3GPP TSG-RAN WG1 Meeting #113 R1-23xxxxx

Incheon, Korea, May 22 – 26, 2023

Agenda Item: 9.17

Source: Ericsson

Title: Editor’s summary on draft CR 38.211 for NR\_SL\_enh2-Core

Document for: Discussion, Decision

# 1 Introduction

This document is intended to facilitate the review process of the draft CR 38.211 for NR\_SL\_enh2-Core.

# 2 Discussion – first round

Please provide your comments on **the latest version of the draft CR on 38.211** available in this folder.

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| **Company** | **Comment** |
| OPPO | **Comment 1: SL transmission physical channels/signals*** In the agreement (from RAN1#113) on a set of all candidate CPE starting positions for *SL transmission* in FR1 unlicensed spectrum is pre-defined in TS38.211, the intention of this agreement is intended for all SL physical channels and signals (i.e., PSCCH+PSSCH, PSFCH and S-SSB). Hence,
	+ Firstly, “PSCCH” only should be removed, since PSCCH is always transmitted with PSSCH in NR sidelink since R16.
	+ Secondly, if all supported SL channels and signals are to be described (same as in NR-R) then “PSFCH” and “S-SSB” should be added.

**Comment 2: Editorial (reference spec)*** CP extension related UE behaviour in NR-U is described in spec TS38.213. It is expected the same spec will be also used for SL-U for CPE. Hence, the expected spec should be “where $Δ\_{i}$ is given by Table 5.3.1-3 with the index $i$ given by the procedure in [5, TS 38.213]”
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| CATT/GOHIGH | Comment 1: same as OPPO’s comment 1, for the CPE starting positioning, remove PSCCH only, and including PSFCH and S-SSB Comment 2: for the S-SSB repetition in frequency domain. We prefer to add “within a RB set” according to following agreement.**Agreement**For S-SSB transmission within 1 RB set, for 15 kHz and 30 kHz SCS, Alt6 is supported:* Alt 6: Support both Option 3-1(revised) and Option B, and enable one of them by (pre-)configuration

Note: the Options are as below* Option 1-1: Using interlaced RB transmission for all of S-PSS/S-SSS/PSBCH
	+ FFS: whether/how to handle the case when each interlace has only 10 PRBs in a RB set, e.g. whether 1 or 2 interlaces will be used for S-SSB
* Option 3-1(revised): Transmit legacy S-PSS/S-SSS/PSBCH N times by repetition in frequency domain, and there is a gap between the repetition(s) to meet OCB requirement
	+ FFS the length of gap between repetitions is (pre-)configured or pre-defined, value of N (e.g., N=2), whether/how to reduce PAPR.
	+ FFS gap of 0
* Option A: Legacy S-SSB
	+ Continue studying how to meet the minimum 2 MHz requirements under 15 kHz SCS for OCB exemption.
* Option B: Legacy S-SSB
	+ RAN1 does not pursue further study on how to meet the minimum 2 MHz requirements under 15 kHz SCS for OCB exemption.

Note: Option A and B are applicable in region with no OCB requirement, or with OCB exemption. |
| Qualcomm | **Comment 1**: Same as Oppo’s comment 1, suggest to remove PSCCH only and add PSFCH/S-SSB**Comment 2**: For the S-SSB frequency repetition in frequency, there are two types of repetitions: one is N repetition within one RB-set to fulfill OCB and the other is repeating in multiple RB-set to maintain the wideband COT (based on the agreement below). We prefer to capture two kinds of repetition here.**Agreement**When the SL-BWP contains multiple RB sets, support the followings:* When UE attempts to transmit S-SSB in a S-SSB occasion (e.g., R16/17 S-SSB occasion, R18 additional candidate S-SSB occasion)
* UE may transmit S-SSB repetition in more than one RB set
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| xiaomi | **Comment 1**: we share the similar view with OPPO,CATT and Qual, suggest to remove PSCCH only and add PSFCH/S-SSB.**Comment 2**: we share the similar view with Qual, we prefer to capture SSB repetition in one RB set and multiple RB sets.  |
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