**3GPP TSG-SA WG6 Meeting #64S6-245348**

**Orlando, USA, 18th – 22nd November 2024 (revision of S6-245041)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.280** | **CR** | **0617** | **rev** | **1** | **Current version:** | **19.4.0** |  |
|  | | | | | | | | |
| *For* ***HE******LP*** *on using this form: comprehensive instructions can be found at  http://www.3gpp.org/Change-Requests.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Trigger override and cancel trigger override procedure for location reporting | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Netherlands Police, Samsung, BDBOS | | | | | | | | | |
| ***Source to TSG:*** | SA6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | enhMC | | | | |  | ***Date:*** | | | 2024-11-19 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Release 19 |
|  | *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. | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | For operational/technical reasons (e.g., in order to reduce the signalling load in a cell) an authorized user should be able to override the aggregated trigger configuraton for one or more reporting location management clients. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding procedure and configuration to override triggers and to cancel the override | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Incomplete functionality | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.9.2.4, 10.9.2.X (new), 10.9.2.Y (new), 10.9.3.X (new), 10.9.3.Y (new), 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:*** | |  | | | | | | | | |

\* \* \* First 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 | O  (see NOTE 1)  (see NOTE 3) | Identity of the requested MC service user (e.g. MCPTT ID, MCVideo ID, MCData ID) |
| Functional alias | O  (see NOTE 3) | Functional alias 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 |
| Location reporting trigger override indicator | O  (see NOTE 2, NOTE Y) | Indicates that the existing location reporting triggers at the reporting location management client are to be replaced by the triggers in this flow |
| Location reporting trigger cancel override indicator | O  (see NOTE 2, NOTE Y, NOTE Z) | Indicates that location reporting trigger override of the reporting location management client is to be cancelled |
| Reason for overriding location reporting triggers | O  (see NOTE X) | A text description indicating the reason for override |
| 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 functional alias must be present.  NOTE X: This shall be present if the request is to override the location reporting trigger.  NOTE Y: Location reporting trigger override indicator cannot occur together with Location reporting trigger cancel override indicator  NOTE Z: A location reporting trigger cancel override shall not contain requested location information, triggering criteria and minimum time between consecutive reports | | |

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

#### 10.9.2.X Location reporting trigger override indication

Table 10.9.2.X-1 describes the information flow from the location management server to the location management client for indicating a location reporting trigger override.

Table 10.9.2.X-1: Location reporting trigger override indication

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID | M | Identity of the overriding MC service user (e.g. MCPTT ID, MCVideo ID, MCData ID) |
| Functional alias | O | Functional alias that corresponds to the overriding MC service user (e.g. MCPTT ID, MCVideo ID, MCData ID) |
| MC service ID list | M | List of identities of the MC service users for who triggers are overridden |
| Functional alias list | O | Functional alias that corresponds to the MC service users for who triggers are overridden |
| Reason for override | O | A text description indicating the reason for override |

#### 10.9.2.Y Location reporting cancel trigger override indication

Table 10.9.2.Y-1 describes the information flow from the location management server to the location management client for indicating a location reporting cancel trigger override.

Table 10.9.2.Y-1: Location reporting trigger override indication

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID | M | Identity of the MC service user (e.g. MCPTT ID, MCVideo ID, MCData ID) who cancels the override |
| Functional alias | O | Functional alias that corresponds to the MC service user (e.g. MCPTT ID, MCVideo ID, MCData ID) who cancels the override |
| MC service ID list | M | List of identities of the MC service users for who trigger override is cancelled |
| Functional alias | O | Functional alias that corresponds to the MC service users for who trigger override is cancelled |

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

#### 10.9.3.X Location reporting trigger override

##### 10.9.3.X.1 General

For operational/technical reasons (e.g., in order to reduce the signalling load in a cell) an authorized user can override the aggregated trigger configuraton for one or more reporting location management clients.

The location reporting trigger override procedures only affect the triggers configured by requesting MC service users. The location management server shall ensure that triggers originating from the MC servers are not affected, in order not to disturb system operation.

##### 10.9.3.X.2 Location reporting trigger override procedure

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

Figure 10.9.3.X.2-1 illustrates the high level procedure of trigger override.

Pre-conditions:

1. MC service client 3 has subscribed to MC service client 1 as described in 10.9.3.5 and has applied location reporting triggers in MC service client 1 as described in 10.9.3.3.



Figure 10.9.3.X.2-1: Trigger override procedure

1. Location management client 2 (authorized MC service user) sends a location reporting trigger to the location management server requesting to override the existing triggers of location management client 1.

2. The location management server checks whether location management client 2 is authorized to override existing triggers of location management client 1.

3. The location management server stores locally the current location reporting configuration for location management client 1.

4. The location management server initiates an event-triggered location reporting procedure for location management client 1, applying the triggers requested by location management client 2 without performing aggregation of other trigger requests received from other location management clients.

5. The location management server informs location management client 3 about the location reporting trigger override by sending a location reporting trigger override indication.

NOTE 1: Location management clients that newly subscribe to location reports from MC service client 1 will receive a Location reporting trigger override indication at subscription until the trigger override for location management client 1 is cancelled.

NOTE 2: The location management server will apply newly initiated trigger requests for location management client 1 only to the stored configuration until the trigger override for location management client 1 is cancelled.

##### 10.9.3.X.3 Cancel location reporting trigger override procedure

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

Figure 10.9.3.X.3-1 illustrates the high level procedure of cancel trigger override.

Pre-conditions:

1. MC service client 3 has subscribed to MC service client 1 as described in 10.9.3.5 and has applied location reporting triggers in MC service client 1 as described in 10.9.3.3.

2. Previously MC service client 2 has initiated a trigger override procedure for MC service client 1 as described in 10.9.3.X.



Figure 10.9.3.X.3-1: Cancel trigger override procedure

1. Location management client 2 (authorized MC service user) sends a location reporting trigger to the location management server requesting to cancel the trigger override for location management client 1.

2. The location management server checks whether location management client 2 is authorized to override the existing triggers of location management client 1.

3. The location management server retrieves the location reporting configuration for location management client 1 which was stored locally.

4. The location management server initiates an event-triggered location reporting procedure for location management client 1, restoring the triggers that were retrieved in step 3.

5. The location management server informs location management 3 about the cancellation of the location reporting trigger override by sending a location reporting cancel trigger override indication.

\* \* \* Fourth Change \* \* \* \*

# A.8 Location user profile configuration data

The location user profile configuration data is stored in the location user database. The location management server obtains the location user profile configuration data via the configuration management server (CSC-24).

Table A.8-1 contains the location user profile configuration required to support the use of on-network location service. Data in table A.8-1 can be configured offline using the CSC-11 reference point.

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 |
| [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 |
| 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 |
| 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 |
| 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 |
| Clause 10.9.3.X.2  Clause 10.9.3.X.3 | List of MC service IDs for which trigger overriding and cancelling an override is authorized |  |  |  |  |
|  | > 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 |
| 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 \* \* \* \*