**3GPP TSG-RAN WG4 Meeting #97-e R4-2100946**

**Online, 2nd-13th Nov, 2020**

**Source:** Samsung, KDDI

**Title:** TP for TR 38.717-02-01: CA\_n41-n257

**Agenda item:**  9.2.3

**Document for:** Approval

1. Introduction

This contribution is a text proposal for TR 38.717-02-01 to include CA\_n41-n257 according to the request in [1].

# 2. Reference

1. RP-202199, Revised WID on Rel-17 NR Inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1,2).

3. Text Proposal

**<Start of Text Proposal>**

## 8.x CA\_n41-n257

### 8.x.1 Common for 1 band UL and 2 bands UL CA

#### 8.x.1.1 Operating bands for CA

Table 8.x.1.1-1: CA band combination of band n41+n257

|  |  |  |  |
| --- | --- | --- | --- |
| NR Band | Uplink (UL) band | Downlink (DL) band | Duplexmode |
| BS receive / UE transmit | BS transmit / UE receive |
| FUL\_low – FUL\_high | FDL\_low – FDL\_high |
| n41 | 2496 MHz | – | 2690 MHz | 2496 MHz | – | 2690 MHz | TDD |
| n257 | 26500 MHz | – | 29500 MHz  | 26500 MHz | – | 29500 MHz  | TDD |

#### 8.x.1.2 Channel bandwidths per operating band for CA

Table 8.x.1.2-1: Supported bandwidths per CA band combination of band n41+n257

*< Editor's note: see Table 5.5A.1-1 in TS38.101-3 for the table format>*

| NR CA configuration | Uplink CA configuration | NR Band | Channel bandwidth (MHz) (NOTE 3) | Bandwidth combination set |
| --- | --- | --- | --- | --- |
| 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |
| CA\_n41A-n257A | CA\_n41A-n257A | n41 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 　 | 80 | 90 | 100 | 　 | 　 | 0 |
| n257 |  |  |  |  |  |  |  | 50 |  |  |  |  | 100 | 200 | 400 |
| CA\_n41A-n257G | CA\_n41A-n257A, CA\_n41A-n257G | n41 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 　 | 80 | 90 | 100 | 　 | 　 | 0 |
| n257 | See CA\_n257G Bandwidth Combination Set 0 in Table 5.5A.1-1 in TS 38.101-2 |
| CA\_n41A-n257H | CA\_n41A-n257A, CA\_n41A-n257G, CA\_n41A-n257H | n41 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 　 | 80 | 90 | 100 | 　 | 　 | 0 |
| n257 | See CA\_n257H Bandwidth Combination Set 0 in Table 5.5A.1-1 in TS 38.101-2 |
| CA\_n41A-n257I | CA\_n41A-n257A, CA\_n41A-n257G, CA\_n41A-n257H, CA\_n41A-n257I | n41 |  | 10 | 15 | 20 |  | 30 | 40 | 50 | 60 | 　 | 80 | 90 | 100 | 　 | 　 | 0 |
| n257 | See CA\_n257I Bandwidth Combination Set 0 in Table 5.5A.1-1 in TS 38.101-2 |

#### 8.x.1.3 ∆TIB and ∆RIB values

Assuming separate antenna architecture between FR1 and FR2, ΔTIB,c and ΔRIB values for this CA configuration are given in the tables below.

Table 8.x.1.3-1: ΔTIB,c

| Inter-band CA Configuration | NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| CA\_n41-n257 | n41 | 0 |
| n257 | 0 |

Table 8.x.1.4-2: ΔRIB,c

| Inter-band CA Configuration | NR Band | ΔRIB,c [dB] |
| --- | --- | --- |
| CA\_n41-n257 | n41 | 0 |
| n257 | 0 |

#### 8.x.1.4 REFSENS requirements

No IMD issues are expected in this CA configuration as these are TDD bands. These TDD bands do not transmit and receive simultaneously.

## 9.X DC\_n41-n257

### 9.x.1 Operating bands for DC\_n41-n257

**Table 9.X.1-2: Inter-band NR DC operating bands for FR1+FR2**

|  |  |
| --- | --- |
| **NR DC Band** | **NR Band** |
| DC\_n41-n257 | n41, n257 |

### 9.x.2 Configurations for DC\_n41-n257

Table 9.x.2-2: Inter-band NR DC configurations for FR1+FR2

| NR DCconfiguration | Uplink NR DCconfiguration |
| --- | --- |
| DC\_n41A-n257ADC\_n41A-n257GDC\_n41A-n257HDC\_n41A-n257I | DC\_n41A-n257ADC\_n41A-n257GDC\_n41A-n257HDC\_n41A-n257I |

<End of Text Proposal>