3GPP TSG-RAN WG2 #109bis-e R2-200xxxx

Electronic, 20 April – 30 April 2020

Agenda Item: 6.7.2.3

Source: Ericsson

Title: Summary on [AT109bis-e][027][IIOT] RRC (Ericsson)

Document for: Discussion, Decision

# 1 Introduction

In this paper, we summarize the part 1 of the following email discussion.

**[AT109bis-e][027][IIOT] RRC (Ericsson)**

Status: Started

Scope: Treat topics in 6.7.2.3, include to make CRs.

Part 1: Determine which issues that need resolution, find agreeable proposals. Deadline: April 24 0700 UTC

Part 2: RRC CRs implementing IIOT decisions from this meeting.

# 2 Discussion

Five papers are submitted [1][2][3][4][5]. To endorse draft CRs [1][2][3][4], we need agreements and these topics are under discussion in relevant sub-agenda summary. Thus, only paper [5] is needed to be further discussed.

Two issues are identified in paper [5]: 1) multi-SPS with only one SPS per BWP, and 2) clarify on PUCCH resources being common. The proposed solution is to move the sps-PUCCH-AN-ListPerCodebook into the PUCCH-Config, since each PUCCH-Config corresponding to one HARQ-ACK codebook, see below endorsed TP in the last RAN1 meeting [6].



The other candidate solution in paper [5] are related with RIL class 1 issue 44-51, which are expected to be accepted. On the other hand, regardless of the outcome, rapporteur agrees that the solution in [5] leads to a better ASN.1 design and we propose to re-struct the IE/field as follows

1. Add “sps-PUCCH-AN-CodebookResource-r16” to “PUCCH-Config” and remove IE SPS-PUCCH-AN-ListandIE SPS-PUCCH-AN-ListPerCodebook

**A draft CR can be found in the same draft folder.**

The intention is to have a better ASN.1 structure, not to change RAN1 agreement. Since this is different from the indicated RRC parameter list from RAN1, **companies are invited to provide comments below if they do not agree on the ASN.1 re-structuring proposal. Comments on the draft CRs are also appreciated.**

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| --- | --- |
| Company | Further comments (if any) |
| Huawei, Hisilicon | It is very much a RAN1 issue. We would like to double check if this change would have further RAN1 impacts.  From signaling point of view, in legacy SPS-config, PUCCH feedback resource is configured, i.e. n1PUCCH-AN. It is natural to follow the same principle when we extend the SPS configuration list.  Our current understanding of the existing ASN.1 structure is, each SPS-Config includes a harq-CodebookID(1 or 2) that can be used to indicate the associated PUCCH Config when two PUCCH Configs are configured. Therefore, it is clear about the mapping and there is no ambiguity issue. Our RAN1 colleague told us that RAN1 has never discussed the details of how to configure the SPS ACK in this case and only focus on the CSI and SR case.  We would suggest to postpone this change, to allow companies to double check if there is a real issue. |
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# 3 Conclusion

tbd

4 References

1. R2-2002754, DraftCR of RRC Open Issues, CATT
2. R2-2002974, Draft-CR on RRC open issues of 38.331, OPPO
3. R2-2002975, Draft-CR on split transmission of 38.323, OPPO
4. R2-2003377, Draft CR on introduction of EHC in LTE, Huawei, HiSilicon
5. R2-2003526, SPS Ack configuration in RRC, Qualcomm Incorporated
6. R1-2001227, Summary of email thread [100e-NR-L1enh\_URLLC-UCI\_Enh-02], Oppo