**3GPP TSG-RAN WG3 Meeting #111-e *R3-21xxxx***

**E-meeting, 25 Jan – 5 Feb 2021**

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **38.413** | **CR** | **0537** | **rev** | **2** | **Current version:** | **16.4.0** |  |
|  |
| *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:***  | Correction on RAT Information Handling |
|  |  |
| ***Source to WG:*** | Huawei, CMCC, Vodafone, Telecom Italia, China Telecom, Deutsche Telekom, China Unicom, Verizon Wireless |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | NB\_IOTenh3-Core |  | ***Date:*** | 2021-02-01 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-16 |
|  | *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 canbe 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)* |
|  |  |
| ***Reason for change:*** | The *RAT Type* IE or the absence of the *RAT Type* IE indicates to the MME the RAT associated with each supported TA in the eNB. It is noticed that It is not clear whether the CN will fail the NG setup procedure or not in case none of the RATs from the RAN node is supported by the CN node. |
|  |  |
| ***Summary of change:*** | Add abnormal condition to clarify that the CN will fail the NG setup procedure in case none of the RATs from the RAN node is supported. |
|  |  |
| ***Consequences if not approved:*** | Potential IOT issue will occur, for example:If RAN support RAT 1 and 2, CN does not support anyone of them, if NG setup succesfully perfomed, the UE access towards this CN will be failed. |
|  |  |
| ***Clauses affected:*** | 8.7.1.4 |
|  |  |
|  | **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:*** | Rev 1: remove the proposed new cause value.Rev 2: update coverpage reason for change. |

***-------- Start of the Change ------***

### 8.7.1 NG Setup

#### 8.7.1.1 General

The purpose of the NG Setup procedure is to exchange application level data needed for the NG-RAN node and the AMF to correctly interoperate on the NG-C interface. This procedure shall be the first NGAP procedure triggered after the TNL association has become operational. The procedure uses non-UE associated signalling.

***//skip the unchanged part***

#### 8.7.1.3 Unsuccessful Operation



Figure 8.7.1.3-1: NG setup: unsuccessful operation

If the AMF cannot accept the setup, it should respond with an NG SETUP FAILURE message and appropriate cause value.

If the NG SETUP FAILURE message includes the *Time to Wait* IE, the NG-RAN node shall wait at least for the indicated time before reinitiating the NG Setup procedure towards the same AMF.

#### 8.7.1.4 Abnormal Conditions

If the NG-RAN node initiates the procedure by sending an NG SETUP REQUEST message including the *PLMN Identity* IEs and none of the PLMNs provided by the NG-RAN node is identified by the AMF, then the AMF shall reject the NG Setup procedure with an appropriate cause value.

If none of the RATs indicated by the NG-RAN node in the NG SETUP REQUEST message is supported by the AMF, then the AMF shall fail the NG Setup procedure with an appropriate cause value.

***-------- End of the Change------***