**3GPP TSG-RAN WG4 Meeting #112 *Rev of***

**Maastricht, Netherlands, 19 – 23 August, 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **003****9** | **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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | (IoT\_NTN\_FDD\_LS\_band) (Rel-18) | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | MediaTek Inc. | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | IoT\_NTN\_FDD\_LS\_band | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***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:*** | | 1. Regarding IoT NTN band 254 (L+S band), NS\_04N/NS\_05N A-MPR values are TBD in TS 36.102 Table 6.2B.3-1. For NS\_04N/NS\_05N, it is observed the 3/6/12 Tones allocation A-MPR values for band 254 (L+S band) were indicated in TR 36.764. These A-MPR values need to be updated into TS 36.102. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. In TS 36.102 Table 6.2B.3-1, the NS\_04N/NS\_05N A-MPR values for 3/6/12 Tones operation for IoT-NTN band 254 (L+S band) are updated based on TR 36.764. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The required NS\_04N/NS\_05N A-MPR for multi-tones operation for IoT-NTN band 254 (L+S band) is not provided. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.2B.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TR 36.764... 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 the change 1==========================

### 6.2B.3 UE additional maximum output power reduction for category NB1 and NB2 UE

Additional ACLR and spectrum emission requirements can be signalled by the network to indicate that the UE shall also meet additional requirements in a specific deployment scenario. To meet these additional requirements, Additional Maximum Power Reduction (A-MPR) is allowed for the output power are specified. For the agreed E-UTRA bands for category NB1 and NB2 UE an A-MPR of 0 dB shall be allowed unless specified otherwise.

For UE Power Class 3 and 5 the specific requirements and identified subclauses are specified in Table 6.2B.3-1 along with the allowed A-MPR values that may be used to meet these requirements. The allowed A-MPR values specified below in Table 6.2B.3-1 are in addition to the allowed MPR requirements specified in subclause 6.2B.2-1.

Table 6.2B.3-1: Additional Maximum Power Reduction (A-MPR) for category NB1 and NB2 UE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Network Signalling value | Requirements (subclause) | E-UTRA Band | A-MPR (dB) | |
| NS\_01 | 6.5B.4.2 | Table 5.2-1 | N/A | |
| NS\_02N | 6.5B.4.4.2 | 255 | N/A | |
| NS\_03N | 6.5B.4.4.4 | 254 | N/A | |
| NS\_04N | 6.5B.4.4.5 | 254 | Table 6.2B.3-2 | |
| NS\_05N | 6.5B.4.4.6 | 254 | Table 6.2B.3-3 | |
| NS\_24 | 6.5B.4.4.3 | 256 | PC3 | PC5 |
| ≤ 3.5 | ≤ 0.5 |

Table 6.2B.3-2: A-MPR for "NS\_04N" power class 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Modulation | QPSK | | | |
| Tone positions for 3 Tones allocation | 0-2 | 3-5 and 6-8 | | 9-11 |
| A-MPR | [≤ 0.7 dB] | [0.2 dB] | | [≤ 0.7 dB] |
| Tone positions for 6 Tones allocation | 0-5 and 6-11 | | | |
| A-MPR | [0 dB] | | [0 dB] | |
| Tone positions for 12 Tones allocation | 0-11 | | | |
| A-MPR | [0 dB] | | | |

Table 6.2B.3-3: A-MPR for "NS\_05N" power class 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Modulation | QPSK | | | |
| Tone positions for 3 Tones allocation | 0-2 | 3-5 and 6-8 | | 9-11 |
| A-MPR | [≤ 1.5 dB] | [0.5 dB] | | [≤ 1.5 dB] |
| Tone positions for 6 Tones allocation | 0-5 and 6-11 | | | |
| A-MPR | [≤ 0.7 dB] | | [≤ 0.7 dB] | |
| Tone positions for 12 Tones allocation | 0-11 | | | |
| A-MPR | [0 dB] | | | |

====================End of the change 1==========================