**3GPP TSG-SA WG6 Meeting #39-bis-e S6-201934**

**e-meeting, 12th – 20th October 2020 (revision of S6-201790)**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **23.282** | **CR** | **0248** | **rev** | **1** | **Current version:** | **17.4.0** |  |
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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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| ***Title:*** | IP connectivity, SDS and FD functional model correction | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | UIC | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eMCData2 | | | | |  | ***Date:*** | | | 2020-10-05 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***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:*** | | **IP** connectivity functional model in figure 6.8.1-1 illustrates that MCData-IPcon-1 reference point is between IPcon function (MCData client) and IPcon distribution function (MCData server) but control plane signalling (see related procedures) runs between MCData client and MCData server. The corresponding text of the aformentioned reference point MCData IPcon-1 defines that the reference point is applicable between MCData client and MCData server.  **SDS** functional model in figure 6.5.1-1 illustrates that MCData-SDS-1 reference point is between SDS function (MCData client) and SDS distribution function. Primarily MCData-SDS-1 reference point corresponds to signalling that may contain as well user data. Actually, the figure in context with MCData-SDS-1 reference point is not in line with the text.  **FD** functional model in figure 6.6.1-1 illustrates that MCData-FD-1 is between the FD functions of MCData client and MCData server. Primarily MCData-FD-1 reference point corresponds to signalling that may contain as well user data. Actually, the figure in context with MCData-FD-1 is not in line with the text. | | | | | | | | |
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| ***Summary of change:*** | | Requires updates of figures that corresponds to the following service capabilities:  -IP connectivity: Correction of figure 6.8.1-1  -SDS: Correction of figure 6.5.1-1 and reordering of the corresponding text.  -File Distribution (FD): Correction of figure 6.6.1-1 and some text adaptations. | | | | | | | | |
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| ***Consequences if not approved:*** | | Causes wrong understanding in the treatment of signalling control plane and user/media plane. | | | | | | | | |
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| ***Clauses affected:*** | | 6.5.1, 6.6.1, 6.8.1 | | | | | | | | |
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|  | | **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:*** | | None | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | S6-201790 | | | | | | | | |

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### 6.8.1 On-network functional model

Figure 6.5.1-1 shows the application plane functional model for User-IP connectivity.



Figure 6.8.1-1: Application plane functional model for IP connectivity

In the model shown in figure 6.8.1-1, the following apply:

- MCData-IPcon-1 reference point is used for MCData application signalling for establishing a session in support of MCData IP connectivity.

- MCData-IPcon-2 reference point carries bidirectional IP Data for point-to-point MCData IP connectivity over the media plane between the U-IPcon distribution function of the MCData server and the IPcon function of the MCData client(s).

- MCData-IPcon-3 reference point is used by the IP-con distribution function of the MCData server to send unidirectional downlink IP Data to the IP-con function of the MCData clients.

- IPcon-host reference point is used for a data host, e.g. server, to use IP connectivity service capabilities. This reference point is outside the scope of the present document.

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### 6.5.1 On-network functional model

Figure 6.5.1-1 shows the application plane functional model for SDS.



Figure 6.5.1-1: Application plane functional model for SDS

In the model shown in figure 6.5.1-1, the following apply:

- MCData-SDS-1 reference point is primarily used for MCData application signalling during session establishment in support of SDS data transfer. Secondarily, MCData-SDS-1 reference point is used for uplink and downlink unicast SDS data transaction over signalling control plane by the SDS distribution function of the MCData server and SDS function of the MCData client.

- MCData-SDS-2 reference point carries uplink and downlink unicast SDS data over media plane between the SDS distribution function of the MCData server and the SDS function of the MCData client.

- MCData-SDS-3 reference point carries downlink multicast SDS data over media plane from the SDS distribution function of the MCData server to the SDS function of the MCData client.

Examples of SDS data (in the form of text, binary, application data, URL or combinations of these) are:

- information pertaining to applications e.g. health parameters of MCData user for situational awareness application;

- information pertaining to enhanced status service;

- text or URL data between MCData users;

- application data (e.g. health parameters) to the MCData user;

- location information (independent or along with user or application provided data);

- command instructions to invoke certain operations on the MCData UE e.g. invoking UE specific applications; and

- application plane identities for the MCData user and MCData application.

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### 6.6.1 On-network functional model

Figure 6.6.1-1 shows the application plane functional model for file distribution.



Figure 6.6.1-1: Application plane functional model for file distribution

In the model shown in figure 6.6.1-1, the following apply:

- MCData-FD-1 reference point is primarily used for MCData application signalling for establishing a session in support of MCData file distribution. Secondarily, MCData-FD-1 reference point is also used for both uplink and downlink unicast data (e.g., URL associated to file, file download completed report).

- MCData-FD-2 reference point carries uplink and downlink unicast file data between the FD functions of the MCData server and the MCData UE.

- MCData-FD-3 reference point carries downlink multicast file data from the FD function of the MCData server to the FD function of the MCData UE.

- MCData-FD-4 reference point carries uplink and downlink unicast file data between the media storage function of the MCData Content server and the media storage client of the MCData UE.

- MCData-FD-5 reference point supports the MCData server to access the stored files in the MCData content server for certain file distribution functions, such as retrieval a file to be distributed through multicast etc. This reference points also supports any necessary operational requirements.

NOTE 1: The security aspects of MCData-FD-5 reference point are the responsibility of SA3 and thus outside the scope of the present document.

Editor's note: It is FFS on what the operational requirements (such as QoS control of file upload and download) are needed to be supported by this reference point.

- MCData content server is a repository area in the MCData trust domain that allows authorized MCData user to temporarily store files that are intended to share to other MCData users. It provides common pool of storage area (i.e. size) to all authorized MCData users to use, no personal space is allocated. An authorized MCData user can use the supported operations on the defined reference point to upload shared files and download the files that are shared to him. The MCData server will use the defined reference point to access the files stored in the MCData content server and support the necessary operational supports. As part of the file life cycle management the temporarily stored files will be removed peoridically based on the Mission Critical service provider policy. An MCData content server may share files with another MCData content server in another MCData system to support interconnection.

NOTE 2: The security aspects of MCData content server and its operational supports are the responsibility of SA3 and thus outside the scope of the present document.