**3GPP TSG-SA WG6 Meeting #49-e S6-221099**

**e-meeting, 16th – 22nd May 2022 (revision of S6-22xxxx)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.289** | **CR** | **0070** | **rev** | **1** | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Including MBS FSA ID into the location information report | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MCOver5MBS | | | | |  | ***Date:*** | | | 2022-04-27 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | C |  | | | | | ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | SA2 has defined the MBS Frequency Selection Area ID (MBS FSA ID) to reflect the areas of broadcast MBS session in analogy to MBMS SAI. The client may report the change of its location based on the change in MBS FAS ID. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The update in the MBS FSA ID may be communicated between the client and server as part of the location management report once applicable. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Information related to the updated MBS FSA ID are not communicated between the MC service clients and servers providing service interruption once the client(s) change their area associated to the broadcast MBS session. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.5.2.3, 7.5.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

7.5.2.3 Location information report

Table 7.5.2.3-1 describes the information flow from the location management client to the location management server for the location information reporting.

Compared to that is defined in 3GPP TS 23.280 [3], the following changes are made:

Adding a new NOTE 5 to clarify the usage of triggering event for inter-system RAT changes

**Table 7.5.2.3-1: Location information report (LMC – LMS)**

|  |  |  |
| --- | --- | --- |
| **Information element** | **Status** | **Description** |
| Set of MC service IDs | M | Set of identities of the reporting MC service user on the MC service UE (e.g. MCPTT ID, MCVideo ID, MCData ID) |
| MC service ID  (see NOTE 4) | O | Identity of the requesting MC service user. |
| Functional alias(es)  (see NOTE 1) | O | Functional alias that corresponds to the reporting MC service ID. |
| MC service UE label | O | Generic name of the reporting MC service UE |
| Triggering event  (see NOTE 3 and NOTE 5) | M | Identity of the event that triggered the sending of the report |
| Location Information (see NOTE 2) | M | Location information of the individual MC service user |
| NOTE 1: Each functional alias corresponds to an individual MC service ID.  NOTE 2: This may contain multiple sets of elements for the MC service user. The following elements shall accompany the location information elements: time of measurement and optional accuracy. The following location information elements shall be optional (configurable) present: longitude, latitude, speed, bearing, altitude, ECGI, MBMS SAIs, MBS FSA ID(s), with at least one provided.  NOTE 3: An on-demand request may be the triggering event.  NOTE 4: In case of an on-demand request of an MC service user the MC service ID shall be provided. In case of an MC service server request or an event-triggered report, no MC service ID is provided.  NOTE 5: Triggering event can be used to indicate the event of inter-system changes. | | |

Table 7.5.2.3-2 describes the information flow from the location management server to the MC service server for location information reporting.

Compared to that is defined in 3GPP TS 23.280 [3], the following changes are made:

Adding a new NOTE 4 to clarify the usage of triggering event for inter-system RAT changes

**Table 7.5.2.3-2: Location information report (LMS – MC service server)**

|  |  |  |
| --- | --- | --- |
| **Information element** | **Status** | **Description** |
| Set of MC service IDs | M | Set of identities of the reporting MC service user on the MC service UE (e.g. MCPTT ID, MCVideo ID, MCData ID) |
| Functional alias(es) (see NOTE 1) | O | Functional alias that corresponds to the MC service ID. |
| Triggering event (see NOTE 3 and NOTE 4) | M | Identity of the event that triggered the sending of the report |
| Location Information (see NOTE 2) | M | Location information of the individual MC service user |
| NOTE 1: Each functional alias corresponds to an individual MC service ID.  NOTE 2: This may contain multiple sets of elements for the MC service user. The following elements shall accompany the location information elements: time of measurement and optional accuracy. The following location information elements shall be optional (configurable) present: longitude, latitude, speed, bearing, altitude, ECGI, MBMS SAIs, MB FSA ID(s), with at least one provided.  NOTE 3: An on-demand request may be the triggering event.  NOTE 4: Triggering event may indicate requiring of location report due to inter-system RAT-type change | | |

\* \* \* \* Second change \* \* \* \*

#### 7.5.3.2 Event-triggered location reporting procedure

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

The location management server provides location reporting configuration to the location management clients, indicating what information the location management server expects and what events will trigger the sending of this information to the location management server. The decision to report location information can be triggered at the location management client by different conditions. In addition to those defined in 3GPP TS 23.280 [3], the conditions could include, the change of MBS FSA ID, inter-system RAT type changes. The location report can indicate the inter-system RAT changes event.

NOTE 2: How the location management client can identify or obtain information about the case that an inter-RAT change has occurred is implementation specific or out of the scope of this specification.

Similar to the usage of eMBMS bearer for transmitting of location reporting configuration defined in TS 23.280, the location reporting configuration message can also be sent over 5G MBS Session.

\* \* \* \* End of changes \* \* \* \*