3GPP TSG SA WG2#166 S2-2411338

Orlando, Florida, 18-22 November 2024 (revision of S2-2411117)

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** | **5686** | **rev** | **3** | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HELP***](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:*** | Support of UE served by a MWAB: network slicing support | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | SA2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | VMR\_Ph2 | | | | |  | ***Date:*** | | | 2024-11-08 |
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| ***Category:*** | B |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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)* | |
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| ***Reason for change:*** | | The approved VMR\_Ph2 work item (SP-240632) is set to specify the architecture enhancements, functionalities and procedures to support MWAB based on conclusions of TR 23.700-06 (clause 8).  This CR introduces the descriptions on how the MWAB supports network slicing | | | | | | | | |
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| ***Summary of change:*** | | New clause added to describe how the MWAB is supporting network slicing | | | | | | | | |
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| ***Consequences if not approved:*** | | Network slicing with differentiated treatment for some network slices feature cannot be supported by MWAB | | | | | | | | |
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| ***Clauses affected:*** | | 5.49.1.x (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:*** | |  | | | | | | | | |
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| ***This CR's revision history:*** | |  | | | | | | | | |

*FIRST CHANGE*

### 5.49.1.x Support of network slicing for UEs served by a MWAB

The MWAB-gNB shall be configured with the supported S-NSSAI(s) in the MWAB Broadcasted PLMN/SNPN. In addition, to optimally support N2 and N3 connections specific for certain S-NSSAI(s), a MWAB-gNB can be configured with a mapping information necessary to associate S-NSSAI(s) in the MWAB-Broadcasted PLMN/SNPN to BH PDU sessions. If no mapping information to associate N2/N3 connections for a specific S-NSSAIs in the MWAB Broadcasted PLMN/SNPN to BH PDU sessions exists, the MWAB-gNB associates by default the N2 and N3 connections for this S-NSSAI to default BH PDU session(s) for N2 and/or N3 backhauling.

Based on the MWAB-gNB configuration described above, the MWAB-gNB, by means of an MWAB internal interface, is responsible to trigger the MWAB-UE to establish any required separate Backhaul PDU Sessions (which e.g. use specific S-NSSAI(s) in the BH PLMN) which are used to backhaul N2 and N3 traffic for specific network slices in the MWAB Broadcasted PLMN/SNPN. If a separate PDU session is required to support a specific S-NSSAI, a different TD needs to be matched at the MWAB-UE configured URSPs (i.e. the MWAB-gNB has to request a PDU session with a different TD).

For N3 connections, when the MWAB-gNB obtains the S-NSSAI(s) of the UE(s) PDU sessions from the UE(s) PDU session context, it checks whether the related BH PDU session according to the mapping is established and if not, it proceeds to establish it.

NOTE 1: whether the specific BH PDU sessions is established before the MWAB-gNB responds to the AMF PDU session resources request of the UE PDU sessions, or the MWAB-gNB does so after this response and then starts a PDU session resource modification procedure to shift the PDU session to the appropriate BH PDU sessions after this established can be based on per S-NSSAI configuration,

NOTE 2: Due to the limitation of the maximum number of PDU sessions supported by a UE, it is expected that there can only be a small number of dedicated BH PDU sessions for specific S-NSSAI(s) in the MWAB-broadcasted PLMN.

A MWAB gNB shall not be configured to support any dedicated S-NSSAI for MWAB operation in the MWAB Broadcasted PLMN/SNPN.

NOTE 3: A MWAB gNB is not expected to be configured to support any dedicated S-NSSAI for MWAB operation in the MWAB Broadcasted PLMN/SNPN. The support in the MWAB-gNB of S-NSSAIs dedicated to MWAB in the MWAB Broadcasted PLMN/SNPN would mean that the MWAB-gNB could support serving MWAB-UEs BH-PDU sessions in the broadcasted PLMN/SNPN.

*End of CHANGES*