**3GPP TSG-SA WG6 Meeting #37-e S6-200800**

**e-meeting, 14th – 26th May 2020 (revision of S6-xxxxxx)**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.280** | **CR** | **0260** | **rev** | **-** | **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)*.* | | | | | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Dynamic data associated with a group at GMS | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Hisilicon | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | enh3MCPTT | | | | |  | ***Date:*** | | | 2020-04-30 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***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:*** | | In order for GMS to utilize the dynamic data information provided by the MC service server for affiliation status, regroup status and emergency status as described in clause 10.1.5.5.1, the structure of the dynamic information needs to be specified. Currently only the structure for affiliation status information is specified in clause 10.1.5.5.2. It is required to also specify in detail the structure information for the regroup status and emergency status as these information from MC service server are used by the GMS to check during the group regroup operation.  The information flows should allow a more granular way to implement the subscribe/notify for the dynamic data information. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1) update clause 10.1.5.5.2 to specify at the GMS the regroup status, and group emergency status related information obtained from the MC service server.  2) update the information flow clauses to allow notification of more granular dynamic data information from the MC service server to the GMS. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The structure of the information for regroup status and emergency status is not clear for implementing the checks for GMS's group regroup operation. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.1.5.5.2, 10.1.5.6, 10.1.5.6.1.1, 10.1.5.6.1.3, 10.1.5.6.2, 10.1.5.6.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

##### 10.1.5.5.2 Dynamic data associated with a group in group management server

The group management server may require (e.g., for regrouping) subscribe to a subset of dynamic data including affiliation status, regroup status and emergency status in the MC service server listed in table 10.1.5.5.1-1.

The affiliation status in the form of a list of MC service IDs of affiliated group members corresponding to the MC service for that group is available in group management server. The group management server can subscribe to this information from the MC service server in Table 10.1.5.5.1-1. Table 10.1.5.5.2‑1 describes the affiliation status contained in the group management server.

Table 10.1.5.5.2-1: Affiliation status in group management server

|  |
| --- |
| Parameter description |
| MC service group ID |
| List of affiliated group members |
| > MCPTT |
| >> MCPTT ID |
| > MCVideo |
| >> MCVideo ID |
| > MCData |
| >> MCData ID |

Editor's note: The support for affiliation status in the group management server of an MC service user logged into multiple UEs is FFS.

The regroup status of a group in the form of a list of MC service group IDs of the group being regrouped is available in group management server. The group management server can subscribe to this information from the MC service server in Table 10.1.5.5.1-1. Table 10.1.5.5.2‑2 describes the regroup status contained in the group management server.

Table 10.1.5.5.2-2: Regroup status in group management server

|  |
| --- |
| Parameter description |
| List of MC service groups being regrouped into a new group |
| > MC service group ID (Constituent MC service group) |
| > Corresponding regrouped group information |
| >> MC service group ID |

The emergency status of a group in the form of a list of MC service group IDs of the group in emergency state is available in group management server. The group management server can subscribe to this information from the MC service server in Table 10.1.5.5.1-1. Table 10.1.5.5.2‑3 describes the emergency status contained in the group management server.

Table 10.1.5.5.2-3: Emergency status in group management server

|  |
| --- |
| Parameter description |
| List of MC service groups in emergency state |
| > MC service group ID |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of 1st Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 2nd Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 10.1.5.6 Subscription and notification for dynamic data associated with a group

##### 10.1.5.6.0 General

An authorized user can request the current dynamic data for an MC service group on request. The dynamic data is described in subclause 10.1.5.5.1.

The group management server can subscribe for affiliation status, regroup status and emergency status associated with a group at the MC service server. The affiliation status, regroup status and emergency status in the group management server is described in subclause 10.1.5.5.2.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of 2nd Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of 3rd Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

###### 10.1.5.6.1.1 Subscribe group dynamic data request

Table 10.1.5.6.1.1-1 describes the information flow subscribe group dynamic data request from the MC service client to the MC service server and from the group management server to the MC service server.

