**3GPP TSG-SA3 Meeting #107-e *draft\_S3-220860-r4***

**e-meeting, 16 – 20 May 2022 Revision of S3-22xxxx**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.501** | **CR** | **1375** | **rev** | **-** | **Current version:** | **17.5.0** |  |
|  | | | | | | | | |
| *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:*** | Enhancement for the service announcement | | | | | | | | | |
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| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBS | | | | |  | ***Date:*** | | | 2022-04-17 |
|  |  | | | |  | |  | | |  |
| ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | As in MBMS, the service protection description in the Service Announcement indicates the securty requirement for the protection. If the service protection description is present, the security protection is required. The IEs also descripted the detailed requirement, such as  “*UICC key management required: yes/ no.*  *2G GBA allowed: yes/no*  *…*”.  For 5G MBS security, the exsiting IEs are not suffient. Due to optionality to support CP procedure and UP procedure, it’s possible that there is a capbility mismatch between UE side and network side. Although UE joined the multicast session, UE may not be able to acquire the MBS keys for the multicast traffic. | | | | | | | | |
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| ***Summary of change:*** | | Add security requirement in Service Announcement | | | | | | | | |
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| ***Consequences if not approved:*** | | Auhorized UE cannot decrypted the protected MBS traffic | | | | | | | | |
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| ***Clauses affected:*** | | Annex W.4.1.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\*\*\*\*\*\*\*\*\*\*\*\* START OF 1st CHANGE\*\*\*\*\*\*\*

# W.4 Security mechanisms for MBS traffic transmission

### W.4.1.1 General

For security protection of MBS traffic, control-plane procedure and user-plane procedure are optionally supported in service layer. The user plane security between UE and RAN shall be deactivated when 5GC shared MBS traffic delivery method for MBS data transmission is used to avoid redundant protection.

If UE is able to meet the protection requirements as specified in clause W.4.2, UE may trigger the multicast session join and session establishment procedure as specified in TS 23.247 [103]. Otherwise, UE shall not join the multicast session or shall trigger the multicast session leave procedure if already joined the multicast session.

\*\*\*\*\*\*\*\*\*\*\*\* END OF 1st CHANGE\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\* START OF 2nd CHANGE\*\*\*\*\*\*\*

## W.4.2 Protection of the traffic transmission

The service protection description in the Service Announcement implies the protection requirement of the traffic transmission in case the security protection is provided in service layer. It may include indications for which security procedures are supported by the network: control-plane procedure or user-plane procedure. If the support for user-plane procedure is indicated then the description should include also an indication of whether GBA or/and AKMA is supported.

NOTE: If the security protection in service layer is not required, the service protection description is not present in the Service Announcement.

The actual method of protection may vary depending on the type of data being transmitted, e.g. media streaming application or file download. Clause 6.6.2 and clause 6.6.3 in TS 33.246 [102] apply to the protection of streaming data and protection of download data, respectively.

\*\*\*\*\*\*\*\*\*\*\*\* END OF 2nd CHANGE\*\*\*\*\*\*\*\*