**3GPP TSG-SA WG6 Meeting #38-e S6-201186**

**e-meeting, 20th – 31st July 2020 (revision of S6-201074)**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | **1** | **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:*** | Functional alias handling for 1-1 FD requests | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eMCData3 | | | | |  | ***Date:*** | | | 2020-07-23 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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)* | |
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| ***Reason for change:*** | | If the functional alias is used as a target for the one-one FD requests and if the end-end encryption to be used then originating client should know the MCData ID derived by resolving the functional alias. | | | | | | | | |
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| ***Summary of change:*** | | Functional alias reaolution response is included between the MCData server and MCData client similar to what is introduced for MCPTT and MCVideo | | | | | | | | |
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| ***Consequences if not approved:*** | | End-end security cannot be established when functional alias is used as target. | | | | | | | | |
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| ***Clauses affected:*** | | 7.5.2.5, 7.5.2.5.1, 7.5.2.5.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

#### 7.5.2.5 One-to-one file distribution using media plane

##### 7.5.2.5.1 General

The MCData client uses the media plane for a standalone data file download from another MCData client. The procedure is appropriate for mandatory download case. The target MCData user may be addressed using the functional alias that can be shared with other MCData users.

##### 7.5.2.5.2 Procedure

The procedure in figure 7.5.2.5.2-1 describes the case where an MCData user is initiating one-to-one data communication for sending file to the other MCData user, with or without download completed report request.

Pre-conditions:

1. The MCData users on the MCData client 1 and the MCData client 2 are already registered for receiving MCData service.

2. Optionally, the MCData client may have an activated functional alias to be used.

3. The MCData server has subscribed to the MCData functional alias controlling server within the MC system for functional alias activation/de-activation updates.



Figure 7.5.2.5.2-1: One-to-one file distribution using media plane

1. The user at the MCData client 1 initiates a file distribution request to the chosen MCData user.

2. MCData client 1 sends a MCData FD request towards the MCData server. The MCData FD request may contain the file metadata information. The MCData FD request contains one MCData user for one-to-one data communication as selected by the user at MCData client 1. The MCData FD request contains conversation identifier for message thread indication. MCData FD request may contain mandatory download indication. The MCData FD request may contain download completed report indication if selected by the user at MCData client 1. MCData user at MCData client 1 may include a functional alias within the FD data transfer and may address the target MCData client 2 using a functional alias.

a) If the MCData user at the MCData client 1 initiates an MCData emergency file distribution communication or MCData emergency state is already set for the MCData client 1 (due to previously triggered MCData emergency alert):

i) The MCData FD request shall contain emergency indicator; and

ii) If MCData emergency state is not set already, MCData client 1 sets its MCData emergency state. The MCData emergency state is retained until explicitly cancelled.

3. MCData server checks whether the MCData user at MCData client 1 is authorized to send MCData FD request. MCData server verifies whether the provided functional alias of MCData client 1, if present, can be used and has been activated for the user. If functional alias is used to address that target MCData user, the MCData server resolves the functional alias to the corresponding MCData ID(s) for which the functional alias is active and proceed with step 4 otherwise proceed with step 6.

NOTE 1: If the MCData server detects that the functional alias used as the target of the MCData FD request is simultaneously active for multiple MCData users, then the MCData server can proceed by selecting an appropriate MCData ID based on some selection criteria. The selection of an appropriate MCData ID is left to implementation. These selection criteria can include rejection of the MCData FD request, if no suitable MCData ID is selected.4. The MCData server responds back to MCData client 1 with a functional alias resolution response message that contains the resolved MCData ID.

5. If the MCData server replies with a MCData functional alias resolution response message, the MCData client 1 sends a new MCData SDS transfer request towards the resolved MCData ID.

6. The MCData server also applies transmission and reception control and the necessary policy to ensure that appropriate data is transmitted between the MCData UEs.

7. MCData server initiates the MCData FD request towards the MCData users determined. The MCData FD request towards the MCData user contains the emergency indicator if it is present in the received MCData FD request from MCData client 1.

8. The receiving MCData client 2 notifies the user about the incoming MCData FD request (including file metadata, if present) which may be either accepted or rejected or ignored. If the request includes mandatory download indication in the MCData FD request an accepted response is assumed.

9. If the target MCData user 2 provides a response (accept or reject) to the notification, then the MCData client 2 sends the MCData FD response to the MCData server. MCData client 2 automatically sends accepted MCData FD response when the incoming request included mandatory download indication.

10. MCData server forwards the MCData FD response from MCData client 2 back to MCData client 1.

11. MCData client 1 distributes the file over the established media plane to MCData server.

12. MCData server distributes the file received from MCData client 1 to MCData client 2 over the established media plane. File download report is shared by the MCData client 2, if requested by the user at MCData client 1. After file transaction is completed, the media plane is released. The MCData client 2 records file download completed and notifies MCData user 2.

NOTE 2: MCData server is not required to wait for the complete download of file from MCData client 1 prior to initiating file distribution to MCData client 2.

13. MCData client 2 initiates a MCData download completed report for reporting file download completed, if requested by the user at MCData client 1.

14. The MCData file download completed report from MCData client may be stored by the MCData server for download history interrogation from the authorized MCData users. MCData download completed report is sent by the MCData server to the user at MCData client 1.

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