Table 10.1.5.6.1-1: Subscribe group dynamic data request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service group ID | M | The MC service group ID for which dynamic data is requested. |
| List of group dynamic data type (See NOTE) | O | The type of group dynamic data requested, e.g., affiliated status, regroup status, emergency status |
| NOTE: if the Group dynamic data type IE is not present, all types of group dynamic data is requested. This IE shall be present from when the request is sent from the group management sever. | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of 3rd Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of 4th Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

###### 10.1.5.6.1.3 Notify group dynamic data request

Table 10.1.5.6.1.3-1 describes the information flow notify group dynamic data response from the MC service server to the MC service client and from the MC service server to the group management server. This information flow from the MC service server to the MC service client may be sent individually addressed or group addressed on unicast or multicast (see subclause 10.7.3.4.1).

Table 10.1.5.6.1.3-1: Notify group dynamic data request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service group ID | M | The MC service group ID for which dynamic data is requested. |
| Group dynamic data | M | Dynamic data associated with the group as per the requested group dynamic data type(s) |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of 4th Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of 5th Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

##### 10.1.5.6.2 Procedure for subscription and notification for dynamic data associated with a group by the MC service client

The procedure for subscription for dynamic data associated with an MC service group is described in figure 10.1.5.6.2-1 and is used by the MC service client of the authorized user to obtain the dynamic data from the MC service server.

Pre-conditions:

- The MC service server holds dynamic data associated with the MC service group.

- The MC service client is authorized to request the dynamic data associated with the MC service group.



Figure 10.1.5.6.2-1: Subscription for group dynamic data

1. The MC service client subscribes to the group dynamic data stored in the MC service server using the subscribe group dynamic data request.

2. The MC service server checks that the MC service client is authorized to receive dynamic data associated with the MC service group.

3. The MC service server provides a subscribe group dynamic data response to the MC service client indicating success or failure of the request.

The procedure for notification of group dynamic data as shown in figure 10.1.5.6.2-2 is used by the MC service server to inform the MC service client about new group dynamic data.

Pre-conditions:

- The MC service client has subscribed to the group dynamic data

- The MC service server has new group dynamic data available.



Figure 10.1.5.6.2-2: Notification of group dynamic data

1. The MC service server provides the notification to the MC service client, who previously subscribed for the group dynamic data.

2. The MC service client provides a notify group dynamic data response to the MC service server.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of 5th Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of 6th Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

##### 10.1.5.6.3 Procedure for subscription and notification for dynamic data associated with a group by the group management server

The procedure for subscription for affiliation status regroup status and emergency status associated with an MC service group by the group management server is described in figure 10.1.5.6.3-1 and is used by the group management server to obtain the affiliation status (implicit and explicit), regroup status and emergency status from the MC service server.

Pre-conditions:

- The MC service server is the MC service server within the MC system where the group is defined.



Figure 10.1.5.6.3-1: Subscription for dynamic data associated with a group

1. The group management server subscribes to the dynamic data associated with a group stored in the MC service server using the subscribe group dynamic data request by specifying the list of group dynamic data type. The group dynamic data type indicates the group affiliation status, regroup status or emergency status to be subscribed.

2. The MC service server provides a subscribe group dynamic data response to the group management server indicating success or failure of the request.

The procedure for notification of group affiliation status, regroup status or emergency status as shown in figure 10.1.5.6.3-2 is used by the MC service server to inform the group management server about the updates to the group affiliation status, regroup status or emergency status.

Pre-conditions:

- The group management server has subscribed to the affiliation status, regroup status or emergency status in the MC service server.

- The affiliation status, regroup status or emergency status associated with a group subscribed to by the group management server has been updated at the MC service server.



Figure 10.1.5.6.3-2: Notification of dynamic data associated with a group

1. The MC service server provides either or all of the affiliation status, regroup status and emergency status via a notification to the group management server based on the list of group dynamic data type which has subscribed.

2. The group management server provides a notify group dynamic data response to the MC service server.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of 6th Changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*