**3GPP TSG-RAN WG2 Meeting #120 *R2-221xxxx***

**Toulouse, France, 14 – 18 November 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.300** | **CR** | **Num** | **rev** | **-** | **Current version:** | **17.2.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Clarification on slice group information provided by NAS | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_Slice-Core | | | | |  | ***Date:*** | | | 2022-11 |
|  |  | | | |  | |  | | |  |
| ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | RAN2 and SA2/CT1 specifications on NSAGs are not aligned | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | It is clarified that NAS provides the NSAG information that is used to derive the NSAGs and their priorities to be considered during cell reselection and slice specific RACH configuration  **Impact analysis**  Impacted functionality: Slice-based cell reselection and Slice-based RACH configuration.  Inter-operability: Implementation of this CR will not cause compatibility issues, as it has no impact to external interfaces | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | RAN2 and SA2/CT1 specifications are not aligned | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 16.3.3.1. 16.3.3a | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 Modified Subclause*

#### 16.3.3.1 General

Resource isolation enables specialized customization and avoids one slice affecting another slice.

Hardware/software resource isolation is up to implementation. Each slice may be assigned with either shared, prioritized or dedicated radio resource up to RRM implementation and SLA as in TS 28.541 [49].

To enable differentiated handling of traffic for network slices with different SLA:

- NG-RAN is configured with a set of different configurations for different network slices by OAM;

- To select the appropriate configuration for the traffic for each network slice, NG-RAN receives relevant information indicating which of the configurations applies for this specific network slice.

Slice-based RACH configuration for RA isolation and prioritization can be included in SIB1 messages. The slice-based RACH configurations are associated to specific NSAG(s), and if not provided for a NSAG that UE considers for selecting the RACH configuration, then the UE does not consider the NSAG for selecting the slice-based RACH configuration. The UE determines the NSAG to be considered during RA as specified in TS 23.501[3].

*Next Modified Subclause*

### 16.3.3a Slice-based cell reselection

Slice-based cell reselection information can be included in SIB16 and in *RRCRelease* messages. The slice-based cell reselection information may include reselection priorities per NSAG per frequency and corresponding list(s) of cells where the slices of the NSAG are supported or not supported. The UE determines the NSAG(s) and their priorities to be considered during cell reselection as specified in TS 23.501[3]. In order to support the NSAG, the NG-RAN provides the AMF with the NSAG information per TA in the appropriate NG interface management procedures, as specified in TS 23.501 [3]. Awareness in the NG3-RAN of the NSAG information supported in the list(s) of neighbour cells may be configured by OAM, or exchanged with neighbour NG-RAN nodes.

When a UE supports slice-based cell reselection, and when slice-based cell reselection information is provided to the UE, then the UE uses the slice-based cell reselection information. Valid cell reselection information provided in *RRCRelease* always has a priority over cell reselection information provided in SIB messages. When no slice-based cell reselection information is provided for any NSAG that was determined to be considered during cell reselection (as specified in TS 23.501[3]), then the UE uses the general cell reselection information, i.e., without considering the NSAG(s) and their priorities.

*End of Changes*