**3GPP TSG-CT WG1 Meeting #130-eC1-21wxyz**

**Electronic meeting, 20-28 April 2021 was C1-213451**

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **24.380** | **CR** | **0304** | **rev** | **3** | **Current version:** | **17.2.0** |  |
|  |
| *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:***  | An authorised user clearing the entire floor request queue |
|  |  |
| ***Source to WG:*** | Samsung |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | enh3MCPTT-CT |  | ***Date:*** | 2021-05-10 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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 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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | The LS response C1-210534 (S6-201695) from SA6 to CT1 (127-e meeting), Clarified further that the procedure for allowing an authorized user to request clearing the queued floor request is enhanced to support the clearing of the entire queue.In the latest version of 3GPP TS 22.280, a new requirement has been added to allow an authorized user to request clearing the entire queue instead of specifying the list of users to be cleared. SA6 agreed to the attached CR to 3GPP TS 23.379 to fullfill the new requirement reproduced from TS 22.280 below:[R-6.19.1.1-005a] The MCX Service shall provide a mechanism for an authorised user to clear the entire MCX request queue. |
|  |  |
| ***Summary of change:*** | The floor control participant and server procedure are updated to support the clearing of entire queue.6.2.4.7.4: Additional text is added to calrify that entire queue can be cancelled.6.3.4.4.13: Additional handling is added to clear the entire queue if the list is not present and added/modified the appropriate response state values.8.2.15: Clarification is provided if the clearing of entire queue is required then no need to include field which carries the list of users.The existing text is repharsed for list of users population in case of response.6.3.4.5.7: Handling of cancel request is voided as state is exclusively for the revoke procedure and no other messages should be handled. 8.2.3.25: Updated the Response state code and description and all the reference to them in the subclauses are also updated.The ‘floor control queue’ is replaced with ‘active floor request queue’. |
|  |  |
| ***Consequences if not approved:*** | The authorized user will not have an option to quickly clear the entire queue instead of picking or selecting the users whose floor request can be removed from the queue.  |
|  |  |
| ***Clauses affected:*** | 6.2.4.7.4, 6.3.4.4.13, 6.3.4.5.7, 6.3.5.4.12, 6.3.5.5.11, 8.2.15, 8.2.3.25 |
|  |  |
|  | **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:*** | Rev 2:1. 6.3.4.5.7: Procedure is removed to allow only revoke procedure to be handled in the 'G: pending Floor Revoke’ state.
2. 6.3.4.4.13, 6.3.5.4.12, 6.3.5.5.11 and 8.2.3.25: Updated the response text and other small corrections with editorial changes.

Rev 1:1. 6.2.4.7.4: Reworded the text – “to clearing of an” to “to clear an”
2. 6.3.4.4.13: Reworded the text – “users identified in” to “users indicated in”, replaced ‘is’ with ‘was’ and replaced “doesn’t exists’ with “was not possible to remove as they were not”. Reworded existing (“list of users population in case of response”). Added/modified the response state handling.
3. 8.2.15: Reworded existing (“list of users population in case of response”) and new proposed text (“If the request is for clearing the entire active floor request queue, this field is neither included in the request nor the response”).
4. The ‘floor control queue’ is replaced with ‘active floor request queue’.
5. 6.3.4.5.7: Incorporated the similar changes of the 6.3.4.4.13 and additionally the current processing pre-emptive floor priority is handled appropriately.
6. 8.2.3.25: The response state codes are modified/added and correponding reference subclauses are also updated.
 |

\* \* \* \* \* \* BEGIN CHANGE \* \* \* \* \* \* \*

##### 6.2.4.7.4 Send Floor Queued Cancel Request message (S: Send Floor Queued Cancel Request)

Upon receipt of a request from an MCPTT user to cancel the floor requests of other MCPTT users whose floor requests are in floor control queue or a request from an MCPTT user to clear all floor requests queued by the floor control server for supporting queuing, the floor participant

If the group is not configured for audio cut-in floor control:

1. shall send the Floor Queued Cancel Request message as described in the subclause 8.2.15;

a. If the user provided a list of MCPTT users, then include the list of MCPTT users in the List of Users Queued Floor Request field; or

b If the user did not provide a list of MCPTT users, then the List of Users Queued Floor Request field is not included;  (This is coding indicates that the user is requesting that all floor requests queued by the floor control server for supporting queuing); and

2. shall start timer T134 (Floor Queued Cancel Request).

