**3GPP TSG- Meeting #63 *S6-244405 (rev of 244043)***

**Hyderabad, India,**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | 4 | **Current version:** |  |  |
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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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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | SA6 | | | | | | | | | |
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| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
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| ***Category:*** | **B** |  | | | | | ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Control Rooms and Dispatchers have requested that group based features are supported for Location in the MC architecture. This document is proposing to include some missing aspects in TS23.280, i.e., MC service Group ID(s) for location information request. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The changes relate to adding optional IEs to the information flow tables and changes to procedures and related text in sections 10.1.5.6, 10.9.2 and 10.9.3 of TS 23.280. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The group based, dynamic location reporting behaviour requested by the Control Rooms and Dispatchers of emergency services cannot be supported. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.1.5.6.1, 10.1.5.6.2, 10.1.5.6.4, 10.9.2.4, 10.9.2.5, 10.9.2.8, 10.9.3.3, 10.9.3.5, 10.9.3.7 and Annex A.8 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | This is a revision of S6-243372 with changes as discussed in SA6 #62. | | | | | | | | |

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

##### 10.1.5.6.1 Information flows for subscription, notification and cancellation for dynamic data associated with a group

###### 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 and from the location 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 server and the location management server. | | |

###### 10.1.5.6.1.2 Subscribe group dynamic data response

Table 10.1.5.6.1.2-1 describes the information flow subscribe 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 and from the MC service server to the location management server. This information flow from the MC service server to the MC service client is sent individually addressed on unicast or multicast.

Table 10.1.5.6.1.2-1: Subscribe group dynamic data response

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service group ID | M | The MC service group ID for which dynamic data is requested. |
| Status | M | Success or failure of the request |

###### 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 request from the MC service server to the MC service client and from the MC service server to the group management server and from the MC service server to the location 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) |

###### 10.1.5.6.1.4 Notify group dynamic data response

Table 10.1.5.6.1.4-1 describes the information flow notify group dynamic data response from the MC service client to the MC service server and from the group management server to the MC service server and from the location management server to the MC service server.

Table 10.1.5.6.1.4-1: Notify group dynamic data response

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service group ID | M | The MC service group ID for which dynamic data was received |

###### 10.1.5.6.1.5 Cancel group dynamic data subscription request

Table 10.1.5.6.1.5-1 describes the information flow for group dynamic data cancel subscription request from the MC service client to the MC service server and from the group management server to the MC service server and from the location management server to the MC service server.

Table 10.1.5.6.1.5-1: Cancel group dynamic data subscription request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service group ID | M | The MC service group ID for which the cancellation of dynamic data subscription is requested. |
| NOTE: The cancellation will affect all types of group dynamic data that was previously subscribed to. | | |

###### 10.1.5.6.1.6 Cancel group dynamic data subscription response

Table 10.1.5.6.1.6-1 describes the information flow for group dynamic data cancel subscription response from the MC service server to the MC service client and from the MC service server to the group management server and from the MC service server to the location management server. This information flow from the MC service server to the MC service client is sent individually addressed on unicast or multicast.

Table 10.1.5.6.1.6-1: Cancel group dynamic data subscription response

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service group ID | M | The MC service group ID for which the cancellation of dynamic data subscription is requested. |
| Status | M | Success or failure of the request |

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

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

10.1.5.6.2.1 SubscriptionThe procedure for subscription for dynamic data associated with an MC service group is described in figure 10.1.5.6.2.1-1 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 10.1.5.6.2.1-1: 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.

10.1.5.6.2.2 NotificationThe procedure for notification of group dynamic data as shown in figure 10.1.5.6.2.2-1 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 10.1.5.6.2.2-1: 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.

10.1.5.6.2.3 Cancellation

The procedure for cancelling subscription for the dynamic data associated with an MC service group by the MC service client is described in figure 10.1.5.6.2.3-1



Figure 10.1.5.6.2.3-1: Cancellation of subscription for group dynamic data

1. The MC service client requests cancellation of subscription to the dynamic data associated with a group stored in the MC service server using the cancel group dynamic data subscription request.

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

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

10.1.5.6.3.1 SubscriptionThe 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 10.1.5.6.3.1-1 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 10.1.5.6.3.1-1: 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.

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

10.1.5.6.3.2 Notification

The procedure for notification of group affiliation status, regroup status or emergency status as shown in figure 10.1.5.6.3.2-1 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 10.1.5.6.3.2-1: 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.

