**3GPP TSG SA WG4#119e S4-220588**

**E-meeting, 11th – 20th April 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **DRAFT CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26**.**501** | **CR** | **draft** | **rev** | **1** | **Current version:** | **17.1.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | **[5MBUSA] Corrections to 5GMS via eMBMS** | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Qualcomm Incorporated, BBC, ORS | | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBUSA | | | | |  | ***Date:*** | | | 30/03/2022 |
|  |  | | | |  | |  | | |  |
| ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Some underspecified operations on User Service announcement and MBMS-APIs | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adds additional details | | | | | | | | |
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| ***Consequences if not approved:*** | | Operation may not be interoperable | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.6.2.5, 4.6.3.3, 4.6.3.4, 4.6.3.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

**===== CHANGE =====**

#### 4.6.2.5 Usage of M5d

Reference point M5d is is used as defined in sub-clauses 4.1 to 4.4.

In addition, for 5GMS content to be distributed via eMBMS:

- The 5GMS Service Access Information shall include the relevant information of the eMBMS Service Announcement in order to bootstrap reception of the MBMS service, typically via a service identifier (i.e., the **serviceId** attribute of the bundleDescription.userServiceDescription element of the USD – see TS 26.346 [19]). This is passed by the Media Session Handler to the MBMS Client via reference point MBMS-API-C [20].

When this information is present in the Service Access Information and when the UE is MBMS-capable, the 5GMSd Client shall invoke the MBMS Client to initiate reception of the corresponding MBMS User Service.

- The 5GMS Service Access Information shall include relevant information from the eMBMS Service Announcement in order for the Media Session Handler to:

i) Collect metrics of the MBMS service from the MBMS Client and report them to the 5GMSd AF using an appropriate metrics reporting scheme.

ii) Collect media consumption information from the MBMS Client and submit it to the 5GMSd AF in 5GMS consumption reports.

**===== CHANGE =====**

#### 4.6.3.3 Usage of MBMS User Services and Delivery Methods

The MBMS User Service Announcement as defined in TS 26.346 is used to advertise the availability of 5GMS content delivered via eMBMS.

A *Generic application service* (as defined in clause 5.7 of TS 26.346 [19]) is provisioned in the BM‑SC and the application service entry point instance is a downlink 5GMS streaming manifest, for example a DASH MPD or HLS playlist.

NOTE: The support of multiple manifests for the same media streaming session is not covered in 5GMS. Hybrid DASH/HLS is supported in eMBMS. Usage together with 5GMS is left to implementation.

**===== CHANGE =====**

#### 4.6.3.4 Usage of MBMS-API-C

The MBMS Client operates according to the procedures defined in clause 6.3 of TS 26.347 [20] at reference point MBMS-API-C when communicating with the 5GMSd Client.

The MBMS Client exposes information to the Media Session Handler to manage the reception of MBMS User Services.

The Media Session Handler configures the MBMS Client for consumption and QoE metrics reporting.

The MBMS Client provides consumption and QoE metrics reports to the Media Session Handler.

**===== CHANGE =====**

#### 4.6.3.5 Usage of MBMS-API-U

The MBMS Client operates according to the procedures defined in clause 7 of TS 26.347 [20] at reference point MBMS-API-U when communicating with the 5GMSd Client.

The MBMS Client provides the streaming manifest, as well as updates of the manifest, to the 5GMSd Client and implements policies for hybrid services based on clause 7 of TS 26.347 [20].

The MBMS Client exposes fully- and partially-received media objects to the Media Player in the 5GMSd Client.