NOTE: It is an implementation option to handle the receipt of the Floor Ack message and what action to take if the Floor Ack message is not received.

otherwise, shall indicate to the MCPTT user that Floor Queued Cancel request is not allowed on the group configured for audio cut-in floor control.

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

##### 6.3.4.4.13 Receive Floor Queued Cancel Request message (R: Floor Queued Cancel Request)

Upon receiving a Floor Queued Cancel Request message from the associated floor participant, the floor control arbitration logic in the floor control server:

1. if the active floor request queue is empty:

a. shall send a Response to Floor Queued Cancel Request message to the associated floor participant as described in the subclause 8.2.15. The Response to Floor Queued Cancel Request:

i. shall include in the Floor Queue Cancel Response State field and value as '2' (Queue is already Empty); and

ii. if the Floor Request included a Track Info field, shall include the received Track Info field; and

b. may set the first bit in the subtype of the Response to Floor Queued Cancel Request message to '1' (Acknowledgment is required) as described in subclause 8.2.2; and

NOTE 1: It is an implementation option to handle the receipt of the Floor Ack message and what action to take if the Floor Ack message is not received.

c. shall remain in the 'G: Floor Taken' state; and

2. if the active floor request queue is not empty:

a. shall remove the queued floor request of the users indicated in the List of User IDs field from the active floor request queue if the List of User IDs field is present. Otherwise, shall remove all the queued floor requests from the active floor request queue;

b. shall send a Floor Queued Cancel Notification message to the associated floor participants whose floor request has been removed from the queue and message is generated as described in the subclause 8.2.15;

c. shall send a Response to Floor Queued Cancel Request message to the associated floor participant as described in the subclause 8.2.15. The Response to Floor Queued Cancel Request:

i. shall include in the Floor Queue Cancel Response State field and value as :

A. '0' (Successfully removed the queued requests of all the specified list of users in a request or all the queued requests of users from the queue), if the actions for removing the queued requests of all the specified list of users in a request or all the queued requests of the users from the active floor request queue as specified in step 2a) above were performed and successful in removing all the queued requests;

B. '1' (Not authorized to remove all the specified list of users in a request or all the queued requests of users from the queue), if the user is not authorized to perform the actions for removing all the specified list of users in a request or all the queued requests of users from the active floor request queue as specified in step 2a) above;

C. '2' (Queue is already empty), if the actions for removing all the specified list of users in a request or all the queued requests of users from the active floor request queue as specified in step 2a) above were performed but not successful as there were not any queued floor request in the active floor request queue;

D. '3' (The queued floor requests do not exist in the queue of all the specified list of users in a request), if the actions for removing the queued floor requests of all the specified list of users in a request from the active floor request queue as specified in step 2a) above were performed but not successful as they were not in the active floor request queue;

E. '4' (Unable to remove some of the queued floor request of the specified list of users in a request), if the actions for removing the queued floor requests of all the specified list of users in a request from the active floor request queue as specified in step 2a) above were performed but not successful for some of the users from the specified list of users and their queued requests still exist in the active floor request queue;

F. '5' (The queued floor requests of some of the specified list of users in a request do not exist in the queue), if the actions for removing the queued floor requests of all the specified list of users in a request from the active floor request queue as specified in step 2a) above were performed but not successful for some of the users as their queued requests were not present in the active floor request queue; or

G. '255' (Unknown reason), if the actions for removing the queued floor requests of all the specified list of users in a request from the active floor request queue as specified in step 2a) above were performed but not successful due to unknown reason (i.e queued requests still exist in the active floor request queue);

ii. if the Floor Queued Cancel Request included a Track Info field, shall include the received Track Info field; and

iii. if the List of User IDs field was present in the received Floor Queued Cancel Request message, shall include into the List of Users Queued Floor Request field the list of users whose queued floor request was not possible to remove and their queued requests still exist in the active floor request queue; and

d. may send a Floor Queue Position Info message to the remaining users whose queued floor request position has changed in the active floor request queue, and if negotiated support of queueing of floor requests as specified in clause 14. The Floor Queue Position Info message:

i. shall include the queue position and floor priority in the Queue Info field; and

ii. if the Floor Request message included a Track Info field, shall include the received Track Info field; and

e. shall remain in the 'G: Floor Taken' state.

