**3GPP TSG- Meeting #**

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
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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:***  |  |
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| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
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| ***Work item code:*** |  |  | ***Date:*** |  |
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| ***Category:*** |  |  | ***Release:*** |  |
|  | *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 canbe 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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
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| ***Reason for change:*** | 1. **In-session Unicast Repair for MBS Object Distribution**: For live and low-latency live services using the Object Distribution Method in MBS, in certain cases the transmission of an object is not successful. In this case, unicast repair for individual MBS Clients can improve the service quality. However, the timing of such requests needs to be carefully studied in order to avoid network overloads or significant latencies in the delivery. A study to extend MBS User Services and object streaming to address in-session repair is of relevance.
2. **MBS User Service and Delivery Protocols for eMBMS:** The MBS User Service architecture and protocol follows the modern design philosophies of the 5G System with separation of user services from transport, a service-based architecture and RESTful APIs. At the same time, eMBMS and enTV as used for LTE-based 5G Broadcast support a transparent delivery mode. While interworking in between MBMS and MBS is addressed in TS 23.247, interworking between these two systems at the User Service level is not addressed. In order for MBMS and LTE-based 5G broadcast to leverage MBS User Service technologies, a study is warranted to identify the gaps to fully support this functionality.
3. **Selected MBMS Functionalities not supported in MBS:** In completing TS 26.502 and TS 26.517, it is obvious that only a subset of the MBMS functionalities is supported in Rel-17. While many MBMS functionalities are likely not important to be supported for MBS, a systematic analysis of MBMS User Services features and their potential relevance for MBS should be completed and recommendations made on which ones to migrate to MBS User Services specifications and how best to achieve this.
4. Conclusions are needed to identify normative work
5. Editorial Updates and corrections
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| ***Summary of change:*** | Addresses the work item objectives for this key issue* Documents the key issue in more detail, in particular how they relate to the 3GPP Media Delivery architecture and/or the MBS User Service architecture
* Studies collaboration scenarios between the Application Service Provider and the 5G System and for each of the key topics.
* Based on existing architectures, provides one or more deployment architectures that address the key topics and the collaboration models.
* Maps the key topics to basic functions and develop high-level call flows.
* Identifies the issues that need to be solved.
* Provides candidate solutions including call flows, protocols and APIs for each of the identified issues.

Identifies gaps and recommend potential normative work for stage-2 and stage-3, including which existing specifications would be impacted and/or if any new specifications would preferably be developed. |
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| ***Consequences if not approved:*** |  |
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| ***Clauses affected:*** | 1, 2, 3.2, 4.2.2.5, 4.3.1, 4.4.5.2, 5.2.1, 5.2.5, 5.3.1.6, 5.9 (new), 5.10 (new), 5.11 (new), 7.2.1.4, 7.2.2.2, 8.3, 8.4 (new) |
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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 ...  |
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| ***Other comments:*** | This CR merges the agreed CRs* S4-242128, 26802-0001rev5
* S4-242258, 26802-0002rev9
* S4-242129, 26802-0003rev6
* S4-242244, 26802-0004rev1
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| ***This CR's revision history:*** |  |

## ===== CHANGE =====