10.1.5.6.3.3 Cancellation

The procedure for cancelling subscription for the dynamic data associated with an MC service group by the group management server is described in figure 10.1.5.6.3.3-1



Figure 10.1.5.6.3.3-1: Cancellation of subscription for dynamic data associated with a group

1. The group management server requests cancellation of subscription to the dynamic data associated with a group stored in the MC service server using the cancel group dynamic data subscription request.

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

##### 10.1.5.6.4 Procedures for subscription, notification and cancellation for dynamic data associated with a group by the location management server

10.1.5.6.4.1 SubscriptionThe procedure for subscription for affiliation status associated with an MC service group by the location management server is described in figure 10.1.5.6.4.1-1 and is used by the location management server to obtain the affiliation status (implicit and explicit) 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 10.1.5.6.4.1-1: Subscription for dynamic data associated with a group

1. The location management server subscribes to the dynamic data associated with a group stored in the MC service server using the subscribe group dynamic data request.

2. The MC service server provides a subscribe group dynamic data response to the location management server indicating success or failure of the request by specifying the list of group dynamic data type. The group dynamic data type indicates the group affiliation status to be subscribed.

10.1.5.6.4.2 NotificationThe procedure for notification of group affiliation status as shown in figure 10.1.5.6.4.2-1 is used by the MC service server to inform the location management server about the updates to the group affiliation status.

Pre-conditions:

- The location management server has subscribed to the affiliation status in the MC service server.

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



Figure 10.1.5.6.4.2-1: Notification of dynamic data associated with a group

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

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

10.1.5.6.4.3 Cancellation

The procedure for cancelling subscription for affiliation status associated with an MC service group by the location management server is described in figure 10.1.5.6.4.3-1



Figure 10.1.5.6.4.3-1: Cancellation of subscription for dynamic data associated with a group

1. The location management server requests cancellation of subscription to the dynamic data associated with a group stored in the MC service server using the cancel group dynamic data subscription request.

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

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

#### 10.9.2.4 Location reporting trigger

Table 10.9.2.4-1 describes the information flow from the location management client to the location management server for triggering a location reporting procedure.

Table 10.9.2.4-1: Location reporting trigger

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID | M  (see NOTE 1) | Identity of the requesting authorized MC service user (e.g. MCPTT ID, MCVideo ID, MCData ID) |
| Functional alias | O | Functional alias that corresponds to the requesting MC service user (e.g. MCPTT ID, MCVideo ID, MCData ID) |
| MC service ID list | O  (see NOTE 1)  (see NOTE 3) | Identity of the requested MC service users (e.g. MCPTT ID, MCVideo ID, MCData ID) |
| MC service group ID list | O  (see NOTE 3) | Group ID(s) that correspond to MC service user(s) whose location information is requested (e.g. MCPTT ID, MCVideo ID, MCData ID). This trigger is only for currently affiliated users to these group(s). |
| Functional alias-list | O  (see NOTE 3) | Functional aliases that corresponds to the requested MC service user (e.g. MCPTT ID, MCVideo ID, MCData ID). |
| Immediate Report Indicator | O  (see NOTE 2) | Indicates whether an immediate location report is required |
| Requested non-emergency location information | O  (see NOTE 2) | Identifies what location information is requested, except for emergency or imminent peril calls or emergency alerts |
| Requested emergency location information | O  (see NOTE 2) | Identifies what location information is requested, for emergency or imminent peril calls or emergency alerts |
| Triggering criteria in non- emergency cases | O  (see NOTE 2) | Identifies when the client will send the location report in non-emergency cases |
| Triggering criteria in emergency cases | O  (see NOTE 2) | Identifies when the client will send the location report in emergency cases |
| Minimum time between consecutive reports | O  (see NOTE 2) | Defaults to 0 if absent and 0 for emergency calls, imminent peril calls and emergency alerts |
| NOTE 1: The identity of the requesting MC service user and the requested MC service user shall belong to the same MC service. E.g. if requesting MC service user is using a MCPTT ID, then the requested MC service user identity shall be an MCPTT ID.  NOTE 2: At least one of these rows shall be present.  NOTE 3: Either the MC service ID or the MC service group ID list or the functional alias must be present. | | |

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

#### 10.9.2.5 Location information subscription request

Table 10.9.2.5-1 describes the information flow from the MC service server to the location management server for location information subscription request.