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

##### 6.3.4.5.7 Receive Floor Queued Cancel Request message (R: Floor Queued Cancel Request)

Void

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

##### 6.3.5.4.12 Receive Floor Queued Cancel Request message (R: Floor Queued Cancel Request)

Upon receiving a Floor Queued Cancel Request message from the associated floor participant:

1. if the MCPTT ID of the associated floor participant is an authorized user (e.g dispatcher) to cancel the queued floor request of other MCPTT users (the list of specified users in a request or all the users), whose floor requests are in floor control queue, the floor control interface towards the MCPTT client in the floor control server:

a. shall forward the Floor Queued Cancel Request message to the floor control server arbitration logic; and

b. shall remain in the 'U: not permitted and Floor Taken' state; and

2. if the MCPTT ID of the associated floor participant is not an authorized user (If participant type is not dispatcher, dispatch supervisor and MC service administrator) to cancel the queued floor request of other MCPTT users (the list of specified users in a request or all the users), whose floor requests are in floor control queue, the floor control interface towards the MCPTT client in the floor control server:

a. shall send a Response to Floor Queued Cancel Request message to the associated floor participant as described in the subclause 8.2.15. The Response to Floor Queued Cancel Request:

i. shall include in the Floor Queue Cancel Response State field and value as '1' (Not authorized to remove all the specified list of users in a request or all the queued requests of users from the queue); and

ii. if the Floor Request included a Track Info field, shall include the received Track Info field; and

b. may set the first bit in the subtype of the Response to Floor Queued Cancel Request message to '1' (Acknowledgment is required) as described in subclause 8.2.2; and

NOTE 1: It is an implementation option to handle the receipt of the Floor Ack message and what action to take if the Floor Ack message is not received.

c. shall remain in the 'U: not permitted and Floor Taken' state.

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

##### 6.3.5.5.11 Receive Floor Queued Cancel Request message (R: Floor Queued Cancel Request)

Upon receiving a Floor Queued Cancel Request message from the associated floor participant:

1. if the MCPTT ID of the associated floor participant is an authorized user (e.g dispatcher) to cancel the queued floor request of other MCPTT users (the list of specified users in a request or all the users), whose floor requests are in floor control queue, the floor control interface towards the MCPTT client in the floor control server:

a. shall forward the Floor Queued Cancel Request message to the floor control server arbitration logic; and

b. shall remain in the 'U: permitted' state;

2. if the MCPTT ID of the associated floor participant is not an authorized user (If participant type is not dispatcher, dispatch supervisor and MC service administrator) to cancel the queued floor request of other MCPTT users (the list of specified users in a request or all the users),, whose floor requests are in floor control queue, the floor control interface towards the MCPTT client in the floor control server:

a. shall send a Response to Floor Queued Cancel Request message to the associated floor participant as described in the subclause 8.2.15. The Response to Floor Queued Cancel Request:

i. shall include in the Floor Queue Cancel Response State field and value as '1' (Not authorized to remove all the specified list of users in a request or all the queued requests of users from the queue); and

ii. if the Floor Request included a Track Info field, shall include the received Track Info field; and

b. may set the first bit in the subtype of the Response to Floor Queued Cancel Request message to '1' (Acknowledgment is required) as described in subclause 8.2.2; and

NOTE: It is an implementation option to handle the receipt of the Floor Ack message and what action to take if the Floor Ack message is not received.

c. shall remain in the 'U: permitted' state.

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

### 8.2.15 Floor Queued Cancel message

The Floor Queued Cancel message is a request from a floor participant being an authorized user (e.g dispatcher) to cancel the queued floor request of other MCPTT users. Further it is used to notify other MCPTT users of their queued request is being cancelled and to the originator of the request to indicate the status of cancellation of queued floor request.

The Floor Queued Cancel message is used in the on-network mode. In the on-network mode the Floor Queued Cancel message is only used over the unicast bearer.

Table 8.2.15-1 shows the content of the Floor Queued Cancel message.

