3GPP TSG RAN WG2 Meeting #113-e R2-210xxxx

Online Jan 25th – Feb 5th 2021

**Title:** **[Draft]** LS on HARQ feedback for CG

**Response to:**

**Release:** Release 16

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

**Source:** OPPO [To be RAN2]

**To:** RAN1

**Cc:**

**Contact person:**

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**Attachments:**

# Overall description

RAN2 noticed the RAN1#102-E agreement as follows

For CG, when the maximum number of HARQ retransmissions for a TB is reached, the UE reports ACK/NACK based on the contents of PSFCH (i.e., the same behaviour as if the maximum number of retransmissions had not been reached).

No RAN1 spec impact is expected.

However, based on RAN2 specification: In mode-1 CG, if Tx-UE does not receive ACK or receives NACK for transmission of a TB, buffer flushing would be done after the maximum transmission number being reached.

1. if sl-MaxTransNum corresponding to the highest priority of the logical channel(s) in the MAC PDU has been configured in sl-CG-MaxTransNumList for the sidelink grant by RRC and the maximum number of transmissions of the MAC PDU has been reached to sl-MaxTransNum; or

[…]

2> flush the HARQ buffer of the associated Sidelink process.

This means that currently, when the maximum transmission number is reached, if the Tx-UE report NACK as it received from Rx-UE, re-transmission grant may be scheduled by network but Tx-UE will ignore the grant due to empty buffer and thus lead to resource waste.

RAN2 reaches the following agreement at RAN2#113-E as follows

* From RAN2 point of view, it will be good to send ACK if max number of retransmissions are reached.

# 2 Actions

**To 3GPP RAN1:**

**ACTION:** RAN2 respectfully asks RAN1 to take the RAN2 agreement above into account and feedback on RAN1 decision.

# 3 Dates of next TSG RAN WG2 meetings

TSG RAN WG2 Meeting #113-bis-e 12 – 20 Apr 2021