Table 10.9.2.5-1: Location information subscription request (MC service server – LMS)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID list | M | List of MC service users whose location information is requested |
| Time between consecutive reports | M (see NOTE) | Indicates the interval time between consecutive reports. The provided time is to be used for all MC service IDs provided in the MC service ID list. |
| NOTE: If the interval time has a value of zero then the location management server will send the Location information notification immediately the location information report is received from the MC service user in the MC service ID list. | | |

Table 10.9.2.5-2 describes the information flow from the location management client to the location management server for location information subscription request.

Table 10.9.2.5-2: Location information subscription request (LMC – LMS)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID | M | Identity of the requesting MC service user |
| MC service ID list | O (see NOTE 1) | List of MC service users whose location information is requested |
| MC service group ID list | O  (see NOTE 1) | Group ID(s) that correspond MC service user(s) for whose location information subscription is requested (e.g. MCPTT ID, MCVideo ID, MCData ID). This request is only for currently affiliated users to these group(s). |
| Time between consecutive reports | M (see NOTE 2) | Indicates the interval time between consecutive reports. The provided time is to be used for all MC service IDs provided in the MC service ID list or the service group ID list. |
| NOTE 1: Either the MC service ID list or the MC service group ID list must be present.  NOTE 2: If the interval time has a value of zero then the location management server will send the Location information notification immediately the location information report is received from the MC service user in the MC service ID list. | | |

Table 10.9.2.5-3 describes the information flow from the location management server in the primary MC system to the location management server in the partner MC system for the location information subscription request.

Table 10.9.2.5-3: Location information subscription request (LMS – LMS)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID (see NOTE 1) | M | Identity of the requesting MC service user in the primary MC system |
| MC service ID list | M | List of the identities of MC service users in the partner MC system whose location information are requested |
| Time between consecutive location notifications (see NOTE 2) | M | Indicates the interval time between consecutive location notifications |
| NOTE 1: This element is only present when the request is originated by an MC service client.  NOTE 2: If the interval time has a value of zero then the location management server will send the location information notification immediately after the location information update is received from the MC service user in the MC service ID list. | | |

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

10.9.2.8 Location information cancel subscription request

Table 10.9.2.8-1 describes the information flow from the MC service server to the location management server for location information cancel subscription request.

Table 10.9.2.8-1: Location information cancel subscription request (MC service server to location management server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID list | M | List of identities of the MC service users for whom location information is no longer required |

Table 10.9.2.8-2 describes the information flow from the location management client to the location management server for location information cancel subscription request.

Table 10.9.2.8-2: Location information cancel subscription request (Location management client to location management server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID (see NOTE 1) | M | Identity of the requesting MC service user |
| MC service ID (see NOTE 2) | O | Identity of the MC service user, whose subscription is to be cancelled |
| MC service ID list | O (see NOTE 3) | List of identities of the MC service users for whom location information is no longer required |
| MC service group ID list | O  (see NOTE 3) | Group ID(s) that correspond MC service user(s) whose location information subscriptions are to be cancelled (e.g. MCPTT ID, MCVideo ID, MCData ID). This request is only for currently affiliated users to these group(s). |
| NOTE 1: Authorized or subscribed MC service user.  NOTE 2: Only used with the authorized MC service user.  NOTE 3: Either the MC service ID list or the MC service group ID list must be present.  . | | |

Table 10.9.2.8-3 describes the information flow from the location management server in the primary MC system to the location management server in the partner MC system for the location information cancel subscription request.

Table 10.9.2.8-3: Location information cancel subscription request (Location management server to location management server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID (see NOTE 1) | M | Identity of the requesting MC service user in the primary MC system |
| MC service ID (see NOTE 2) | O | Identity of the MC service user in the partner MC system, whose subscription is to be cancelled |
| MC service ID list | M | List of the identities of MC service users in the partner MC system for whom location information is no longer required |
| NOTE 1: Authorized or subscribed MC service user and only present when the request was originated by an MC service client.  NOTE 2: Only used with the authorized MC service user. | | |

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

#### 10.9.3.3 Client-triggered location reporting procedure

NOTE: This procedure is valid for single MC system operation only.

Figure 10.9.3.3-1 illustrates the high level procedure of client-triggered location reporting.

Pre-conditions:

1. If the trigger involves an MC service group ID (list):

The LMS has previously subscribed to group dynamic data from the MC service server, as per 10.1.5.6.4.1.



