**3GPP TSG-SA WG6 Meeting #48-e S6-220700**

**e-meeting, 5th – 14th April 2022 (revision of S6-22xxxx)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **23.379** | **CR** | **0307** | **rev** | **-** | **Current version:** | **18.1.0** |  |
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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 | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Update to remotely initiated call request procedure to support pre-emptive or high priority and commencement mode | | | | | | | | | |
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| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | enh4MCPTT | | | | |  | ***Date:*** | | | 2022-03-30 |
|  |  | | | |  | |  | | |  |
| ***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 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:*** | | Stage-1 has requirement to request for the pre-emptive or high priority while requesting for the remotely initiated communication.  “the initiator of the feature can have the capability to request a pre-emptive or high priority for that Communication to ensure it is set up even in case of resource congestion or to limit disturbance by other services.”  Currently the below informations being passed from the initiator of this feature to the remote party   1. Notification to remote user of remotely initiated call 2. MCPTT User ID or MCPTT group ID to be called   The pre-emptive or high priority for the communication and commencement mode (e.g. forced automatic) are required to be conveyed by the initiator of the feature is missing in information flow and procedures.  An indication is required while initiating an communication which is result of remotely initiated call request to convey the recipient(s) of the call that this call is being initiated because of remotely call initiated request. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The changes to the existing information flows and procedures to hanlde the gaps identified as described in the reason for changes.  In 10.16.2.1: Added new information elements “Requested priority” and “Requested commencement mode” in remotely initiated MCPTT call request information flow.  In 10.16.3.1: Updated the procedure to consider the newly added information elements for call setup parameters while initiating a call.  In 10.6.2.2.7, 10.6.2.2.8 & 10.6.2.2.9: Updated the information flow for group call request to include the information indicating about the call initiation is a result of receiving of a “Remotely initiated call request” and authorized user who has requested for remotely initiated call request.  In 10.7.2.1.1, 10.7.2.1.2 & 10.7.2.1.2a: Updated the information flow for private call request to include the information indicating about the call initiation is a result of receiving of a “Remotely initiated call request” and authorized user who has requested for remotely initiated call request. | | | | | | | | |
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| ***Consequences if not approved:*** | | The pre-emptive or high priority while requesting for the remotely initiated communication can not be supported. Quick setup of the call and the reason for the call initiation can’t be conveyed. | | | | | | | | |
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| ***Clauses affected:*** | | 10.16.2.1, 10.16.3.1, 10.6.2.2.7, 10.6.2.2.8, 10.6.2.2.9, 10.7.2.1.1, 10.7.2.1.2 & 10.7.2.1.2a | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

##### 10.16.2.1 Remotely initiated MCPTT call request

Table 10.16.2.1-1 describes the information flow remotely initiated MCPTT call request from the MCPTT client to the MCPTT server and from the MCPTT server to MCPTT client.

Table 10.16.2.1-1: remotely initiated MCPTT call request information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCPTT ID | M | The MCPTT ID of the called party (remote) |
| Notification to remote user of remotely initiated call | M | Use to determine whether the called party (remote) receives any indication of the remotely initiated MCPTT call. |
| MCPTT ID | O (NOTE) | For a remotely initiated MCPTT private call the MCPTT User ID to be called |
| MCPTT Group ID | O (NOTE) | For a remotely initiated MCPTT group call to use. |
| Requested commencement mode | O | For a remotely initiated MCPTT private call, requested commencement mode to be used by the called party (remote) as a commencement mode while initiating a call requested by a received remotely initiated call. The values could be force-auto-mode, auto-mode and manual-mode |
| Requested priority | O | For a remotely initiated MCPTT private call or MCPTT group call, requested priority level to be used by the called party (remote) as an application level priority while initiating a call requested by a received remotely initiated call |
| NOTE: One and only one of these shall be present. | | |

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

#### 10.16.3.1 Remotely initiated MCPTT call request

The remotely initiated MCPTT call request procedure includes the initial remotely initiated MCPTT call request from the MCPTT user to the remote UE and either the MCPTT private call procedures or the MCPTT group call procedures originating at the remote UE.

Procedures in figure 10.16.3.1-1 show the signalling control plane procedures for the MCPTT client initiating a remotely initiated MCPTT call request with the chosen MCPTT user.

Pre-conditions:

1. If the MCPTT user on MCPTT client 1 wants the resulting remotely initiated MCPTT call to be:

a. an MCPTT group call, then MCPTT user 2 on MCPTT client 2 is an affiliated MCPTT group member of the MCPTT group that is the target of the remotely initiated MCPTT call. Otherwise prior to these procedures the MCPTT user 1 on MCPTT client 1 can use existing procedures (e.g., remotely change MCPTT group affiliation (10.3.5.1.1), if authorized, to satisfy the necessary preconditions for the MCPTT user 2 on MCPTT client 2 to initiated a MCPTT group call from that MCPTT group.

b. an MPCTT private call, then the MCPTT user 2 on MCPTT client 2 is permitted to initiate an MCPTT private call to the identified MCPTT user.



