**3GPP TSG-WG SA2 Meeting #164S2-2407842r01**

**Maastricht, NL, 19th Aug – 23rd Aug, 2024 (revision of S2-240xxxx)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.501** | **CR** | **5468** | **rev** | **-** | **Current version:** | **19.0.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Control of UE access to MWAB | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon, Nokia, ZTE | | | | | | | | | |
| ***Source to TSG:*** | SA2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | VMR\_Ph2 | | | | |  | ***Date:*** | | | 2024-08-09 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The work item VMR\_Ph2 was approved in SP#104 meeting therefore it is the time to introduce the features to the related specifications.  Regarding the topic of “controlling the access of the UE”, as per the discussions during the study phase, there were two aspects that to be addressed, namly controlling the access of UE to the PNI-NPN, and controlling the access of UE to the SNPN. Note that it is not the purpose to extend the mechanisms specific for NPN (e.g., CAG/SNPN ID) to the general case.  In addition, the conclusion of the TR can be found as follows:   * The existing CAG mechanism (as defined in Rel-18 for MBSR) can be used as an optional method for managing UE's access to MWAB-gNB, for PNI-NPN deployment cases. * Existing SNPN control mechanism can be used to manage the UE's access to MWAB-gNB, in case the MWAB-gNB is serving a SNPN. * - When there is mixed deployment of fixed gNB(s) and MWAB-gNB(s) for SNPN, existing SNPN control mechanism can be reused to differentiate the cells, and no standards impact is expected. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding new clauses to support for Mobile gNB with Wireless Access Backhauling. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The controlling the access for the UE to MWAB is not clear. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.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:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* First change (All Text New) \* \* \* \*

### 5.X.6 Control of UE access to MWAB

#### 5.X.6.1 General

The MWAB-gNB and the 5GC can reuse the existing mechanisms e.g. forbidden Tracking Area, UAC, to manage access control to an MWAB-gNB cell.

NOTE: Control of the MWAB-UE access to the BH PLMN or BH SNPN is based on existing mobility restriction management based on subscription data form MWAB-UE and is no further discussed in this caluse.

#### 5.X.6.2 Control of UE access to a MWAB PNI-NPN

According to operator's policy, the access control may be applied to UE access to MWAB-gNB cell supporting a PNI-NPN.

If the MWAB-gNB is serving a PNI-NPN, an associated CAG Identifier is used to control the access of a UE via MWAB-gNB gNB cell and existing CAG mechanism defined in clause 5.30.3 can be used for managing UE's access to MWAB-gNB cell, with the following additional considerations:

- The MWAB-gNB is configured either during the communication with the OAM of MWAB-gNB or (pre-)configuration mechanism, with a one or more CAG identifiers which are unique within the scope of this PLMN.

- If the MWAB-gNB is (pre-)configured with the PLMN list, the corresponding CAG Identifiers per PLMN is also configured in the MWAB.

NOTE 1: In the case the UE does not support CAG functionality, the MWAB-gNB and 5GC are allowed to use not only CAG mechanism but also other existing mechanisms e.g. forbidden Tracking Area, to manage its access control to a MWAB-gNB cell.

- The MWAB-gNB and 5GC support the UE access control based on the CAG identifier associated with the MWAB-gNB cell and the allowed CAG identifiers for the UE that supports CAG functionality.

- Time duration restriction may be provided to the UE together with the CAG Identifier(s) for the MWAB-gNB(s) that the UE can access. The enhanced Allowed CAG list will be provided to UE and AMF for enforcement, to make sure that UE not accessing the MWAB-gNB cell outside of the time duration. For example, if the time when a certain CAG is allowed for a UE is up, the CAG for the UE is revoked from the network.

#### 5.X.6.2 Control of UE access to a MWAB broadcasted SNPN

If the MWAB-gNB is serving a SNPN, the existing SNPN control mechanism defined in clause 5.30.2.5 can be used to manage the UE's access to MWAB-gNB.

\* \* \* \* End of changes \* \* \* \*