**3GPP TSG-RAN WG3 Meeting #119R3-230886**

**Athens, Greece, 27th Feb – 3rd Mar 2023**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.401** | **CR** | **0274** | **rev** | **1** | **Current version:** | **17.3.0** |  |
|  |
| *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 |  | Radio Access Network | **X** | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Support of Network-Controlled Repeater |
|  |  |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell, Huawei |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | NR\_netcon\_repeater-Core  |  | ***Date:*** | 2023-02-16 |
|  |  |  |  |  |
| ***Category:*** | B |  | ***Release:*** | Rel-18 |
|  | *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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | Add the support for Network-Controlled Repeater  |
|  |  |
| ***Summary of change:*** | The following changes are added:* Add a new section for NCR integration procedure
 |
|  |  |
| ***Consequences if not approved:*** | Not able to support NCR |
|  |  |
| ***Clauses affected:*** | 8.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:*** | Rev 1: updated during RAN3#119 |

<<<<<<<<<<<<<<<<<<<< Start of Changes >>>>>>>>>>>>>>>>>>>>

## 8.x Overall procedures for Network Controlled Repeater

### 8.x.y NCR-node Integration Procedure

A high-level flow chart for NCR integration is shown below:



Figure 8.x.y-1: The integration procedure for NCR-node

Phase 1: NCR-MT setup. In this phase, the NCR-MT of the new NCR-node connects to the network in the same way as a UE, by performing RRC connection setup procedure with gNB-CU, authentication with the core network, and OAM connectivity establishment that can be supported by using the NCR-MT’s PDU session. The NCR-MT selects a cell for access based on NCR support indication in SIB1, and includes the NCR indication in *RRCSetupComplete* message to assist the gNB to select an AMF supporting NCR. Upon receiving the NCR authorization information from 5GC, the gNB-CU provides the authorization information to the gNB-DU.

NOTE 1: The OAM server may configure the NCR-node with a list of allowed gNB cell(s) that the NCR-MT is allowed to connect with, and/or a list of forbidden gNB cell(s) that the NCR-MT is not allowed to connect with.

NOTE 2: The signalling flow for UE initial access procedure as shown in Figure 8.1-1/Figure 8.9.1-1 is used for the setup of the NCR-MT.

Phase 2: The gNB-CU may configure the NCR node via the RRC.

Editor’s NOTE: The information to be configured via RRC pends on RAN2.

Phase 3: After the NCR is configured, the NCR-node can start serving the UEs.

<<<<<<<<<<<<<<<<<<<< End of Changes >>>>>>>>>>>>>>>>>>>>