Figure 10.16.3.1-1: Remotely initiated MCPTT call request

1. MCPTT user on MCPTT client 1 initiates a remotely initiated MCPTT call request to the MCPTT user of MCPTT client 2.

2. MCPTT client 1 sends a remotely initiated MCPTT call request towards the MCPTT server.

3. MCPTT server checks whether the MCPTT user at MCPTT client 1 is authorized to initiate a remotely initiated MCPTT call request.

4. If authorized, MCPTT server sends the corresponding remotely initiated MCPTT call request towards the MCPTT client 2.

5. Based on the received information the receiving MCPTT client 2 may notify the user of the remotely initiated MCPTT call request.

6. Optionally the receiving MCPTT client 2 sends a remotely initiated MCPTT call response to the MCPTT server.

7. After receiving the remotely initiated MCPTT call response from MCPTT client 2, the MCPTT server informs the MCPTT client 1 about successful remotely initiated MCPTT call request.

NOTE 1: Step 6 and step 7 might not be sent, since it could be determined that the remotely initiated MCPTT call was successful by receiving the MCPTT call initiated by MCPTT client 2.

8. Based on the received information the MCPTT client 2 initiates an MCPTT call (either an MCPTT group call or an MCPTT private call) using the normal MCPTT call establishment procedures (10.6.2.3.1.1.2 or 10.7.2.2) with implicit floor request and other call set up parameters if received in the remotely initiated call request. The MCPTT call request may include the additional information such as MCPTT ID of requester of remotely initiated call request and indication of whether the call initiation is due to receiving of remotely initiated call request from authorized user.

NOTE 2: Step 6 and step 7 are received in this order. However, step 6 or step 7 or both might occur before or after step 8.

NOTE 3: The received information can have call setup related information, such as requested application priority level, commencement mode, etc.

NOTE 4: The additional information such as MCPTT ID of requester of remotely initiated call request and indication of whether the call initiation is due to receiving of remotely initiated call request from authorized user can be used by terminating client to switch to this call if user is active on another call or any other implementation specific use.

The result of these procedures is an on-going MCPTT (group or private) call which includes MCPTT client 1.

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

##### 10.6.2.2.7 Group call request (MCPTT client – MCPTT server)

Table 10.6.2.2.7-1 describes the information flow group call request from the MCPTT client to the MCPTT server.

Table 10.6.2.2.7-1 Group call request information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCPTT ID | M | The MCPTT ID of the calling party |
| Functional alias | O | The functional alias of the calling party |
| MCPTT group ID | M | The MCPTT group ID of the group on which the call is requested |
| SDP offer | M | Media parameters of MCPTT clients |
| Implicit floor request | O | When originating client requests the floor, this element shall be included |
| Broadcast indicator | O | Indicates that the group call request is for a broadcast group call |
| Location information | O | Location of the calling party. |
| Requested priority | O | Application priority level requested for this call |
| MCPTT ID | O | The MCPTT ID of the authorized user who has requested for remotely initiated call request and must be present for remotely initiated call |
| Remotely initiated call request indicator | O | Indicates that the MCPTT group call request is a result of receiving of a remotely initiated call request (true/false) and must be present for remotely initiated call |

##### 10.6.2.2.8 Group call request (MCPTT server – MCPTT server)

Table 10.6.2.2.8-1 describes the information flow group call request between the MCPTT servers.

Table 10.6.2.2.8-1 Group call request information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCPTT ID | M | The MCPTT ID of the calling party |
| Functional alias | O | The functional alias of the calling party |
| MCPTT group ID | M | The MCPTT group ID of the group on which the call is initiated |
| SDP offer | M | Media parameters of MCPTT server |
| Broadcast indicator | O | Indicates that the group call request is for a broadcast group call |
| Implicit floor request (NOTE) | O | Indicates that the originating client requests the floor. |
| Requested priority | O | Priority level requested for the call. |
| Location information | O | Location of the calling party |
| MCPTT ID | O | The MCPTT ID of the authorized user who has requested for remotely initiated call request and must be present for remotely initiated call |
| Remotely initiated call request indicator | O | Indicates that the MCPTT group call request is a result of receiving of a remotely initiated call request (true/false) and must be present for remotely initiated call |
| NOTE: This element shall be included only when the originating client requests the floor. | | |

##### 10.6.2.2.9 Group call request (MCPTT server – MCPTT client)

Table 10.6.2.2.9-1 describes the information flow group call request from the MCPTT server to the MCPTT client.

