**3GPP TSG-RAN WG4 Meeting #100-e R4-2112446**

**Online, 16th-27th Aug, 2021**

**Source:** Samsung, Verizon

**Title:** TP for TR 37.717-21-11: DC\_2-46\_n2

**Agenda item:** 8.15.2

**Document for:** Approval

1. Introduction

This contribution is a text proposal for TR 37.717-21-11 to include DC\_2-46\_n2 according to the request in [1].

# 2. Reference

1. R4-2110666 WID revision: Dual Connectivity (DC) of 2 bands LTE inter-band CA (2DL/1UL) and 1 NR band (1DL/1UL).
2. R4-2110665 TR 37.717-21-11 v0.5.0\_DC of 2 LTE band and 1 NR band

3. Text Proposal

**<Start of Text Proposal>**

## 5.x DC\_2-46\_n2

5.x.1 Configurations for DC

**Table 5.x.1-1: Inter-band EN-DC configurations within FR1 (three bands)**

| EN-DC  configuration | Uplink EN-DC  configuration  (NOTE 1) |
| --- | --- |
| DC\_2A-46A\_n2A3  DC\_2A-46C\_n2A3  DC\_2A-46D\_n2A3  DC\_2A-46E\_n2A3 | DC\_2A\_n2A2 |
| NOTE 2: Only single switched UL is supported  NOTE 3: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band for Band 46 is paired with the uplink operating band (external E-UTRA band) of the carrier aggregation configuration that is supporting the configured Pcell. | |

5.x.2 Co-existence studies

For UL DC\_2A\_n2A, there is no need to study IMD for only single switch UL is supported.

3rd harmonic of n2 UL falls into b46 DL.

5.x.3 ∆TIB and ∆RIB values

For DC\_2-46\_n2, the ΔTIB,c and ΔRIB,c values are reused from CA\_2-46 shown below.

**Table 5.x.3-1: ΔTIB,c due to EN-DC (three bands)**

| Inter-band DC Configuration | E-UTRA and NR Band | ΔTIB,c [dB] |
| --- | --- | --- |
| DC\_2-46\_n2 | 2 | 0 |
| 46 | 0 |
| n2 | 0 |

**Table 5.x.3-2: ΔRIB due to EN-DC (three bands)**

| Inter-band DC Configuration | E-UTRA and NR Band | ΔRIB [dB] |
| --- | --- | --- |
| DC\_2-46\_n2 | 2 | 0 |
| 46 | 0 |
| n2 | 0 |

5.x.4 REFSENS requirements

Based on 5.x.2 discussion above, REFSENS exceptions are specified below.(A new table below is introduced and could be number as **Table 7.3B.2.3.1-6** in TS38.101-3 )

**Table 5.x.4-1: Reference sensitivity QPSK PREFSENS (EN-DC with b46)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD** | | | | | | | | | | | | |
| **UL band** | **DL band** | **5**  **MHz**  **(dB)** | **10 MHz**  **(dB)** | **15 MHz**  **(dB)** | **20 MHz**  **(dB)** | **25 MHz**  **(dB)** | **40 MHz**  **(dB)** | **50 MHz**  **(dB)** | **60 MHz**  **(dB)** | **80 MHz**  **(dB)** | **90 MHz**  **(dB)** | **100 MHz**  **(dB)** |
| n2 | 461 |  | N/A |  | N/A |  |  |  |  |  |  |  |
| NOTE 1: These requirements apply when there is at least one individual RE within the downlink (victim) transmission bandwidth which falls into the reference sensitivity exclusion region overlapping with UL harmonic zones | | | | | | | | | | | | |

**<End of Text Proposal>**