3GPP TSG-RAN WG4 Meeting # 104-e R4-2212004

Electronic Meeting, 15th April – 26th August, 2022

**Source:** Vodafone

**Title:** TP for TR 36.718-06-02 to add CA\_1A-3A-8A-41A-41A

**Agenda item:** 12.1.3.2

**Document for:** Approval

# Background

This contribution provides text proposal for the LTE CA configuration CA\_1A-3A-8A-41A-41A with UL configurations CA\_1A-3A, CA\_1A-8A, CA\_1A-41A, CA\_3A-8A, CA\_3A-41A and CA\_8A-41A as proposed in [1].

# Reference

[1] RP-221831 Rel-18 LTE-A inter-band CA for x bands (x<= 6) DL with y bands (y=1, 2) UL

# Text Proposal

##### ---Start of changes---

### 5.3.x CA\_1A-3A-8A-41A-41A

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

Table 5.3.x.1-1: CA configurations under study

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA CA configuration / Bandwidth combination set | | | | | | | | | | |
| E-UTRA CA Configuration | Uplink CA configurations | E-UTRA Bands | 1.4 MHz | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Maximum aggregated bandwidth  [MHz] | Bandwidth combination set |
| CA\_1A-3A-8A-41A-41A | CA\_1A-3A  CA\_1A-8A  CA\_1A-41A  CA\_3A-8A  CA\_3A-41A  CA\_8A-41A | 1 |  |  | Yes | Yes | Yes | Yes | 90 | 0 |
| 3 | Yes | Yes | Yes | Yes | Yes | Yes |
| 8 | Yes | Yes | Yes | Yes |  |  |
| 41 | See CA\_41A-41A Bandwidth combination set 0 in Table 5.6A.1-3 | | | | | |

#### 5.3.x.2 Co-existence studies

Coexistence requirements for CA\_1-3, CA\_1-8, CA\_1-41, CA\_3-8, CA\_3-41 and CA\_8-41 already exist in TS 36101.

#### 5.3.x.3 ∆TIB and ∆RIB values

The following ∆TIB and ∆RIB values are drawn from CA\_1-3-8-41 in TS 36101:

**Table 6.X.1.4-1:** **ΔTIB,c**

| Inter-band CA Configuration | NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| CA\_1-3-8-41-41 | 1 | 0.5 |
| 3 | 0.5 |
| 8 | 0.3 |
| 41 | 0.35 |
| 0.86 |
| NOTE 5**:** The requirement is specified for the frequency range of 2545-2690MHz.  NOTE 6**:** The requirement is specified for the frequency range of 2496-2545MHz. | | |

**Table 6.X.1.4-2: ΔRIB,c**

| Inter-band CA Configuration | NR Band | ΔRIB,c [dB] |
| --- | --- | --- |
| CA\_1-3-8-41-41 | 1 | 0 |
| 3 | 0 |
| 8 | 0 |
| 41 | 05 |
| 0.56 |
| NOTE 5: The requirement is specified for the frequency range of 2545-2690MHz.  NOTE 6: The requirement is specified for the frequency range of 2496-2545MHz. | | |

#### 5.3.x.4 REFSENS requirements

Table 5.3.x.4-1: 4DL/2UL interband Reference sensitivity QPSK PREFSENS and uplink/downlink configurations

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA Band / Channel bandwidth / NRB / Duplex mode | | | | | | | | | | Source of IMD |
| EUTRA CA | EUTRA CA | EUTRA band | UL Fc | UL BW | UL | DL Fc | DL BW | MSD | Duplex mode |
| DL Configuration | UL Configuration | (MHz) | (MHz) | CLRB | (MHz) | (MHz) | (dB) |
| CA\_1A-3A-8A-41A-41A | CA\_3A-8A | 3 | 1780 | 5 | 25 | 1875 | 5 | N/A | FDD | N/A |
| 8 | 885 | 5 | 25 | 930 | 5 | N/A | FDD | N/A |
| 41 | 2665 | 5 | 25 | 2665 | 5 | 27.4 | TDD | IMD21 |
| CA\_3A-41A | 3 | 1715 | 5 | 25 | 1810 | 5 | N/A | FDD | N/A |
| 8 | 905 | 5 | 25 | 950 | 5 | 28.9 | FDD | IMD21 |
| 41 | 2665 | 5 | 25 | 2665 | 5 | N/A | TDD | N/A |
| CA\_1A-41A | 1 | 1977 | 5 | 25 | 2167 | 5 | N/A | FDD | N/A |
| 8 | 886 | 5 | 25 | 931 | 5 | 4.5 | FDD | IMD5 |
| 41 | 2500 | 5 | 25 | 2500 | 5 | N/A | TDD | N/A |
| CA\_3A-41A | 3 | 1740 | 5 | 25 | 1835 | 5 | 8.2 | FDD | IMD4 |
| 41 | 2657.5 | 5 | 25 | 2657.5 | 5 | N/A | TDD | N/A |
| NOTE 1: This band is subject to IMD3 also which MSD is not specified. | | | | | | | | | | |

##### ---End of changes---