**3GPP TSG-SA WG6 Meeting #37-e S6-200640**

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

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | Cancel location history transmission | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | BDBOS, BMWi | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | enh3MCPTT | | | | |  | ***Date:*** | | | 2020-05-08 |
|  |  | | | |  | |  | | |  |
| ***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 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:*** | | Currently existing information flows and procedures do not support the on-demand request or automatic transmission of locally stored, but triggered location reports of an MC service user after returning from off-network operation. During the transmission of the locally stored location reports the cancellation of such transmission is required, e.g. during channel congestion.  [R-5.11-009] in 3GPP TS 22.280 in clause 5.11 for on-network and off-network location reports based on triggered events.  Clause 7.1 in 3GPP TS 22.280 describes in general that MC services available during off-network are functional comparable to MC services during on-network and this includes location management, as an essential feature of MC communication. While triggered location reports are available during on-network operation, the same or modified off-network triggers allow such MC service continuity while off-network operation. The location reports provided after returning to on-network operation.  Functional support for use case #5, solutions #6, #7 and #8 discussed in 3GPP TR 23.744. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | New information flow and new procedure for the cancellation request of locally stored location reports after returning to on-network operation. New information flow to report the current status of locally stored location reports. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The operational analysis of location information triggered during off-network operation cannot be included into operative-tactical decisions after returning to on-network operation. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.9.2.11 (new), 10.9.2.14 (new), 10.9.3.9.4 (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 23.280 CR 0253, 0254 | | |
| ***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 \* \* \* \*

#### 10.9.2.11 Location information history status report

Table 10.9.2.11-1 describes the information flow from the location management client to the location management server and from the location management server to the MC service server or location management client for the location history status reporting of location reports locally stored during off-network operation and after returning to on-network operation.

Table 10.9.2.11-1: Location information history status report

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID list (see NOTE 1) | M | List of identities of (e.g. MCPTT ID, MCData ID, MCVideo ID) of the MC service user from whom reports can be requested |
| MC service ID (see NOTE 2) | O | Identity of the MC service user to receive the status report |
| Number of stored reports (see NOTE 3) | O | Indicates either zero or the number of available reports |
| Start time (see NOTE 3) | O | Start time of the available reports |
| End time (see NOTE 3) | O | End time of the available reports |
| Triggered event list (see NOTE 3) | O | List of triggered events, that caused stored reports |
| NOTE 1: The MC service server may only require the MC service ID according to the MC service.  NOTE 2: Only present from the location management server to the location management client.  NOTE 3: Either the number of last stored reports or start time with the associated end time shall be present, but always in conjunction with the triggered events in case of available reports. | | |

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

#### 10.9.2.14 Location information history cancel request

Table 10.9.2.14-1 describes the information flow from the MC service server or location management client to the location management server and from the location management server to the reporting location management client for the cancellation of location information history reporting of location reports locally stored during off-network operation and transmitted after returning to on-network operation.

Table 10.9.2.14-1: Location information history cancel request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MC service ID list (see NOTE 1) | M | List of identities of the reporting MC service user (e.g. MCPTT ID, MCData ID, MCVideo ID) |
| MC service ID (see NOTE 2) | O | Identity of the MC service user, who has requested the cancellation |
| NOTE 1: The MC service server may only use the MC service ID according to the MC service.  NOTE 2: Only present from the location management client to the location management server. | | |

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

##### 10.9.3.9.4 Cancel location history reporting procedure

The location management server can request the transmission cancellation of location information history reports at any time during the already started transmission by sending a Location information history cancel request to the reporting location management client. The MC service server or location management client could initiate the cancellation request, if those entities have been initiated the location information history reporting. The transmission cancellation does not have any effect on the configured off-network or on-network trigger criteria.

Figure 10.9.3.9.4-1 illustrates the procedure for the on-demand based usage of the cancellation on location history reporting.

Pre-conditions:

1. The location management client 1 has returned to on-network operation while in off-network operation has locally stored location reports.



Figure 10.9.3.9.4-1: On-demand based usage of location history cancel procedure

1. The location management client 1 transmits location information reports.
2. The MC service server or location management client 2 requests the cancellation of the location information history reporting at any time during the transmission. Otherwise would return the location information history status report to the location management client 2.
3. The location management server checks the authorization of this request.
4. The location management server forwards the cancellation request to the location management client 1.
5. The location management client 1 stops the transmission of the requested location information history reports.

NOTE: On-network triggered location reports are not affected by this cancellation request.

1. The location management client 1 provides information about the remaining locally stored location reports, which have been requested but not transmitted due to the cancellation.
2. The location management server forwards this information to the MC service server or location management client 2.

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

\* \* \* End of Change \* \* \* \*