Table 10.6.2.2.9-1 Group call request information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCPTT ID | M | The MCPTT ID of the calling party |
| Functional alias | O | The functional alias of the calling party |
| MCPTT group ID | M | The MCPTT group ID of the group on which the call is initiated |
| SDP offer | M | Media parameters of MCPTT server |
| Broadcast indicator | O | Indicates that the group call request is for a broadcast group call |
| MCPTT ID | O | The MCPTT ID of the authorized user who has requested for remotely initiated call request and must be present for remotely initiated call |
| Remotely initiated call request indicator | O | Indicates that the MCPTT group call request is a result of receiving of a remotely initiated call request (true/false) and must be present for remotely initiated call |

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

##### 10.7.2.1.1 MCPTT private call request (MCPTT client to MCPTT server)

Table 10.7.2.1.1-1 describes the information flow MCPTT private call request from the MCPTT client to the MCPTT server.

Table 10.7.2.1.1-1: MCPTT private call request (MCPTT client to MCPTT server) information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCPTT ID | M | The MCPTT ID of the calling party |
| Functional alias | O | The functional alias of the calling party |
| MCPTT ID (see NOTE) | O | The MCPTT ID of the called party |
| Functional alias (see NOTE) | O | The functional alias of the called party |
| Use floor control indication | M | This element indicates whether floor control will be used for the private call. |
| SDP offer | O | Media parameters of MCPTT client. |
| Requested commencement mode | O | An indication that is included if the user is requesting a particular commencement mode |
| Implicit floor request | O | An indication that the user is also requesting the floor. |
| Location information | O | Location of the calling party |
| Requested priority | O | Application priority level requested for this call |
| Transfer indicator | O | Indicates that the MCPTT private call request is a result of a call transfer (true/false) |
| Forwarding indicator | O | Indicates that the MCPTT private call request is a result of a call forwarding.(true/false) |
| MCPTT ID | O | The MCPTT ID of the authorized user who has requested for remotely initiated call request and must be present for remotely initiated call |
| Remotely initiated call request indicator | O | Indicates that the MCPTT private call request is a result of receiving of a remotely initiated call request (true/false) and must be present for remotely initiated call |
| NOTE: At least one identity must be present. | | |

##### 10.7.2.1.2 MCPTT private call request (MCPTT server to MCPTT server)

Table 10.7.2.1.2-1 describes the information flow MCPTT private call request from the MCPTT server to the MCPTT server.

Table 10.7.2.1.2-1: MCPTT private call request (MCPTT server to MCPTT server) information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCPTT ID | M | The MCPTT ID of the calling party |
| Functional alias | O | The functional alias of the calling party |
| MCPTT ID | M | The MCPTT ID of the called party |
| Functional alias | O | The functional alias of the called party |
| Use floor control indication | M | This element indicates whether floor control will be used for the private call. |
| SDP offer | M | Media parameters of MCPTT client. |
| Requested commencement mode | O | An indication of the commencement mode to be used. |
| Implicit floor request | O | An indication that the user is also requesting the floor. |
| Requested priority | O | Priority level requested for the call. |
| Location information | O | Location of the calling party |
| MCPTT ID | O | The MCPTT ID of the authorized user who has requested for remotely initiated call request and must be present for remotely initiated call |
| Remotely initiated call request indicator | O | Indicates that the MCPTT private call request is a result of receiving of a remotely initiated call request (true/false) and must be present for remotely initiated call |

##### 10.7.2.1.2a MCPTT private call request (MCPTT server to MCPTT client)

Table 10.7.2.1.2a describes the information flow MCPTT private call request from the MCPTT server to the MCPTT client.

Table 10.7.2.1.2a: MCPTT private call request (MCPTT server to MCPTT client) information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCPTT ID | M | The MCPTT ID of the calling party |
| Functional alias | O | The functional alias of the calling party |
| MCPTT ID | M | The MCPTT ID of the called party |
| Functional alias | O | The functional alias of the called party |
| Use floor control indication | M | This element indicates whether floor control will be used for the private call. |
| SDP offer | M | Media parameters of MCPTT client. |
| Requested commencement mode | O | An indication of the commencement mode to be used. |
| Implicit floor request | O | An indication that the user is also requesting the floor. |
| MCPTT ID | O | The MCPTT ID of the authorized user who has requested for remotely initiated call request and must be present for remotely initiated call |
| Remotely initiated call request indicator | O | Indicates that the MCPTT private call request is a result of receiving of a remotely initiated call request (true/false) and must be present for remotely initiated call |

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