**3GPP TSG-RAN WG4 Meeting # 104-e Rev\_R4-2213180**

**Electronic Meeting, August. 15-26, 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **DRAFT CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.884** | **CR** | 0002 | **rev** | **-** | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | CR on TR 38.884 for FR2-2 maximum DL testable SNR | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Qualcomm Incorporated | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | FS\_FR2\_enhTestMethods | | | | |  | ***Date:*** | | | 2022-08-10 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***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 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:*** | | The calculaiton parameters and maximum DL testable SNR for 400MHz demodulatio are not correct.  8RBs CBW results are missing.  Updated the SNR based on the latest endorsed proposal 4 in R5-221628 states that: “For 64QAM scenarios (both Demod and CSI), consider fading backoff margin of 11.08 dB (replacing the current working assumption of 17.71 dB) | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | To correct the calculaiton parameters and maximum DL testable SNR for 400MHz.  To add the SNR resutls for narrow CBW.  To correct the SNR based on the latest endorsed proposal 4 in R5-221628. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The above tables are not correct in the current specification. 8RBs CBW results are missing. The maximum DL testable SNR is not reflecting the lastest agreemetn for backoff margin. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.2.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 changes---

We further note that the SNR calculation related to cable loss also includes connector losses and additional margin. Demodulation test system setup parameters required for SNR calculation are summarized in Table 7.2.3-1.

Table 7.2.3-1: Demodulation test setup SNR calculation parameters for band n263

|  |  |
| --- | --- |
| Parameter | Comment |
|
| REFSENS | Using REFSENS agreed for band n263  -72.0 dBm/400 MHz |
| Multi-band relaxation | TBD |
| TE amplifier 1dB compression | 23 dBm |
| Backoff from P1dB | --11.08 (RAN5 assumption endorsed in R5-221628) |
| Cable loss | 10.3 dB, assuming 1m length |
| Connector insertion loss | 0 |
| FS path loss | 66.7 dB, assuming 0.725m range length |
| TE DL absolute power setting uncertainty | +/-6 dB |
| Probe antenna gain | 12 dBi |
| Beam peak search procedure error | 0.5 dB |

The maximum achievable DL SNR is summarized in Table 7.2.3-2.

Table 7.2.3-2: Maximum DL testable SNR preliminary extension for band n263

|  |  |  |
| --- | --- | --- |
|  | CBW (MHz) | Test method |
| IFF |
| Single band UE | 4.62 | [23.3] |
| 100 | [9.8] |
| 400 | [2.6] |
| 800 | [-2.3] |
| 1600 | < -20 (NOTE 1) |
| 2000 | < -20 (NOTE 1) |
| Multi band UE | 4.62 | TBD |
| 100 | TBD |
| 400 | TBD |
| 800 | TBD |
| 1600 | TBD |
| 2000 | TBD |
| NOTE 1: Result does not converge  NOTE 2: 8RBs with 480kHz SCS | | |

---End of changes---