**3GPP TSG RAN WG1 Meeting #101 R1-200xxxx**

**e-Meeting, May 25th - June 5th, 2020**

**Title: [Draft]** LS on TDD configuration indication in PSBCH

**Response to:**

**Release:** Rel-16

**Work Item:** 5G\_V2X\_NRSL-Core

**Source:** RAN1

**To:** RAN2

**CC:**

**Contact Person:**

#### Name: Teng Ma

E-mail Address: [mateng@catt.com](mailto:mateng@catt.com)

# 1. Overall Description:

In NR V2X synchronization discussion, RAN1 reached the following agreements:

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| Agreements:   * For indication of TDD configuration: * X=1 bit indicates the number of patterns   + Value 0 indicates one pattern is used.   + Value 1 indicates two patterns are used. * Y=4 bits indicate the periodicity information   + When one pattern is used, Y indicates the periodicity of the pattern.   + When two patterns are used, Y jointly indicates the periodicities of the two patterns. * Z=7 bits indicate the UL slots   + UL slots are jointly indicated by 7 bits when two patterns are configured.   + FFS other details.   Agreements:   * When transmitting PSBCH, UE derives the values of X/Y/Z; from RRC configuration of TDD-UL-DL-ConfigCommon and maps them to the “indication of TDD configuration” field of PSBCH.   Agreements:  For indication of the UL slots by Z,   * If single pattern is configured, Z bits indicate the UL slot number in the pattern is n. * If two patterns are configured, Z bits indicate the state index derived by the UL slots,   Where   * *n*1 is the number of UL slots in the first pattern, * *n*2 is the number of UL slots in the second pattern, * *P* is the periodicity in units of ms of the first pattern, * w is the granularity of resource indication, * μ is (working assumption) * 0/1/2/3 corresponds to the 15/30/60/120 kHz SCS for SL respectively. |

The corresponding TP of TS 38.213 based on the agreements above is endorsed as in R1-200xxxx.

In RAN1’s perspective, *SL-TDD-Config* with 12-bit payload size in PSBCH cannot be set to a value with the same meaning of *TDD-UL-DL-ConfigCommon*. The current definition in TS 38.331 can be changed as:

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| 5.8.9.4.3 Transmission of *MasterInformationBlockSidelink* message The UE shall set the contents of the *MasterInformationBlockSidelink* message as follows:  1> if in coverage on the frequency used for the NR sidelink communication as defined in TS 38.304 [20].  2> set *inCoverage* to *true*;  2> if *tdd-UL-DL-ConfigurationCommon* is included in the received *SIB1*:  3> set *sl-TDD-Config* according to the definition in subclause 16.1 of TS 38.213; |

**2 Actions:**

**To RAN WG2:**

RAN1 respectfully asks RAN2 to take the agreements above into account.

**3 Date of Next RAN WG1 Meetings:**

TSG-RAN WG1 Meeting #102 24 - 28 Aug. 2020, Online

TSG-RAN WG1 Meeting #102bis 12 - 16 Oct. 2020, China