3GPP TSG-RAN WG4 Meeting # 111 R4-2407106

**Fukuoka, Japan, 20th - 24th May 2024**

**Title: TP for TR 36.718-02-01 Addition of CA\_3-8-11 with 2UL**

**Source: Softbank Corp.**

**Agenda item: 8.1.3.2**

**Document for: Approval**

# 1 Introduction

This contribution is a text proposal for TR 36.718-02-01[1] to include CA\_3-8-11 with 2UL as requested in RAN4#109.

# 2. Reference

[1] TR36.718-02-01, LTE-A intra-band/inter-band Carrier Aggregation for x (x<=6) bands DL with y bands (y=1, 2) UL (Release 18) V0.0.6

[3] TR37.716-21-11, Dual Connectivity (EN-DC) of 2 bands LTE inter-band CA (2DL/1UL) and 1 NR band (1DL/1UL) (Release 16) V16.1.0

# Text Proposal

**-- Start of TP –**

5.4.x CA\_3-8-11

5.4.x.1 Channel bandwidths per operating band for CA

**Table 5.4.x.1-1: Inter-band CA operating bands**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **E‑UTRA Operating Band** | **Uplink (UL) operating band BS receive UE transmit** | | | **Downlink (DL) operating band BS transmit  UE receive** | | | **Duplex Mode** |
| **FUL\_low – FUL\_high** | | | **FDL\_low – FDL\_high** | | |
| 3 | 1710 MHz | – | 1785 MHz | 1805 MHz | – | 1880 MHz | FDD |
| 8 | 880 MHz | – | 915 MHz | 925 MHz | – | 960 MHz | FDD |
| 11 | 1427.9 MHz | – | 1447.9 MHz | 1475.9 MHz | – | 1495.9 MHz | FDD |

**Table 5.4.x.1-2: E-UTRA CA configurations and bandwidth combination sets defined for inter-band CA**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E-UTRA CA configuration / Bandwidth combination set** | | | | | | | | | | |
| **E-UTRA CA Configuration** | **Uplink CA configurations** | **E-UTRA Bands** | **1.4 MHz** | **3 MHz** | **5 MHz** | **10 MHz** | **15 MHz** | **20 MHz** | **Maximum aggregated bandwidth**  **[MHz]** | **Bandwidth combination set** |
| CA\_3A-8A-11A | CA\_3A-8A  CA\_3A-11A | 3 |  |  | Yes | Yes | Yes | Yes | 40 | 0 |
| 8 |  |  | Yes | Yes |  |  |
| 11 |  |  | Yes | Yes |  |  |

5.4.x.2 Co-existence studies

Coexistences for CA\_3-8 and CA\_3-11 were referred the DC\_8-11\_n3 with UL DC\_8\_n3 and UL DC\_11\_n3 which are already analysed in TR37.716-21-11[3]. The analysis result is that there is no additional intermodulation impact for the additional band receiver.

So this section can be omitted.

5.4.x.3 ∆TIB and ∆RIB values

Relaxation values for CA\_3-8-11 have already been specified in TS 36.101.

5.4.x.4 REFSENS Requirements

No additional REFSENS relaxation required compared to fallbacks.

**-- End of TP --**