**3GPP T****SG-RAN WG4 Meeting#101 R4-2119698**

**E-meeting, 1st – 12th Nov, 2021**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.307** | **CR** | **<CR#>** | **rev** | **-** | **Current version:** | **17.3.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | draftCR 38.307: Addition of release independence information for shared spectrum access R16 CATB | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_unlic-Core | | | | |  | ***Date:*** | | | 2021-10-22 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | A |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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:*** | | Addition of release independence information for shared spectrum access | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Release independence information for shared spectrum access is added | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Release independence information for shared spectrum access is missing | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.1, 5.6, B.4.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## 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 B.4.7-1 |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* No changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## 5.6 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 5.6-1: 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, TDD | Rel-16 | Table B.3.1-1, Table B.4.2-1, Table B.4.8-1 |
| Inter-band EN-DC configurations involving shared spectrum access | FDD, TDD | Rel-16 | Table B.4.6-1 |
| Inter-band NR DC configurations involving shared spectrum access | FDD, TDD | Rel-16 | Table B.4.5-1 |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* No changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## B.4.7 Common UE RF requirements shared spectrum access

The requirements and test cases listed in Table B.4.7-1 are specified in REL-16 version of TS 38.101-1 [2].

Table B.4.7-1: Common UE RF requirements for shared spectrum access

|  |  |
| --- | --- |
| Clause | Description |
| 5.2A | Operating bands for CA |
| 5.3A | UE channel bandwidth for CA |
| 5.4A | Channel arrangement for CA |
| 6.2F | Transmitter power for shared spectrum channel access |
| 6.3F | Output power dynamics for shared spectrum channel access |
| 6.4F | Transmit signal quality for shared spectrum channel access |
| 6.5F | Output RF spectrum emissions |
| 7.3F | Reference sensitivity for shared spectrum channel access |
| 7.4 | Maximum input level |
| 7.5F | Adjacent channel selectivity |
| 7.6F | Blocking characteristics |
| 7.7F | Spurious response for shared spectrum channel access |
| 7.8F | Intermodulation characteristics for shared spectrum channel access |
| 7.9 | Spurious emissions |

## B.4.8 Common UE RF requirements for Intra-band and Inter-band NR CA configurations involving shared spectrum access

The requirements and test cases listed in Table B.4.8-1 are specified in in REL-16 version of TS 38.101-1 [2].

Table B.4.8-1: Common UE RF requirements for Intra-band and Inter-band NR CA configurations involving shared spectrum access

|  |  |
| --- | --- |
| Clause | Description |
| 6.2F.1A.1 | UE maximum output power for inter-band CA |
| 6.2F.2A.1 | UE maximum output power reduction for inter-band CA |
| 6.2F.3A.1 | UE additional maximum output power reduction for inter-band CA |
| 6.3F.3A.1 | General ON/OFF mask for inter-band CA |
| 6.4F.2A.1 | Transmit modulation quality for inter-band CA |
| 7.3F.3 | ΔRIB,c |
| 7.3F.4 | Intra-band contiguous shared spectrum channel access CA |
| 7.3G.5 | Inter-band CA with shared spectrum channel access |
| 7.5F.2 | Intra-band contiguous shared spectrum channel access CA |
| 7.7F.2 | Intra-band contiguous shared spectrum channel access CA |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*