Figure 10.9.3.3-1: Client-triggered location reporting procedure

1. Location management client 2 (authorized MC service user) sends a location reporting trigger to the location management server to start a location reporting procedure for obtaining the location information. The location reporting trigger request contains MC service ID list or MC service group ID list or Functional alias list to obtain the the location information. Location management server checks whether location management client 2 has subscribed to and is authorized to send a location reporting trigger for location management client 1's location information.

2. . If step (1) involves an MC service group ID list:

The MC service server notifies group affiliation status to the LMS as per 10.1.5.6.4.2. The LMS will update the list of currently affiliated users.

3. If the location reporting trigger request contains MC service ID list or Functional alias list, depending on the information specified by the location reporting trigger, location management server initiates an event-triggered location reporting procedure for the location of location management client 1.

If the location reporting trigger request contains MC service group ID list, the location management server initiates an event-triggered location reporting procedure. The LMS will trigger location reports for only the currently affiliated users of the group, based on the last notification from the MC service server, as per step 2. The LMS will cancel the current location reporting trigger for the users who have de-affiliated from the service group ID lists(s).

Note: If the location reporting trigger request contains MC service group ID list, steps 2 and 3 shall be repeated as per the group affiliation status notifications are received.

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

#### 10.9.3.5 Location information subscription procedure

NOTE 1: This procedure is valid for single MC system operation only.

Figure 10.9.3.5-1 illustrates the high level procedure of location information subscription request. The same procedure can be applied for location management client and other entities that would like to subscribe to MC service user location information.



Figure 10.9.3.5-1: Location information subscription request procedure

1. MC service server or location management client sends a location information subscription request to the location management server to subscribe location information of one or more MC service users. The request will contain the MC service ID list or the MC service group ID list.

2. The location management server checks if the location management client is authorized to initiate the location information subscription request.

NOTE 2: As the MC service server is implicitly trusted, the Location management server need not to check the authorization for the MC service server.

3. If step (1) involves an MC service group ID list:

a) The LMS subscribes to group dynamic data request as per 10.1.5.6.4.1, to obtain group affiliation data from the MC service server.

b) The MC service server provides the response to this LMS request, as per 10.1.5.6.4.1.

4. The location management server replies with a location information subscription response indicating the subscription status.

5. If step (1) involves an MC service group ID list:

a) If the response in 3b) indicates success, the MC service server notifies group affiliation status of each MC service ID to the LMS as per 10.1.5.6.4.2, whenever there is a change in group affiliations.

b) The LMS will maintain and update a list of currently affiliated users inline with 5a) as the target user list to provide location information to the location management client as per this subscription.

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

#### 10.9.3.6 Usage of location information procedure

##### 10.9.3.6.1 Event-trigger location information notification procedure

NOTE 1: This procedure is valid for single MC system operation only.

Figure 10.9.3.6.1-1 illustrates the high level procedure of event-trigger usage of location information. The same procedure can be applied for location management client and other entities that would like to subscribe to location information of MC service user.

Pre-condition:

1. The MC service server or location management client has subscribed to the location information of a target MC service user.



Figure 10.9.3.6.1-1: Event-trigger usage of location information procedure

1. Based on configuration, e.g., subscription, periodical location information timer, the location management server is triggered to report the latest user location information of the target MC service user to the subscribed MC service server or subscribed location management client. The location management server has verified that the subscribed MC service server or subscribed location management client is authorized to receive the user location information of the target MC service user.

2. The location management server sends the location information notification including the latest location information of one MC service user to the MC service server or to the location management client. The latest location information is derived from the location report procedure as described in clause 10.9.3.1, or from PLMN operator (e.g. LCS network). If the optional MC service UE label is present, the location management server sends it, as part of the location information notification, to the MC service user. If the location management client has subscribed to location information through a MC service group ID, the location management server will report back location information only for currently affiliated members to this MC service group.

NOTE 2: The MC service server does not receive the MC service UE label.

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

10.9.3.7 Location information cancel subscription procedure

NOTE: This procedure is valid for single MC system operation only.

Figure 10.9.3.7-1 illustrates the high level procedure of location information cancel subscription request. The MC service server or the location management client can request the cancellation of location information subscriptions at any time from the location management server.

Pre-conditions:

- The authorized MC service user is in possession of the MC service ID of the MC service user as well as the location information subscriptions of this MC service ID.



