**3GPP TSG-RAN4 Meeting #101-e *R4-2120077***

**Electronic Meeting, 1 – 12 November 2021**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.307** | **CR** | **CRNum** | **rev** | **-** | **Current version:** | **16.8.0** |  |
|  | | | | | | | | |
| *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:*** | Big CR for TS 38.307 Maintenance (Rel-16) | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | MCC | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_unlic-Core | | | | |  | ***Date:*** | | | 2021-11-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | This big CRs merge the mutiple endorsed draft CRs. The reason for change in each endorsed draft CR is copied below.  R4-2120059 Addition of release independence information for shared spectrum access R16  <Reason for change>  Addition of release independence information for shared spectrum access | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The summary of change in each endorsed draft CR is copied below.  R4-2120059 Addition of release independence information for shared spectrum access R16  <Summary of change>  Release independence information for shared spectrum access is added | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The consequences if not approved for each endorsed draft CR are coppied below.  R4-2120059 Addition of release independence information for shared spectrum access R16  <Consequences if not approved>  Release independence information for shared spectrum access is missing | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.1, 5.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

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

## 5.1 Additional NR operating bands and UE power classes for NR frequency range 1

Requirements for a Rel-16 UE for additional NR operating bands and power classes compared to TS 38.101-1 of Rel-16 [2] are introduced via this clause.

Table 5.1-1: NR operating bands

|  |  |  |  |
| --- | --- | --- | --- |
| Feature | Duplex-mode | Release  independent from | Requirements to be fulfilled  (see TS 38.307 of the release in which the band was introduced) |
| Operating bands | FDD, TDD, SDL, SUL | Rel-15 | Table B.4.1-1, Table B.4.3-1 |
| Shared spectrum access operating bands | TDD | Rel-16 |  |

Table 5.1-2: NR UE power class

|  |  |  |  |
| --- | --- | --- | --- |
| Feature | Duplex-mode | Release  independent from | Requirements to be fulfilled  (see TS 38.307 of the release in which the power class was introduced) |
| Power Class 1 | FDD | Rel-15 | Table B.4.1-1, Table B.4.3-1 |
| Power Class 1.5 | TDD | Rel-15 | Table B.4.1-1, Table B.4.3-1 |
| Power Class 2 | TDD | Rel-15 | Table B.4.1-1, Table B.4.3-1 |
| Power Class 3 | FDD, TDD, SUL | Rel-15 | Table B.4.1-1, Table B.4.3-1 |

## **<<Next of Change>>**

5.6 Other release independent requirements for NR frequency range 1

This clause covers requirements for a Rel-16 UE coming from all other release independent requirements with the corresponding features introduced in Rel-15.

Table 5.6-1: Release independent requirements with the corresponding features introduced in Rel-15

|  |  |  |  |
| --- | --- | --- | --- |
| Feature | Release  independent from | Requirements to be fulfilled  (see 38.307 of the REL when the feature was introduced) | Further information |
| Precoding matrix indicator (PMI) reporting requirements for TypeI-SinglePanel and TypeII Codebooks with more than 8TX and up to 32TX | Rel-15 | Table D.1-1, Table D.2-1 | Rel-16 NR\_perf\_enh-Perf WI introduced band independent PMI reporting requirements for 16TX and 32TX TypeI-SinglePanel Codebook, and 16TX TypeII Codebook: see Table D.1-1 and Table D.2-1 respectively. |
| PDSCH demoulation requirements with LTE CRS rate matching for TDD band | Rel-15 | Table E.1-1 | Rel-16 NR\_perf\_enh-Perf WI introduced band independent PDSCH demodulation requirements with LTE CRS rate matching for TDD band: see Table E.1-1. |

## 5.7 Additional Inter-band EN-DC or NR CA configurations involving shared spectrum access

Requirements for a Rel-16 UE for additional NR CA, EN-DC, and NR DC configurations involving shared spectrum access compared to TS 38.101-1 of Rel-16 [2] or TS 38.101-3 of Rel-16 [4] are introduced via this clause.

Table 5.7-1: NR-DC within FR1

|  |  |  |  |
| --- | --- | --- | --- |
| Feature | Duplex-mode | Release  independent from | Requirements to be fulfilled  (see 38.307 of the REL in which the EN-DC or NR CA configuration was introduced) |
| Intra-band and Inter-band NR CA configurations involving shared spectrum access | FDD and TDD, TDD | Rel-16 |  |
| Inter-band EN-DC configurations involving shared spectrum access | FDD and TDD, TDD | Rel-16 |  |

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