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

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

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

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|  | | | | | | | | | | |
| ***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 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:*** | | 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>**