**3GPP TSG-RAN WG4 Meeting #97-e R4-201xxxx**

**Electronic Meeting, 2 November – 13 November 2020**

**Source:** China Unicom, ZTE, CHTTL

**Title:** TP for TR 37.826: PC2 for DC\_8A\_n78A

**Agenda item:** 10.20.2

**Document for:** Approval

# 1. Introduction

In RAN#89-e meeting, the Revised WID on High power UE (power class 2) for EN-DC with 1 LTE band + 1 NR TDD band [1] was approved. This contribution is a text proposal for TR 37.826 to include Power Class 2 for combination DC\_8A\_n78A.

# 2. Text Proposal

# ---Start of changes---

## 6.x DC\_8A\_n78A

### 6.x.1 Transmitter Characteristics

#### 6.x.1.1 Maximum Output Power

Table 6.x.1.-1: Maximum output power for inter-band EN-DC (two bands)

| **EN-DC combination** | Power class 2 (dBm) | Tolerance (dB) |
| --- | --- | --- |
| DC\_8A\_n78A | 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 signaled separately by the UE. |

#### 6.x.1.2 Co-existence study

The co-existence study for PC2 DC\_8A\_n78A can be reused from the PC3 DC\_8A\_n78A captured in TR37.863-11-11, where:

- 4th intermodulation product may fall into band n8 Rx.

- 4th harmonic product of band n8 may fall into band n78 Rx.

For the harmonic product, due to the maximum output power of band n8 is kept unchanged, so the MSD values due to 4th harmonic product of the corresponding PC3 ENDC can be applied. Therefore, only additional MSD for IMD4 needs to be defined for PC2 DC\_8A\_n78A.

### 6.x.2 Receiver Characteristics

#### 6.x.2.3 MSD test points for intermodulation interference due to dual uplink operation for PC2 EN-DC in NR FR1 involving two bands

Table 6.x.2.3-1: MSD test points for PCell due to dual uplink operation for PC2 EN-DC in NR FR1 (two bands)

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |
| --- |
| EN-DCConfiguration | EUTRA or NR band | UL Fc (MHz) | UL/DL BW (MHz) | UL LCRB | DL Fc (MHz) | MSD (dB) | IMD order |
| DC\_8A\_n78A | 8 | 897.5 | 5 | 25 | 942.5 | 15.5 | IMD4 |
| n78 | 3635 | 10 | 50 | 3635 | N/A | N/A |

---End of changes---

# Reference

[1] RP-202079 Revised WID on High power UE (power class 2) for EN-DC with 1 LTE band + 1 NR TDD band, China Unicom