**3GPP TSG-RAN5 Meeting #91-e Draft\_R5-213803**

**Electronic Meeting, 17th May – 27th May 2021**

**Title: Response to LS on band dependent parameters** **for the FR2 demodulation setup**

**Response to:**

**Release:** Release 17

**Work Item:** FR2\_enhTestMethods

**Source:** TSG RAN WG5

**To:** TSG RAN WG4

**Cc:**

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**Attachments:** None

**1. Overall Description:**

RAN5 thanks RAN4 for the LS on band dependent parameters for the FR2 demodulations setup.

RAN5 would like to provide the following responses to the questions raised in the RAN4 LS.

**Question 1: Can RAN5 share any comments regarding the preliminary assessment of the demodulation test setup SNR calculation parameters in Table 1?**

RAN5 is yet to discuss the various parameters affecting the max achievable SNR for n262 band.

**Question 2: Can RAN5 share any updates related to FR2b, so that these can be applied to the SNR calculations for n262?**

Following is the current working assumption for the max testable SNRbb updated in TR 38.903 for the FR2 bands defined in 38.101-4 with and without fading. RAN5 is still discussing on some of the key parameters such as “*available DL power at CW 1 dB compression at QZ, dBm*” and hence the max testable SNRbb for n260 band (also referred to as FR2b) is currently TBD in TR 38.903.

Table D.3.2.2-1: Predicted SNRBB upper bound values for Indirect far field (IFF) with 30cm QZ, PC3, 100MHz CHBW under fading conditions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Operating Band | Maximum SNRBB (dB) | | |
| CHBW 50 MHz | CHBW 100 MHz | CHBW 200 MHz |
| Multi-band UE (Note) | n257 | [24.0] | [20.8] | [17.8] |
| n258 | [24.0] | [20.8] | [17.8] |
| n259 | TBD | TBD | TBD |
| n260 | TBD | TBD | TBD |
| n261 | [24.0] | [20.8] | [17.8] |
| Note: For ∑MBp from TS 38.101-2 [16] Table 6.2.1.3-4 allow up to 0.75 dB in Rel-15. | | | | |

Table D.3.2.2-2: Predicted SNRBB upper bound values for Indirect far field (IFF) with 30cm QZ, PC3, 100MHz CHBW when no fading conditions apply

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Operating Band | Maximum SNRBB (dB) | | |
| CHBW 50 MHz | CHBW 100 MHz | CHBW 200 MHz |
| Multi-band UE (Note) | n257 | [28.7] | [25.5] | [22.5] |
| n258 | [28.7] | [25.5] | [22.5] |
| n259 | TBD | TBD | TBD |
| n260 | TBD | TBD | TBD |
| n261 | [28.7] | [25.5] | [22.5] |
| Note: For ∑MBp from TS 38.101-2 [16] Table 6.2.1.3-4 allow up to 0.75 dB in Rel-15. | | | | |

**2. Actions to RAN4 group.**

None

**3. Date of Next TSG-RAN WG5 Meetings:**

TSG-RAN5 Meeting#92 16th – 27th Aug 2021 Electronic Meeting

TSG-RAN5 Meeting#93 8th – 19th Nov 2021 Electronic Meeting

**4. Appendix**

Table 1 included in the RAN4 LS, and referenced in the questions, is included below

Table 1: Proposed demodulation test setup SNR calculation parameters for band n262

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| REFSENS | -82.8 dBm/50 MHz | Using REFSENS agreed for band n262 |
| Multi-band relaxation | 1.0 dB | Defined as ceil(.); change from 2.0 dB |
| FS path loss | -63.2 dB | Change from -62.3 dB (scaling from 43.5 to 48.2 GHz) |
| Cable loss | -8.7 dB | Additional 0.33 dB/m in cable loss at 48.2 GHz |
| Probe antenna gain | [12.0] dB | Needs checking |
| Backoff from P1dB | [13.0] dB | Needs checking |