**3GPP TSG RAN WG1 #104b-e R1-210xxxx**

**e-Meeting, April 12th – 20th, 2021**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Agenda item:** 7.2.4

**Source:** Moderator (LG Electronics)

**Title:** Feature lead summary for physical layer procedure aspects in AI 7.2.4

**Document for:** Discussion and decision

# **Issues for email discussions**

FL proposal is to discuss Issue #1 with high priority and, if time allows, to also discuss Issue #3.

# **Physical layer procedure**

Issue #1: How SL HARQ-ACK report is piggybacked on PUSCH [vivo,3] [Apple,4] [LG,5] [Huawei,6] [DCM,8]

* Aspects on which PUSCH transmission is used to convey SL HARQ-ACK reporting
* Aspects on scheduling restriction avoiding certain overlapping case(s)

Issue #2: Further clarification on reference RS used for pathloss derivation [vivo,3] [ASUSTeK,9]

* + Aspects on which serving cell is the reference cell for pathloss derivation
  + Aspects on beam failure case

Issue #3: Additional prioritization rule

* Issue #3-1: Tie-break for prioritization between PSFCH TX and PSFCH RX [CATT,1]
* Issue #3-2: Prioritization rule between PUSCH carrying SL HARQ-ACK reports and SL transmission [Fujitsu,2] [vivo,3]

Issue #4: UE procedure for overlapping UL TX and SL RX [ZTE,7]

Issue #5: Minimum number of retransmissions for groupcast with SL HARQ-ACK feedback Option 1 [Intel,10]

Issue #6: Editorial corrections

* Issue #6-1: Interpretation of sl-PSFCH-RB-Set [Huawei,6]
* Issue #6-2: References for UE procedure for SL HARQ-ACK reporting on UL [DCM,8]
* Issue #6-3: Replace “in a serving cell” with “in a carrier or in two respective carriers” for UE procedure for simultaneous transmission of UL and SL [DCM,8]

# **References**

1. R1-2102590 Discussion and TPs on Tie-break issues for PSFCH Tx and PSFCH Rx CATT, GOHIGH
2. R1-2102711 Remaining issues on physical layer procedures for NR sidelink Fujitsu
3. R1-2102942 Maintenance on NR sidelink synchronization and procedure vivo
4. R1-2103080 On Remaining Issue of Sidelink Physical Layer Procedures Apple
5. R1-2103377 Discussion on essential corrections in physical layer procedure LG Electronics
6. R1-2103391 Remaining issues for sidelink physical layer procedure Huawei, HiSilicon
7. R1-2103500 SL PHY procedure on prioritization ZTE, Sanechips
8. R1-2103556 Maintenance for sidelink physical layer procedure NTT DOCOMO, INC.
9. R1-2103638 Remaining issues on DL pathloss for sidelink power control ASUSTeK
10. R1-2103766 Correction to PSFCH reception procedure for NACK-only case to mitigate half-duplex issue Intel Corporation