**3GPP TSG-SA3 Meeting #107-e *draft\_S3-220870-r1***

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

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.501** | **CR** | **1379** | **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 |  | Radio Access Network |  | Core Network | **x** |

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| ***Title:*** | Clarifications on the multicast security context handling in session creation procedure | | | | | | | | | |
|  |  | | | | | | | | | |
| ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In control-plane procedure, the multicast session security context consists of the MBS session ID, MBS keys and the corresponding key ID. The MBS keys include MBS Service Key (MSK) and MBS Traffic Key (MTK).  In the MBS session creation procedure, whether they are sent in the same messages or in the different messages using the same signalling channel needs clarification | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add clarification for session creation procedure | | | | | | | | |
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| ***Consequences if not approved:*** | | The delivery of MSK and MTK from MBSF/MBSTF to MB-SMF in session creation is not clear. | | | | | | | | |
|  | |  | | | | | | | | |
| ***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

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### W.4.1.1 General

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Upon receiving the MSK from the MBSF, the MBSTF generates the MTK and its key ID for the MBS traffic protection. A new MTK may be generated based on the MBS session security policy. When the MBSTF generates a new MTK, the MBSTF shall multicast the MTK and its key ID after protecting it using the MSK as specified in TS 33.246 [102]. The MBSTF shall also provide the new MTK and its key ID to the MBSF.

During the MBS session creation for multicast communication as specified in clause 7.1.1 of TS 23.247 [103], after receiving the description for an MBS session from the AF of content provider, the MBSF shall create the multicast session security context by generating an MSK and acquiring an MTK from the MBSTF. Afterwards, the MBSF distributes the muticast session security context to the MB-SMF via the Nmbsmf\_MBSSession\_Create Request message. In the multicast session join and session establishment procedure, the SMF interacts with the MB-SMF to obtain the multicast session security context. Absence of the multicast security context indicates that security protection is not applied for the MBS session. The SMF shall provide the multicast session security context to the UE if received from the MB-SMF and the UE is authorized to use the required multicast service. The UE shall use the MTK in the received multicast session security context, to process the protected MBS traffic until it receives a new MTK update over the user-plane.

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