Figure 10.9.3.7-1: Location information cancel subscription request procedure

1. MC service server or location management client sends a location information cancel subscription request to the location management server to cancel the subscription for location information of one or more MC service users. The request will contain the MC service ID list or the MC service group ID list.2. The location management server checks the authorization of this request.

NOTE: Whether the authorization check is a specific check of the requesting MC service user or is a general policy check is outside the scope of this procedure.

1. If step (1) involves an MC service group ID, the LMS issues a group dynamic data cancel request to MC service server, as per 10.1.5.6.1.5. The MC service server will issue the response as per 10.1.5.6.1.6.
2. The location management server replies with a location information cancel subscription response indicating the cancel subscription status.
3. If step (1) involves an MC service group ID list, the LMS will delete the list of affiliated group members for the group ID(s).
4. The associated location reporting triggers (from the same authorized user or the MC service server to the same target MC service client(s) or group(s)) will be cancelled, as per procedure 10.9.3.4a

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

Table A.8-1: location user profile data (on and off network)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Reference** | **Parameter description** | **Location UE** | **Location Server** | **Configuration management server** | **Location user database** |
| [R-5.11-007] of 3GPP TS 22.280 [3]  Clause 10.9.3.3 | Authorization to set a trigger at a LMC |  |  |  |  |
|  | > List of MC service IDs for which a trigger is authorized to be set | Y | Y | Y | Y |
|  | >> MCPTT ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCVideo ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCData ID (see NOTE 1) | Y | Y | Y | Y |
|  | > List of MC service group IDs for which a trigger is authorized to be set | Y | Y | Y | Y |
|  | >> MCPTT group ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCVideo group ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCData group ID (see NOTE 1) | Y | Y | Y | Y |
| [R-5.11-008] of 3GPP TS 22.280 [3] | Authorization to cancel a trigger at a LMC |  |  |  |  |
|  | > List of MC service IDs for which a trigger is authorized to be cancelled | Y | Y | Y | Y |
|  | >> MCPTT ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCVideo ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCData ID (see NOTE 1) | Y | Y | Y | Y |
|  | > List of MC service group IDs for which a trigger is authorized to be cancelled | Y | Y | Y | Y |
|  | >> MCPTT group ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCVideo group ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCData group ID (see NOTE 1) | Y | Y | Y | Y |
| Clause 10.9.3.5  Clause 10.9.3.7 | Authorization to subscribe to location information for an MC user |  |  |  |  |
|  | > List of MC service IDs for which subscription and subscription cancellation is authorized | Y | Y | Y | Y |
|  | >> MCPTT ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCVideo ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCData ID (see NOTE 1) | Y | Y | Y | Y |
|  | > List of MC service group IDs for which subscription and subscription cancellation is authorized | Y | Y | Y | Y |
|  | >> MCPTT group ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCVideo group ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCData group ID (see NOTE 1) | Y | Y | Y | Y |
| Clause 10.9.3.6.2  Clause 10.9.3.7 | Authorization to obtain location information for an MC user |  |  |  |  |
|  | > List of MC service IDs for which obtaining location information is authorized | Y | Y | Y | Y |
|  | >> MCPTT ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCVideo ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCData ID (see NOTE 1) | Y | Y | Y | Y |
|  | > List of MC service group IDs for which obtaining location information is authorized | Y | Y | Y | Y |
|  | >> MCPTT group ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCVideo group ID (see NOTE 1) | Y | Y | Y | Y |
|  | >> MCData group ID (see NOTE 1) | Y | Y | Y | Y |
| Clause 10.9.3.10.6  Clause 10.9.3.11 | Authorization to modify the location user profile of an MC user |  |  |  |  |
|  | > Modification to the location user profile is permanent/temporary | Y | N | Y | Y |
|  | >> Duration of time for temporary modification | Y | N | Y | Y |
|  | > List of MC service IDs for which modifying the location reporting configuration is authorized | Y | N | Y | Y |
|  | >> MCPTT ID (see NOTE 1) | Y | N | Y | Y |
|  | >> MCVideo ID (see NOTE 1) | Y | N | Y | Y |
|  | >> MCData ID (see NOTE 1) | Y | N | Y | Y |
| NOTE 1: There can be zero or more.  NOTE 2: The default authorization applies to all MC users not listed as specifically authorized or not authorized. The intent of this parameter is to avoid having to list all MC users as specifically authorized or not authorized and allowing the administrator to only indicate specific authorization statuses. | | | | | |

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