**3GPP TSG-SA2 Meeting #164S2-240xxxx**

**Maastricht, Netherlands, August 19 – 23, 2024 (revision of S2-240xxxx)**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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 | **x** | Core Network | **x** |

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| ***Title:*** | Authorization of MWAB | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
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| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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 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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Based on onclusion for KI#2: Authorization of a MWAB and configuration of MWAB Conclusion in TR 23.700-06, Authorization of a MWAB needs to be specified. | | | | | | | | |
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| ***Summary of change:*** | | §5.x.3 (new)  - Add description about Authorization of a MWAB. | | | | | | | | |
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| ***Consequences if not approved:*** | | Authorization of a MWAB is not supported. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.x.3 (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

### 5.x.3 Authorization of MWAB

#### 5.x.3.1 General

MWAB-UE authorization and MWAB-gNB authorization are two different authorizations and managed by different entities in the networks. The BH 5GC controls the slice-based MWAB-UE authorization and the OAM that the MWAB-gNB connects to controls the MWAB-gNB authorization.

Details on authorization of MWAB-UE are described in clause 5.x.3.2. Details on authorization of MWAB-gNB are described in clause 5.x.3.3.

#### 5.x.3.2 Authorization of MWAB-UE

Authorization of MWAB-UE is to allow the MWAB-UE to establish BH PDU Session(s) in the BH 5GC.

Dedicated S-NSSAI(s)/DNN for MWAB operation may be used for a MWAB-UE to indicate the MWAB operation to BH 5GC. Such S-NSSAI(s)/DNN for MWAB operation are stored in the MWAB-UE's subscription data.

The MWAB-UE authorization supports time-based and/or location-based control. For time-based control, existing slice subscription control defined in clause 5.15.16 can be used. For location-based control, existing mechanism, e.g. service area restriction, DNN/LADN based control can be used. In addition, per operator/PLMN based location restriction on S-NSSAI defined in clause 5.15.8 can also affect the MWAB-UE authorization.

When the MWAB-UE's authorization status changes from "authorized" to "not authorized", the AMF performs as below:

- If the AMF chooses to release the BH PDU Session(s), the AMF releases the BH PDU Session(s).

NOTE: If the AMF recognizes the dedicated S-NSSAI/DNN used by the MWAB-UE for MWAB operation, e.g. a S-NSSAI for BH PDU Session support, the AMF can send a UE Configuration Update Command to the MWAB-UE and determine to delay the corresponding PDU Session release based on an operator configuration (e.g. local configured timer).

- If the AMF chooses to de-register the MWAB-UE, the AMF de-registers the MWAB-UE.

#### 5.x.3.3 Authorization of MWAB-gNB

Authorization of MWAB-gNB is to allow the MWAB-gNB to opearate as a gNB.

The OAM that the MWAB-gNB connects to is assumed to be aware of the MWAB-UE authorization limitations (e.g. pre-determined authorization limitations) and may (pre-)configure or trigger the MWAB-gNB to turn on or shut down accordingly.

When the MWAB-gNB is no longer authorized to operate by the OAM, the MWAB-gNB should hand over the UE(s) it serves to other cells. For the case that the BH PDU Sessions are released by the MWAB-UE, the MWAB-gNB also performs shut-down.

NOTE: The coordination of the MWAB-gNB authorization/configuration from OAM and the update of subscription data (e.g. slice/DNN) of the MWAB-UE is handled by OAM/management system.

\* \* \* \* End of Changes \* \* \* \*