the in-progress emergency state of the group as a whole, separately from accepting or denying the request to cancel the emergency alert at MC service client 1. An authorized user (e.g. dispatcher, supervisor) can cancel either or both the in-progress emergency state of the group and the MC service emergency alert of another user. A MC service user is always authorized to cancel the emergency state of their own client. Determination of authorized users is implementation dependent.

2. MC service client 1 requests the MC service server to send an MC service emergency alert cancel to the MC service group to which MC service client 1 had previously sent the emergency alert.

3. MC service server resolves the MC service group ID to determine the members of that MC service group and their affiliation status, based on the information from group management server.

4. The MC service server sends the MC service emergency alert cancel response to the MC service client 1 to confirm the MC service emergency alert cancel request. MC service client 1 clears its emergency state.

5. The MC service server sends an MC service emergency alert cancel request towards the MC service clients of each of those affiliated MC service group members.

6. MC service users are notified of the MC service emergency alert cancellation of MC service client 1.

7. For a unicast MC service emergency alert cancel, the receiving MC service clients send the MC service emergency alert cancel response to the MC service server to acknowledge the MC service emergency alert cancel. For a multicast MC service emergency alert cancel, these acknowledgements are not sent unless the MC service clients have been configured to do so.

\* \* \* End of First Change \* \* \* \*

\* \* \* Second Change \* \* \* \*

##### 10.10.1.2.1.3 MC service individual emergency alert initiation

Figure 10.10.1.2.1.3-1 illustrates the procedure for the MC service client initiating an MC service individual emergency alert. This emergency alert can be sent at the time of emergency private call initiation as specified in subclause 10.7.2.4.1 of TS 23.379 [16], or it can also be sent standalone as described below.

Pre-conditions:

1. The MC service ID of MC service client 2 is previously defined to be used for emergency communications by MC service client 1.

2. Optionally, MC service client 1 may use an activated functional alias for individual communication.

3. The MC service server may have subscribed to the MC service functional alias controlling server within the MC system for functional alias activation/de-activation updates.



Figure 10.10.1.2.1.3-1 MC service individual emergency alert

1. The MC service user at the MC service client 1 initiates an MC service individual emergency alert. MC service client 1 sets its MC service emergency state. The MC service user at MC service client 1 may select a functional alias to be used for the MC service individual emergency alert. MCPTT client 1 retains the MC service emergency state until explicitly cancelled by the user of MC service client 1.

2. MC service client 1 requests the MC service server to send an MC service emergency alert request to MC service client 2 that has been designated as the target of MC service emergency communication by MC service client 1.

3. MC service server checks whether the MC service user of MC service client 1 is authorized for initiation of an MC service individual emergency alerts. The MC service server checks whether the provided functional alias, if present, can be used and has been activated for the user.

4. The MC service server sends the MC service emergency alert response to the MC service user 1 to confirm the MC service emergency alert request.

NOTE 1: While MC service client 1 is in the emergency state, all MC service group and private calls initiated by MC service client 1 are initiated as MC service emergency calls.

5. The MC service server sends an MC service emergency alert request toward MC service client 2. The MC service emergency alert request message shall contain the following information: Location, MC service ID, and the MC service user's mission critical organization name. If in step 2, the MC service client 1 does not include the location information in the MC service emergency alert request to the MC service server, the MC service server acquires the location information of the MC service user at the MC service client 1 from the location management server. If the location information is included in step 2, then the MC service server uses the location information from MC service client 1.

6. MC service user of MC service client 2 is notified of the MC service emergency alert. The functional alias of the initiating MC service user may be displayed.

NOTE 2: MC service client 2 does not set its emergency state as a result of receiving the MC service emergency alert.

7. The receiving MC service client 2 sends the MC service emergency alert response to the MC service server to acknowledge the MC service emergency alert.

NOTE 3: The MC service client 1 need not initiate a private call to MC service client 2.

\* \* \* End of Second Change \* \* \* \*

\* \* \* Third Change \* \* \* \*

###### 10.10.1.2.2.3 MC service individual emergency alert cancel

Figure 10.10.1.2.2.3-1 illustrates the procedure for the MC service client cancelling an individual MC service emergency alert (i.e. without an associated MC service group).

Pre-conditions:

1. The MC service client 1 had previously successfully initiated an individual MC service emergency alert targeted to MC service client 2.

2. The MC service client 1 is still in the emergency state.



Figure 10.10.1.2.2.3-1 MC service individual emergency alert cancel

1. The MC service user at the MC service client 1 initiates an MC service individual emergency alert cancel for an individual emergency alert.

2. MC service client 1 sends the MC service emergency alert cancel request to the MC service server to inform the server that MC service client 1 is no longer in the emergency state. The emergency alert cancel request contains the MC service ID of MC service client 2.

3. The MC service server sends the MC service emergency alert cancel response to the MC service client 1 to confirm the MC service emergency alert cancel request. MC service client 1 clears its emergency state.

4. The MC service server sends an MC service emergency alert cancel request towards MC service client 2.

5. The MC service user of MC service client 2 is notified of the MC service emergency alert cancellation of MC service client 1.

6. MC service client 2 sends the MC service emergency alert cancel response to the MC service server to acknowledge the MC service emergency alert cancel.

\* \* \* End of Third Change \* \* \* \*

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