**3****GPP TSG-RAN WG4 Meeting #109 R4-2320105**

**Chicago, USA, 13th November – 17th November 2023**

Source: ZTE Corporation

Title: TP to TR37.718-21-11 to add DC\_8A-39A\_n79A and DC\_8A-39A\_n79C

Agenda Item: 7.4.2

Document for: Approval

# **Introduction**

The configurations of DC\_8A-39A\_n79A and DC\_8A-39A\_n79C were requested in RAN4#108 meeting. So this contribution provides a text proposal to introduce DC\_8A-39A\_n79A and DC\_8A-39A\_n79C in TR37.718-21-11.

# **Reference**

[1] TR37.718-21-11, v0.7.0

# Text Proposal

**----- Start of TP -----**

## 5.x DC\_8-39\_n79

### 5.x.1 Configurations for DC

Table 5.x.1-1: Inter-band DC configurations (three bands)

| **EN-DC**  **configuration** | **Uplink EN-DC**  **configuration** |
| --- | --- |
| DC\_8A-39A\_n79A  DC\_8A-39A\_n79C | DC\_8A\_n79A DC\_39A\_n79A |

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

In terms of the co-existence studies of the fallbacks of DC\_8\_n79 and DC\_39\_n79, which are captured in the TR 37.863-01-01, it can be found that:

* IMD4 products produced by Band 8 and Band n79 that impact the reference sensitivity of LTE band 39.
* IMD3, IMD4 products produced by Band 39 and Band n79 that impact the reference sensitivity of LTE band 8.

### 5.x.3 ∆TIB and ∆RIB values

For DC\_8-39\_n79, the ΔTIB,c and ΔRIB,c values are reused from DC\_8\_n39-n79 and given in the tables below.

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

| Inter-band EN-DC configuration | ΔTIB,c for E-UTRA band / NR band (dB)6 | | |
| --- | --- | --- | --- |
| Component band in order of bands in configuration7 | | |
| DC\_8-39\_n79 | 0.3 | 0.3 | 0.8 |
| NOTE 6: “-” denotes ΔTIB,c = 0.  NOTE 7: The component band order in the configuration should be listed by the order of E-UTRA band and NR band respectively, such as for DC\_66\_(n)12 the band order from left to right is 12, 66 and n12. | | | |

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

| **Inter-band EN-DC configuration** | ΔRIB,c for E-UTRA band / NR band (dB)7 | | |
| --- | --- | --- | --- |
| Component band in order of bands in configuration8 | | |
| DC\_8-39\_n79 | - | - | 0.5 |
| NOTE 7: “-” denotes ΔRIB,c = 0.  NOTE 8: The component band order in the configuration should be listed by the order of E-UTRA band and NR band respectively, such as for DC\_5\_(n)12 the band order from left to right is 5, 12 and n12. | | | |

### 5.x.4 Reference sensitivity exceptions

According to the co-existence study, the MSD values are defined as below, in which the corresponding MSD values are reused from the NR 3DL/2UL CA\_n8A-n39A-n79A

Table 5.x.4-1: MSD test points for Scell due to dual uplink operation for EN-DC in NR FR1 (three bands)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EN-DC Configuration | EUTRA / NR band | UL Fc  (MHz) | UL/DL BW  (MHz) | UL  LCRB | DL Fc (MHz) | MSD  (dB) | IMD order |
| DC\_8-39\_n79 | 8 | 897.5 | 5 | 25 | 942.5 | N/A | N/A |
|  | 39 | N/A | 5 | N/A | 1907.5 | 13.8 | IMD4 |
|  | n79 | 4600 | 40 | 216 | 4600 | N/A | N/A |
|  | 8 | 895 | 5 | 25 | 940 | 15.1 | IMD3 |
|  | 39 | 1900 | 10 | 50 | 1900 | N/A | N/A |
|  | n79 | 4740 | 40 | 216 | 4740 | N/A | N/A |
|  | 8 | N/A | 5 | N/A | 940 | 7.1 | IMD4 |
|  | 39 | 1900 | 5 | 25 | 1900 | N/A | N/A |
|  | n79 | 4760 | 40 | 216 | 4760 | N/A | N/A |

**----- End of TP -----**