

3GPP TSG RAN meeting #94e
Electronic meeting, December 6-17, 2021
A.I. 9.3.1.5

RP-213053

Views on CovEnh Rel-17 conclusion

Qualcomm



Rel-17 Coverage Enhancements WI

Five sub-agendas

1. PUSCH enhancements
 - Enhancements on PUSCH repetition Type A
 - TB processing over multi-slot PUSCH
 - Joint channel estimation for PUSCH
2. PUCCH enhancements
3. Type A PUSCH Repetitions for Msg3

Qualcomm view on status after last RAN1 meeting: All sub-agendas except TB processing over multi-slot PUSCH are complete.

Status of TB processing over multi-slot PUSCH

- Overall feature is very close to completion. Only outstanding item is on starting bit determination for each slot of a TBOMS.
- We suggest the following course of action:

Proposal: It is recommended that the most straightforward design to complete the feature be adopted in RAN-94e so that this feature can be considered complete.

- There is no strong need for RAN1 to further discuss this issue.
- It is recommended that this feature not be left incomplete.

On starting bit determination for each slot of a TBOMS

- The following two options were listed by RAN1 for down selection:
 - Option B: the index of the starting coded bit in the circular buffer is the index continuous from the position of the last bit selected in the previous allocated slot
 - Option C: the index of the starting coded bit in the circular buffer is the index continuous from the position of the last bit selected in the previous allocated slot, regardless of whether UCI multiplexing occurred in the previous allocated slot or not.

• Observations:

- Option C is a straightforward choice. Majority of companies support Option C.
- Design details for Option B are unclear. It requires additional discussion in RAN1.

Suggested way forward to complete the feature

- To avoid any further delay in the completion of this WI, the following recommendation is made:

Proposal: For starting bit determination of each slot of a TBOMS, adopt Option C.



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