3GPP TSG-RAN WG4 Meeting # 102-e draft R4-2207277

Electronic Meeting, 21 Feb – 03 Mar, 2022

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.104** | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **x** | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | CR to TS 38.104: RX requirements (revision) | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_RAIL\_EU\_900MHz-Core, NR\_RAIL\_EU\_1900MHz\_TDD-Core | | | | |  | ***Date:*** | | | 2022-02-11 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In this CR we provide further corrections to the blocking requirement, in order to better aligh with the structure of other blocking requirements in TS 38.104, and to capture further refinements to the blocker signal. Delta is highlighted. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | * 7.4.2.5: corrections to the new section for Additional in-band blocking requirements; further corrections on the blocker signal, new section number due to the 7.4.2.4 being already Voided in the past. | | | | | | | | |
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| ***Consequences if not approved:*** | | Implementation of RMR900 and RMR1900 bands would not be complete. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.4.2.5, 7.5.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **x** | Other core specifications | | | |  | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS 38.141-1 CR#0260 | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | This is based on the already Endorsed Draft CR to TS 38.104 in R4-2203055 (RAN4#101bis-e). | | | | | | | | |

*------------------------------ Modified section ------------------------------*

#### 7.4.2.5 Additional in-band blocking requirements for the use of RMR bands

~~The requirement apply outside the~~ *~~Base Station RF Bandwidth~~* ~~or~~ *~~Radio Bandwidth~~*~~. The interfering signal offset is defined relative to the~~ *~~Base Station RF Bandwidth~~**~~edges~~* ~~or~~ *~~Radio Bandwidth~~* ~~edges.~~

For the wanted and interfering signal coupled to the *antenna connector*, using the parameters in table 7.4.2.5-1, the throughput shall be ≥ 95 % of the *maximum throughput* of the reference measurement channel defined in annex A.1.

The following requirement may apply to BS operating in band n100 in certain regions.

Table 7.4.2.5-1: Additional in-band blocking requirement for RMR BS operating in n100

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | BS channel bandwidth of the lowest/highest carrier received (MHz) | Wanted signal mean power (dBm) | Interfering signal mean power (dBm) | ~~Centre frequency of interfering signal (MHz)~~ | Interfering signal centre frequency minimum offset from the lower/upper Base Station RF Bandwidth edge or sub-block edge inside a sub-block gap (MHz) | Type of interfering signal |
|  | 5 | PREFSENS + 3 dB | Wide Area BS: -34 | ~~870.1 - 874.3~~ | ~~±7.5~~  FFS | FFS |
|  |  |  |  |  |  |  |
| NOTE: PREFSENS depends on the *BS channel bandwidth* as specified in table 7.2.2-1. | | | | | | |

*----------------------------- Next modified section ------------------------------*

### 7.5.5 Additional out-of-band blocking requirements for the use of RMR bands

For the additional out-of-band blocking requirements, the interfering signal differs from the one used for the general out-of-band blocking requirement.

The out-of-band blocking requirement apply from 1 MHz to FUL,low - ΔfOOB and from FUL,high + ΔfOOB up to 12750 MHz, including the downlink frequency range of the FDD *operating band* for BS supporting FDD. The ΔfOOB is defined in table 7.4.2.2-0.

The throughput shall be ≥ 95% of the maximum throughput of the reference measurement channel, with a wanted and an interfering signal coupled to *BS type 1-C* *antenna connector* using the parameters in table 7.5.~~2~~5-1. The reference measurement channel for the wanted signal is identified in clause 7.2.2 for each *BS channel bandwidth* and further specified in annex A.1.

The following requirement may apply to BS operating in band n101 in certain regions.

Table 7.5.5-1: Additional out-of-band blocking requirement for RMR BS operating in n101

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ~~Operating band~~ | BS channel bandwidth of the lowest/highest carrier received (MHz) | Wanted signal mean power (dBm) | Interfering signal mean power (dBm) | ~~Centre frequency of interfering signal (MHz)~~ | ~~Interfering signal centre frequency minimum offset from the lower/upper Base Station RF Bandwidth edge or sub-block edge inside a sub-block gap (MHz)~~ | Type of interfering signal |
| ~~n101~~ | 5, 10 | PREFSENS + 3 dB | Wide Area BS: -20 | ~~1807.5 - 1877.5~~ | ~~±7.5~~ | 5 MHz LTE signal |
| NOTE: PREFSENS depends on the *BS channel bandwidth* as specified in table 7.2.2-1. | | | | | | |

*----------------------------- End of modified section ------------------------------*