**3GPP TSG-RAN WG4 Meeting # 112 R4-2411932**

**Maastricht, Netherlands, Aug.19th – 23th, 2024**

Source: ZTE Corporation

Title: TP for TR38.719-01-01\_CA\_n104C

Agenda Item: 7.3.2

Document for: Approval

# **Introduction**

CA\_n104C was requested and included in the new R19 basket WID[1], Hence, we provide a TP to TR38.719-01-01 to introduce intra-band UL CA\_n104C.

# **Reference**

[1] RP-241674, New WID: Rel-19 NR Carrier Aggregation (CA)/Dual Connectivity (DC) for x bands DL with y bands UL (x<7, y<3) and Supplementary Uplink (SUL) band combinations/CA band combinations with a single SUL or two SUL cells, Ericsson, ZTE, Huawei

# Text Proposal

**----- Start of TP -----**

## 5.x CA\_2DL\_n104C\_2UL\_n104C

### 5.x.1 Channel bandwidths per operating band for CA

Table 5.x.1-1: NR CA configurations and bandwidth combination sets defined for intra-band contiguous CA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA configuration / Bandwidth combination set | | | | | | | | |
| NR CA configuration | Uplink CA configurations | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) | Channel bandwidths for carrier (MHz) | Maximum aggregated  bandwidth (MHz) | Bandwidth combination set |
| CA\_n104C | CA\_n104C | 20, 30, 40, 50 | 60, 70, 80, 90, 100 |  |  |  | 200 | 0 |
| 60, 70, 80, 90 | 60, 70, 80, 90, 100 |  |  |  |
| 100 | 100 |  |  |  |
| See n104 channel bandwidths in Table 5.3.5-1 for each carrier | |  |  |  | 200 | 4 and 5 |

### 5.x.2 UE maximum output power

Table 5.x.2-1: UE Power Class for intra-band contiguous CA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA Configuration | Class 1 (dBm) | Tolerance (dB) | Class 2 (dBm) | Tolerance (dB) | Class 3 (dBm) | Tolerance (dB) | Class 4 (dBm) | Tolerance (dB) |
| CA\_n104C |  |  |  |  | 23 | +2/-3 |  |  |

### 5.x.3 UE co-existence studies

As stated in clause Table 6.2.3.1-1A in clause 6.2.3.1 in the current spec, additional emission requirements and associated network signalling for Band n104 are not defined in this version of the specification but may be forthcoming in the future. Thus for PC3 CA\_n104C, there is no need to define the additional emission requirements at the current stage but may be needed in the future.

Table 5.x.3-1 shows the spurious emissions requirements for UE co-existence for intra-band contiguous CA n104C.

Table 5.x.3-1: Requirements for uplink intra-band contiguous carrier aggregation

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA combination | Spurious emission | | | | | | |
|  | Protected Band | Frequency range (MHz) | | | Maximum Level (dBm) | MBW (MHz) | NOTE |
| CA\_n104 | E-UTRA Band 1, 3, 7, 8, 20 | FDL\_low | - | FDL\_high | -50 | 1 |  |
| NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |

**----- End of TP -----**