3GPP TSG SA WG5 Meeting 136-e TDoc S5-212216

electronic meeting, online, 1-9 March 2021

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.130** | **CR** | **0010** | **rev** | **-** | **Current version:** | **16.0.0** |  |
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| *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 | **X** | Core Network | **X** |

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| ***Title:*** | Add NG-RAN sharing deployment example | | | | | | | | | |
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| ***Source to WG:*** | ZTE Corporation | | | | | | | | | |
| ***Source to TSG:*** | SA5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MANS | | | | |  | ***Date:*** | | | 2021-01-06 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | 5G MOCN supports NG-RAN Sharing with or without multiple Cell Identity broadcast, but it is not clear how NG-RAN Sharing with multiple Cell Identity broadcast can be deployed. | | | | | | | | |
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| ***Summary of change:*** | | 1. Add necessary references 2. Add a NG-RAN sharing deployment example in the annex. | | | | | | | | |
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| ***Consequences if not approved:*** | | It will be still unclear how NG-RAN Sharing with multiple Cell Identity broadcast can be deployed.. | | | | | | | | |
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| ***Clauses affected:*** | | 2, Annex X (new) | | | | | | | | |
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|  | | **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:*** | |  | | | | | | | | |

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| **1st of Changes** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".

[3] 3GPP TS 32.102: "Telecommunication management; Architecture".

[4] 3GPP TS 36.300: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2".

[5] 3GPP TS 23.251: "Network sharing; Architecture and functional description".

[6] 3GPP TS 36.314: "Evolved Universal Terrestrial Radio Access (E-UTRA); Layer 2 – Measurements"

[x] 3GPP TS 23.501: "System architecture for the 5G System (5GS)".

[y] 3GPP TS 38.331: “NR; Radio Resource Control (RRC); Protocol specification”

[z] 3GPP TS 38.401: “NG-RAN; Architecture description”

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| **Next Change** |

Annex X (informative):  
Network sharing deployment examples

## X.1 Deployment examples of 5G MOCN NG-RAN sharing

In TS 23.501 [x], it is mentioned that “5G MOCN supports NG-RAN Sharing with or without multiple Cell Identity broadcast as described in TS 38.300.”

In TS 38.331 [y], multiple Cell Identity broadcast information is reflected in the definition of PLMN-IdentityInfoList. In the 5G MOCN NG-RAN sharing without multiple Cell Identity broadcast scenario, there is only one PLMN-IdentityInfoList in the SIB1 broadcast, which only maps to one NCGI. The figure below depicts a deployment example for this scenario.

Note: In the following figures, the definitions of the entities (e.g. gNB, gNB-CU, gNB-DU) and the relationship of the entities are defined in TS 38.401 [z].

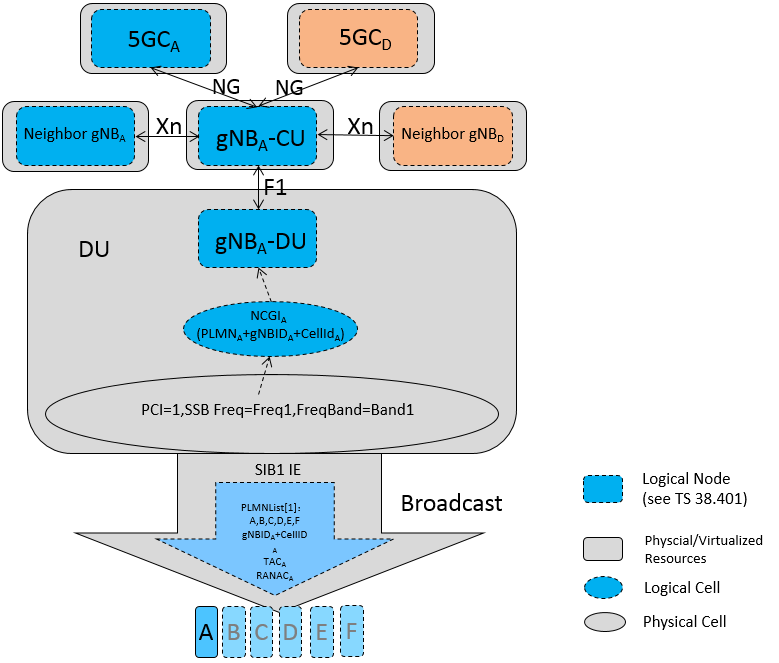


Figure X.1-1: Deployment example of NG-RAN Sharing without multiple Cell Identity broadcast

In the 5G MOCN NG-RAN sharing with multiple Cell Identity broadcast scenario, there are more than one PLMN-IdentityInfoLists in the SIB1 broadcast, which map to more than one NCGIs. The figure below depicts a deployment example for NG-RAN Sharing with multiple Cell Identity broadcast based on per-PLMN signalling (see 8.11, TS 38.401 [z]).

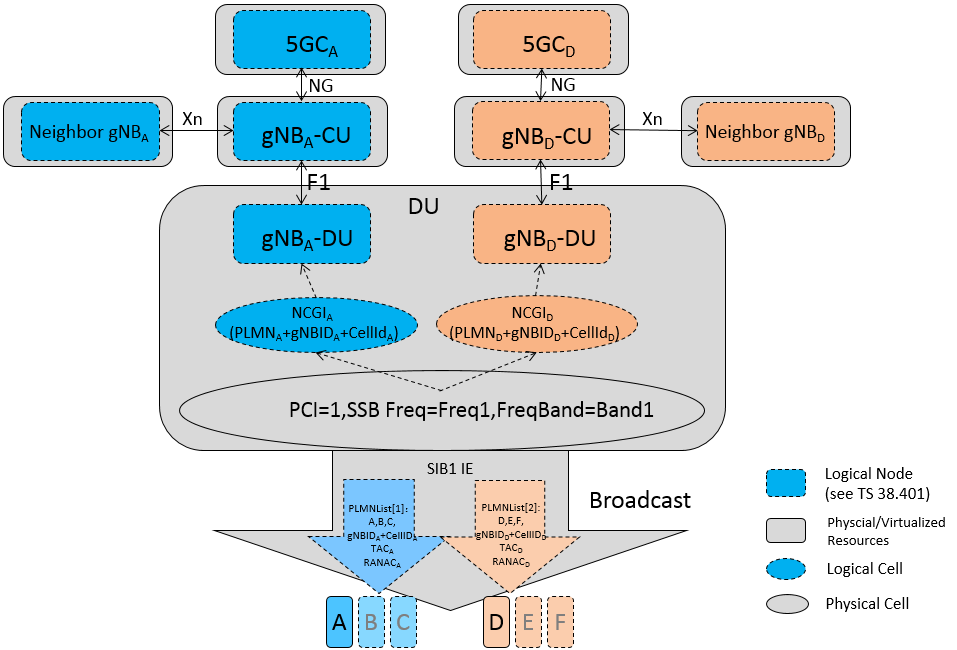


Figure X.1-2: Deployment example of NG-RAN Sharing with multiple Cell Identity broadcast based on per-PLMN signalling

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| **End of Change** |