Table 8.2.15-1: Floor Queued Cancel message

0 1 2 3

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

|V=2|P| Subtype | PT=APP=204 | length |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| SSRC of floor participant/floor control server/arbitrator |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| name=MCPT |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Functional Alias field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Track Info field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| List of Users Queued Floor Request field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Requested Party's Identity field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Floor Queued Cancel Message Type field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Floor Queue Cancel Response State field |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

With the exception of the three first 32-bit words the order of the fields is irrelevant.

**Subtype:**

The subtype is coded according to table 8.2.2-1.

**Length:**

The length is coded as specified in subclause 8.1.2.

**SSRC:**

The SSRC field carries the SSRC of the floor participant / floor control server / floor arbitrator.

If the message is for cancellation of a queued floor request, then the SSRC shall be that of the floor participant who is requesting cancellation.

If the message is for notifying the cancellation of a queued floor request to the other floor participants or is a response to a message for cancellation of a queued floor request originated by a floor participant, then the SSRC shall be that of the floor control server / floor arbitrator.

The SSRC field is coded as specified in IETF RFC 3550 [3].

**Functional Alias:**

This field shall be included if the message is for a cancellation of a queued floor request from a floor participant or is a response to a message for cancellation of a queued floor request originated by a floor participant. The Functional Alias field is coded as described in subclause 8.2.3.19.

**Track Info:**

The Track Info field is included when an MCPTT call involves a non-controlling MCPTT function. The coding of the Track Info field is described in subclause 8.2.3.13.

**List of Users Queued Floor Request:**

The List of Users field is used only in sending a message for cancellation of a queued floor request of other MCPTT users and for sending a response message to the cancellation of a queued floor request. The List of Users field is coded as specified in subclause 8.2.3.24 and indicates the list of users whose request for permission to send media is queued.

In the case of sending a response message to the cancellation of a queued floor request, the List of Users field indicates the list of users whose queued floor request was not possible to remove and their queued requests still exist in the active floor request queue.

If the request is for clearing all the users queued floor request, this field is neither included in the request nor the response.

**Requested Party's Identity field:**

The Requested Party’s Identity field shall be added only when the Floor Queue Cancel request is originated by a floor participant user. This field shall not be added if the Floor Queue Cancel request message is originated by the floor control server (due to local policies). This field is also included in a response messages to the cancellation of a queued floor request originated by a floor participant. The Requested Party’s Identity field is coded as specified in subclause 8.2.3.8.

**Floor Queued Cancel Message Type field:**

The Floor Queued Cancel Message Type field is coded as specified in subclause 8.2.3.23.

**Floor Queue Cancel Response State field:**

The Floor Queue Cancel Response State field is included only when sending a response message to the cancellation of a queued floor request originated by a floor participant. The Floor Queue Cancel Response State field is coded as specified in subclause 8.2.3.25.

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

#### 8.2.3.25 Floor Queue Cancel Response State field

The Floor Queue Cancel Response State field indicates the result of the cancellation of floor requests of other MCPTT users, whose floor requests are in floor control queue.

Table 8.2.3.25-1 describes the coding of the Floor Queue Cancel Response State field.

Table 8.2.3.25-1: Floor Queue Cancel Response State field coding

0 1 2 3

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

| Floor Queue | Floor Queue | Floor Queue |

| Cancel Response | Cancel Response | Cancel Response |

| State field ID | State length | State Value |

| value | | |

+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

The <Floor Queue Cancel Response State field ID> value is a binary value and shall be set according to table 8.2.3.1-2.

The <Floor Queue Cancel Response State length> value is a binary value and shall have the value '2' indicating the total length in octets of the <Floor Queue Cancel Response State> value item.

The <Floor Queue Cancel Response State> value is a 16-bit binary value with the following values:

'0' Successfully removed the queued requests of all the specified list of users in a request or all the queued requests of users from the queue

'1' Not authorized to remove all the specified list of users in a request or all the queued requests of users from the queue

'2' Queue is already empty

'3' The queued floor requests do not exist in the queue of all the specified list of users in a request

'4' Unable to remove some of the queued floor request of the specified list of users in a request

'5' The queued floor requests of some of the specified list of users in a request do not exist in the queue

'255' Unknown reason

All other values are reserved for future use.

\* \* \* \* \* \* END CHANGE \* \* \* \* \* \* \*