**3GPP TSG-RAN WG4 Meeting # 111 *R4-2410584***

**Fukuoka, Japan, May 20 – May 24, 2024**

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.101-5** | **CR** | **DraftCR** | **rev** | **-** | **Current version:** | **18.5.0** |  |
|  |
| *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:***  | Draft CR for 38.101-5 to introduce NS for regional regulatory requirements |
|  |  |
| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_NTN\_enh-Core |  | ***Date:*** | 2024-05-22 |
|  |  |  |  |  |
| ***Category:*** | B |  | ***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 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)* |
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| ***Reason for change:*** | 1. Based on the WF R4-2406609 in the RAN4#111 meeting, RAN4 reached some offline agreements how to arrange the regional regulatory requirements by indicating network signaling. It’s proposed to use network signaling indication method for additional regional requirements.
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| ***Summary of change:*** | 1. It’s proposed to use network signaling indication method for additional regional requirements.
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| ***Consequences if not approved:*** | 1. Network signaling indication method is not used for additional regional requirements.
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| ***Clauses affected:*** | 9.7 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** | **X** |  |  Test specifications | TS 38.521-5 |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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

## 9.7 Additional regional requirements indicated by NS

### 9.7.1 General

Additional regional requirements can be signalled by the network. Each group of additional regional requirements is associated with a unique network signalling (NS) value indicated in RRC signalling by an NR NTN frequency band number of the applicable FR2-NTN operating band and an associated value in the field *additionalSpectrumEmission.* Throughout this specification, the notion of indication or signalling of an NS value refers to the corresponding indication of an NR frequency band number of the applicable operating band, the IE field *freqBandIndicatorNR* and an associated value of *additionalSpectrumEmission* in the relevant RRC information elements [8]*.*

Table 9.7.1-1 specifies the additional regional requirements with their associated network signalling values, the applicable satellite orbit scenario(s) and applicable FR2-NTN operating band(s) for each NS value. The mapping of NR frequency band numbers and values of the additionalSpectrumEmission to network signalling labels is specified in Table 9.7.1-2.

Table 9.7.1-1: Additional regional requirements indicated by Network Signalling label

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Network Signalling label | Requirements (clause) | Applicable Satellite orbit scenario | NR satellite Band | Channel bandwidth (MHz) |
| NS\_200N |  | GSO and LEO | Table 5.2.3-1 | 50, 100, 200, 400 |
| NS\_201N | Clause 9.2.2.3Clause 9.5.3.2Clause 9.5.3.3Clause 9.6.1.1Clause 9.6.1.2Clause 10.8 | GSO | n512 | 50, 100, 200, 400 |
| NS\_202N | Clause 9.5.3.2Clause 9.5.3.3Clause 9.6.1.1 | LEO | n512 | 50, 100, 200, 400 |

Table 9.7.1-2: Mapping of network signalling label

|  |  |
| --- | --- |
| NR satellite band | Value of additionalSpectrumEmission |
|  | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| n512 | NS\_200N | NS\_201N | NS\_202N |  |  |  |  |  |
| n511 | NS\_200N |
| n510 | NS\_200N |
| NOTE 1: *additionalSpectrumEmission* corresponds to an information element of the same name defined in clause 6.3.2 of 3GPP TS 38.331 [8].NOTE 2: For band n511 and n510, only NS\_200N can be used to map. |

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