**3GPP TSG-RAN WG2 #113 electronic *R2-210xxxx***

**Online, Jan 25 – Feb 5, 2021**

Agenda Item: 6.4.3

Source: LG (rapporteur)

Title: Summary of email discussion [POST113-e][705][V2X] MAC impacts from the latest RAN1 decisions (LG)

Document for: Discussion, Decision

# Introduction

This is to kick off the following email discussion:

* [POST113-e][705][V2X/SL] MAC impacts from the latest RAN1 decisions (LG)

      **Scope:** Discuss MAC impacts from the latest RAN1 decisions.

      **Intended outcome:** Report, agreeable corresponding CRs and response LS (if needed)

                          **Deadline:** Long

# Discussion

RAN1 agreement in RAN1#104-e (i.e. latest RAN1 decision)

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| Update on 1/28:Agreements: * The following value, OH, are used for the calculation of SL max data rate.
	+ 0.25 for FR2 in SL
* RAN1 sends an LS to RAN2 to inform the agreed overhead value for SL max data rate and also to fix the typo as below.
	+ Qmis the maximum supported modulation order between 6 or 8 given by higher layer parameter *sl-Tx-256QAM* and *sl-Rx-256QAM*,

OH for FR1? Check on 1/29 🡪 2/1Agreements: * The following value, OH, are used for the calculation of SL max data rate.
	+ 0.217 for FR1 in SL

Update on 1/28: to check on 1/29Agreements:Clarify in Clause 16.5.1.2 and 16.5.2.2 in TS 38.213 that an UL transmission resulting in DL/SL HARQ-ACK information multiplexed in PUSCH may be scheduled by DCI format 0\_2.Agreements:The parameter pdsch-HARQ-ACK-Codebook is always used for reporting SL HARQ-ACK information.Agreements:Clarify that when DCI format 3\_0 does not include the PSFCH-to-HARQ\_feedback timing indicator field, the feedback slot is determined by sl-PSFCH-ToPUCCH-CG-Type1-r16 for CG type-1 and sl-PSFCH-ToPUCCH-r16 otherwise.Last proposal? 2/1Agreements:* Send an LS to RAN2 describing that:
	+ Per RAN1 agreements, the parameter *sl-N1PUCCH-AN-r16* should be used for SL CG Type 2 (only for PSCCH/PSSCH transmissions without a corresponding PDCCH).
	+ In RAN1’s understanding, the parameter cannot be configured for SL CG type-2 and asking RAN2 whether they can provide a solution that would be compatible with the existing RAN1 agreements.

LS & CR? 2/2Agreement:* Send an LS to RAN2 with the following agreement and asking them to make the appropriate changes to their specifications.

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| Agreement:* The parameter *pdsch-HARQ-ACK-Codebook* is always used for reporting SL HARQ-ACK information.
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Update on 1/28:Agreements:* UE does not expect the case when a PUSCH with no UCI overlaps with two non-overlapping PUCCHs each of which contains SL HARQ-ACK and Uu UCI.
	+ No spec change is needed.

Agreements:* PUCCH transmission for the response of MsgB and Msg4 is prioritized over SL transmission(s).

Agreements:* For prioritization between SL PSFCH or S-SSB reception and PUCCH carrying SL HARQ reporting,
	+ The PUCCH transmission has higher priority than a SL PSFCH or S-SSB reception if a priority value of the PUCCH is smaller than a priority value of the SL PSFCH or S-SSB reception.
	+ If the priority value of the PUCCH transmission is larger than the priority value of the SL PSFCH or S-SSB reception, the SL PSFCH or S-SSB reception has higher priority.

Proposal 1? 1/29 🡪 2/1 🡪 2/2Update on 2/2:Agreement: In terms of prioritization between PUCCH with SL HARQ-ACK and PUCCH with UCI, the principle specified in 9.2.5.0 are used only.Update on 1/28: to check on 1/29Update on 1/31:Agreement: * Alt 1 shown below is agreed.

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After checking the latest RAN1 agreements above, Rapporteur thinks that there is no additional points (to be captured on MAC spec) other than those covered by on-going email discussion [1][2]. Just to be clear whether this understanding is correct, I would like to collect other companies’ views.

**Question 2.1: Do you think that there are any MAC impacts from the RAN1 decision? If yes, please provide it.**

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| Company | Answer (yes or no) | Comments |
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**Conclusion: There are no MAC impacts from RAN1 decision.**

# Reference

[1] Email discussion of [POST113-e][707][V2X/SL] Spec update to level 3 logical slots (OPPO)

[2] Email discussion of [POST113-e][708][V2X/SL] How to handle DG for retransmissions? (OPPO)