**3GPP TSG- Meeting #**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **0070** | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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 |  |

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|  | | | | | | | | | | |
| ***Title:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_netcon\_repeater-Core | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | Requirement set applicability tables are confusing. In general, clauses 6.2 to 6.10 are for conducted requirements for RF repeater and NCR-Fwd. Clauses 6.11 to 6.22 are for conducted requirements for NCR-MT. Clauses 7.2 to 7.9 are for radiated requirements for RF repeater and NCR-Fwd. Clauses 7.10 to 7.17 are for radiated requirements for NCR-MT. However, there are some exceptions which lead to the confusions.  Requirements for NCR-MT are shown with the surfix “Conducted” or “Radiated” in the applicability table for NCR-MT.  Performance requirements are missing in the applicability table for NCR-MT.  Some requirement names in the applicability tables for RF repeater and for NCR-Fwd are not correct. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clauses 6.2 to 6.10 and 7.2 to 7.9 are allocated to RF repeater and NCR-Fwd only. Clauses 6.11 to 6.25 and 7.10 to 7.29 are allocated to NCR-MT only.  Remove “Conducted” and replace “Radiated” with “OTA” and add “for NCR-MT” in the applicability table for NCR-MT.  Add performance requirements in the applicability table for NCR-MT.  Requirement names for RF repeater and NCR-Fwd are corrected. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Requirement set table for NCR-MT is complex and leads to confusion.  Requirement set tables for RF repeater and NCR-MT remain requirement name errors. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

**--------------Start of change-------------**

## 4.5 Applicability of requirements

In tables4.5-1, the requirement applicability for each requirement set is defined. For each requirement, the applicable requirement clause in the specification is identified. Requirements not included in a requirement set is marked not applicable (NA).

Table 4.5-1: *Requirement set* applicability

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Requirement | Requirement set | | | | | |
|  | *Repeater*  *type 1-C,*  *NCR-Fwd*  *type 1-C* | *NCR-Fwd*  *type 1-H* | *NCR-MT type 1-C* | *NCR-MT type 1-H* | *Repeater type 2-O* | *NCR-MT type 2-O* |
| Repeater output power | 6.2 | 6.2 |  |  |  |  |
| Frequency stability | 6.3 | 6.3 |  |  |  |  |
| Out of band gain | 6.4 | 6.4 |  |  |  |  |
| Unwanted emissions | 6.5 | 6.5 |  |  |  |  |
| Repeater Error Vector Magnitude | 6.6 | 6.6 | NA | NA | NA |  |
| Input intermodulation | 6.7 | 6.7 |  |  |  |  |
| Output intermodulation | 6.8 | 6.8 |  |  |  |  |
| Adjacent Channel Rejection Ratio (ACRR) | 6.9 | 6.9 |  |  |  |  |
| Transmit ON/OFF power | 6.10 | 6.10 |  |  |  |  |
| Repeater output power for NCR-MT |  |  | 6.2.3.2 | 6.2.3.2 |  |  |
| Output power dynamics for NCR-MT |  |  | 6.11 | 6.11 |  |  |
| Transmit signal quality for NCR-MT |  |  | 6.12 | 6.12 |  |  |
| Unwanted emissions for NCR-MT |  |  | 6.5 | 6.5 |  | NA |
| Transmit intermodulation for NCR-MT |  | NA | 6.13 | 6.13 |  |  |
| Diversity characteristics for NCR-MT |  |  | 6.15 | 6.15 |  |  |
| Reference sensitivity for NCR-MT |  |  | 6.16 | 6.16 |  |  |
| Maximum input level for NCR-MT |  |  | 6.17 | 6.17 |  |  |
| Adjacent channel selectivity for NCR-MT |  |  | 6.18 | 6.18 |  |  |
| Blocking characteristics for NCR-MT |  |  | 6.19 | 6.19 |  |  |
| Spurious response for NCR-MT |  |  | 6.20 | 6.20 |  |  |
| Receiver intermodulation characteristics for NCR-MT |  |  | 6.21 | 6.21 |  |  |
| Performance requirements for NCR-MT |  |  | 8 | 8 |  |  |
| OTA Repeater output power |  | 7.2 |  |  | 7.2 |  |
| OTA frequency stability |  |  |  |  | 7.3 |  |
| OTA out of band gain |  |  |  |  | 7.4 |  |
| OTA unwanted emissions |  |  |  |  | 7.5 |  |
| OTA Repeater Error Vector Magnitude | NA |  |  | NA | 7.6 |  |
| OTA input intermodulation |  |  |  |  | 7.7 |  |
| OTA Adjacent Channel Rejection Ratio (ACRR) |  |  |  |  | 7.8 |  |
| OTA transmit ON/OFF power |  |  |  |  | 7.9 |  |
| OTA repeater output power for NCR-MT |  | NA | NA | 7.18 |  | 7.2 |
| OTA output power dynamics for NCR-MT |  |  |  |  |  | 7.10 |
| OTA transmit signal quality for NCR-MT |  |  |  |  |  | 7.11 |
| OTA unwanted emissions for NCR-MT |  |  |  |  |  | 7.5 |
| OTA diversity characteristics for NCR-MT |  |  |  |  |  | 7.12 |
| OTA reference sensitivity for NCR-MT |  |  |  | NA | NA | 7.13 |
| OTA maximum input level for NCR-MT |  |  |  |  |  | 7.14 |
| OTA adjacent channel selectivity for NCR-MT |  |  |  |  |  | 7.15 |
| OTA blocking characteristics for NCR-MT |  |  |  |  |  | 7.16 |
| OTA receiver spurious emissions for NCR-MT |  |  |  |  |  | 7.17 |
| Radiated performance requirements for NCR-MT |  |  |  |  |  | 9 |

Table 4.5-1a: Void



Table 4.5-1b: Void



**--------------End of change-------------**