**3GPP TSG-RAN WG4 Meeting #116bis *R4-2513150***

**Prague, CZ, Oct 13rd – 17th , 2025**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.101-5** | **CR** | **draftCR** | **rev** | **1** | **Current version:** | **19.1.1** |  |
|  |
| *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 |  | Radio Access Network | **X** | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | Draft CR for 38.101-5, On NTN UE requirement of the NR NTN Ku band |
|  |  |
| ***Source to WG:*** | CATT |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_NTN\_Ku\_bands-Core |  | ***Date:*** | 2025-09-29 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-19 |
|  | *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 canbe 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:*** | Introduce note for the synchronization raster entries for band n248 and n247. This draft CR is on the top of agreed big CR R4-2510831 in RAN4#116. |
|  |  |
| ***Summary of change:*** | Add Note 2 for band n248 and n247 in Table 5.4.3.3-1. |
|  |  |
| ***Consequences if not approved:*** | The synchronization raster entries for band n248 and n247 would be unclear. |
|  |  |
| ***Clauses affected:*** | 5.4.3.3 |
|  |  |
|  | **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:*** | Revised from R4-2513150. |

## **<Start of Change 1>**

#### 5.4.3.3 Synchronization raster entries for each operating band

The synchronization raster for each band is give in Table 5.4.3.3-1 and Table 5.4.3.3-2. The distance between applicable GSCN entries is given by the <Step size> indicated in Table 5.4.3.3-1 for FR1-NTN and Table 5.4.3.3-2 for FR2-NTN.

Table 5.4.3.3-1: Applicable SS raster entries per operating band (FR1-NTN)

|  |  |  |  |
| --- | --- | --- | --- |
| NTN satellite operating band | SS Block SCS | SS Block pattern1 | Range of GSCN(First – <Step size> – Last) |
| n256 | 15 kHz | Case A | 5429 – <1> – 5494 |
| n255 | 15 kHz | Case A | 3818 – <1> – 3892 |
|  | 30 kHz | Case B | 3824 – <1> – 3886 |
| n254 | 15 kHz | Case A | 6215 – <1> – 6244 |
|  | 30 kHz | Case C | 6220 – <1> – 6238 |
| n252 | 15 kHz | Case A | 5456 – <1> – 5494 |
| n248 (Note 2) | 15 kHz | Case A | 12848 – <1> – 14268 |
| 30 kHz | Case C | 12850 – <1> – 14266 |
| n247 (Note 2) | 15 kHz | Case A | 12848 – <1> – 14268 |
| 30 kHz | Case C | 12850 – <1> – 14266 |
| NOTE 1: SS Block pattern is defined in clause 4.1 in 3GPP TS 38.213 [7].NOTE 2: The SCS for the SSB shall be the same as the SCS for the data channel. |

Table 5.4.3.3-2: Applicable SS raster entries per operating band (FR2-NTN)

|  |  |  |  |
| --- | --- | --- | --- |
| SAN operating band | SS Block SCS | SS Block pattern(NOTE) | Range of GSCN(First – <Step size> – Last) |
| n512 | 120 kHz | Case D | 17448 – <12> – 19428 |
|  | 240 kHz | Case E | 17472 – <24> – 19416 |
| n511 | 120 kHz | Case D | 17448 – <12> – 19428 |
|  | 240 kHz | Case E | 17472 – <24> – 19416 |
| n510 | 120 kHz | Case D | 17448 – <12> – 19428 |
|  | 240 kHz | Case E | 17472 – <24> – 19416 |
| n509 | 120 kHz | Case D | 12864 – <12> – 14256 |
| n508 | 120 kHz | Case D | 12864 – <12> – 14256 |
| NOTE: SS Block pattern is defined in section 4.1 in TS 38.213 [7]. |

## **<End of Change 1>**