3GPP TSG-RAN WG4 Meeting # 99-e R4-2108906

Electronic Meeting, 19th – 27th May 2021

Source: Verizon

Title: TP for TR 37.827 for DC\_13\_n66-n77

Agenda item: 8.39.2

Document for: Approval

# **Introduction**

This contribution is a text proposal for TR 37.827 to include DC\_13\_n66-n77 according to the request in [1].

**Reference**

[1] RP-210816, New WID on PC2 EN-DC with x LTE band + y NR band (x= 2, 3, 4, y=1; x=1, 2, y=2)

# **Text Proposal**

**<Start of Text Proposal>**

## 5.x DC\_13\_n66-n77

### 5.x.1 Transmitter Characteristics

#### 5.x.1.1 Maximum Output Power

Table 5.x.1.1-1: Maximum output power for inter-band EN-DC (two bands)

| **EN-DC combination** | Power class 2 (dBm) | Tolerance (dB) |
| --- | --- | --- |
| DC\_13A\_n77A | 266 | +2/-3 |
| NOTE 6: The UE supports PC3 within E-UTRA cell group, and supports either PC3 or PC2 within NR cell group. Power class support within each individual cell group is signalled separately by the UE. | | |

5.x.1.2 Configurations for EN-DC

Table 5.x.1.2-1: Inter-band EN-DC configurations within FR1 (four bands)

| EN-DC  Configuration | Uplink EN-DC  configuration |
| --- | --- |
| DC\_13A\_n66A-n77A | DC\_13A\_n77A |

#### 5.x.1.3 Co-existence study

According to the both PC3 DC\_13A\_n66A-n77A study in 37.717-11-21 and only DC\_13A\_n77A uplink configuration applied in this band combination, additional MSD due to IMD 3 to the band n66 from the configured uplink EN-DC should be considered to mitigate the impact of the interference to the PC2 DC\_13A\_n66A-n77A combination.

IMD generated by DC\_13A\_n77A that falls into the third band, n66

### 5.x.2 Receiver Characteristics

#### 5.x.2.1 MSD test points for intermodulation interference due to dual uplink operation for PC2 EN-DC in NR FR1 involving two bands

#### 5.x.2.1.1 Power class 2 Case A

The additional MSD due to intermodulation for PC2 Case A of DC\_13A\_n66A-n77A are defined in table 5.x.2.1.1-1.

Table 5.x.2.1.1-1: MSD test points for PCell due to dual uplink operation for PC2 EN-DC in NR FR1 (three bands)

| **NR or E-UTRA Band / Channel bandwidth / NRB / MSD** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EN-DC Configuration** | **EUTRA / NR band** | **UL Fc  (MHz)** | **UL/DL BW  (MHz)** | **UL**  **LCRB** | **DL Fc (MHz)** | **MSD  (dB)** | **IMD order** |
| DC\_13A\_n66A-n77A | 13 | 782 | 5 | 25 | 751 | N/A | N/A |
| n66 | 1731 | 5 | 25 | 2131 | 26.1 | IMD3 |
| n77 | 3750 | 10 | 50 | 3750 | N/A | N/A |

#### 5.x.2.1.2 Power class 2 Case B

The additional MSD due to intermodulation for PC2 Case B of DC\_13A\_n66A-n77A are the same as the Case A defined in table 5.x.2.1.1-1.

**<End of Text Proposal>**