3GPP TSG-RAN WG4 Meeting #111 R4-2410587

Fukuoka, Japan, 20 – 24 May, 2024

**Title:** WF on NR\_SL\_ intraB\_CA\_ITS\_part2

**Agenda Item:** 10.9.4

**Source:** Huawei, Meta Ireland

**Document for:** Approval

# Issue 1: Tx UE RF requirements for PC2 SL intra-band contiguous CA

**Issue 1-1: MOP**

**Online Agreement:**

* For PC2 intra-band contiguous SL CA, the following two aspects should be specified in Rel-19
	+ Minimum requirements for Power Class 2 should be applicable for SL intra-band contiguous CA combination configuration, and update the maximum output power for sidelink CA
* Define SL intra-band contiguous CA PC2 MOP as total transmitted power (Per UE) for PC2 SL CA UE

**Issue 1-2: MPR**

**Online Agreement:**

* MPR/A-MPR requirements for intra-band contiguous SL CA with PC2 should be specified in Rel-19 referring to the methodology of that with PC3 in Rel-18 including, PSSCH/PSCCH, PSFCH and S-SSB
	+ For PSSCH/PSCCH: specify MPR for power class 2 contiguous CA with contiguous/non-contiguous RB allocation, including inner and outer.
	+ For PSFCH: specify MPR for PC2 contiguous CA based on different range of R, R is the ratio of the gap bandwidth between the two PSFCH transmitted on the two intra-band carrier by the total bandwidth of the two carrier
	+ For S-SSB: specify MPR for PC2 contiguous CA by single S-SSB and two S-SSB, separately.

#### **Issue 1-3: Simulation Assumption for MPR**

**<Way forward>:** Keep 25dBc carrier leakage as agreed WF(R4-2406611) for PC2 intra-band SL contiguous CA.

**Issue 1-4: UE RF architecture for MPR evaluation**

**Online Agreement:**

* The PC2 UE RF architecture of NR intra-band contiguous CA for MPR can be found as below for information (1 PA, dual Tx(Tx diversity), and dualPA)
	+ High priority for MPR evaluations
		- 1 PA : 1x26dBm + 1LO
		- Dual Tx : 2x23dBm + 1LO
	+ Second priority for MPR evaluations
		- dualPA : 2x23dBm + 2LO

**Issue 1-6: ACLR**

**Online Agreement:**

* Reuse 31dB ACLR for intra-band contiguous PC2 CA

**Issue 1-7: Whether to introduce ΔPPowerClass,SL CA**

**Online Agreement:**

* Not to introduce ΔPPowerClass,SL CA due to no SAR related issues for sidelink CA on the ITS band

**Issue 1-8-1: A-MPR for EU regulation**

**Online Agreement:**

* No A-MPR requirement based on EU regulation is needed for sidelink intra-band contiguous CA.

**Issue 1-8-2: A-MPR for US regulation**

**Online Agreement:**

* Study and specify the related A-MPR requirements with NS\_52 after final FCC announcement for the additional emission limits in US

#### **Issue 1-9: Other Tx requirements than MOP, MPR and A-MPR**

<Way forward>: Reuse the requirements of PC3 SL intra-band contiguous CA

* Minimum output / transmit OFF power /transmit ON/OFF time mask
* Power control
* Transmit signal quality
* SEM/
* General spurious emissions/UE-to-UE coexistence SE
* Transmit intermodulation

# Issue 2: Rx requirements for SL intra-band contiguous CA

**Sub-topic 2-1 : Rx UE RF requirements for PC2 SL intra-band contiguous CA**

**Issue 2-1: Rx UE RF requirements**

**Online Agreement:**

* The Rx requirements including REFSENS, ACS, maximum input power and blockings for intra-band contiguous SL CA with PC3 in current Spec shall apply to the intra-band contiguous SL CA with PC2 directly

# Issue 3: System Parameter

**Online Agreement:**

* For PC2 intra-band contiguous CA, reuse the same channel bandwidth of PC3 intra-band contiguous CA.