3GPP TSG-RAN WG1 Meeting #104bis-e Tdoc R1-20xxxxx

e-Meeting, April 12th – 20th, 2021

Agenda Item: 7.2.4

Source: Moderator (Ericsson)

Title: Feature lead summary#1 on Resource allocation for NR sidelink Mode 1

Document for: Discussion, Decision

# Summary

The FL has grouped the corrections discussed in the contributions in the following way.

**Group 1 – DCI-related aspects**

1. *dci-FormatsExt* vs *dci-FormatsSL* (see Nokia+NSB (P2, P3), vivo (P2, P3), LGE (P1))
   * FL assessment: discussion is necessary. Nokia+NSB claim it is editorial but vivo and LGE have longer discussions.
2. Value of n\_CI (see vivo (TP1))
   * FL assessment: views from other companies required.
3. For size alignment, include DCI formats for other purposes (see vivo (TP2))
   * FL assessment: almost editorial

**Group 2 – Codebook construction**

1. For Type 1, the number of PSSCH slots associated with the same PSFCH slot could be smaller than the PSFCH resource period (see LGE (P1), vivo (TP4), ZTE+Sanechips (P1))
   * FL assessment: needs correction
2. How to operate with multiple resource pools with different PSFCH periods (see ASUSTeK (TP1), ZTE+Sanechips (P2))
   * FL assessment: views from other companies required.
3. TX power – vivo (TP7)
   * FL assessment: views from other companies required.

**Group 3 – SL HARQ-ACK reports to gNB**

1. Change RRC parameter values (see OPPO (P1))
   * FL assessment: ASN.1 impact, not necessary, can be addressed by RAN2 if necessary.
2. SL HARQ-ACK reporting in UL when the SL transmission (scheduled by DG/CG) does not use SL HARQ feedback (see OPPO (P2, P3))
   * FL assessment: RAN1 has already made agreements already captured in the agreements on the topic. This change has been discussed in the past without reaching consensus.
3. Report ACK when DG is not used (see Fujitsu (P1), DCM (TP1))
   * FL assessment: This change has been discussed in the past without reaching consensus.
4. Slot offset between PSFCH and HARQ-ACK reporting (i.e., k>0 always) (see Sharp (TP5))
   * FL assessment: Not a critical correction.
5. Some companies discuss actions for a potential reply by RAN2 to LS R1-2102176. In all cases, they suggest waiting for a reply LS (See Nokia+NSB, DCM)
   * FL assessment: Wait until a reply LS is received

A few contributions discuss issues related to priorities (see vivo (TP5), Sharp (TP3), Fujitsu (P1)). The FL suggestion is that, as done earlier, they are treated by the FL of PHY procedures, if necessary.

In addition, the FL has identified proposals to make the following editorial corrections.

**Group 4 – Editorial**

* TS 38.211
  + 8.4.1.2.2: See OPPO
* TS 38.212
  + 7.3.1.4.1: DCI format 3\_0 clarification that the configuration index is reserved for DG scheduling a retransmission for CG (see ASUSTeK (TP5), Sharp (TP2))
    - FL assessment: reasonable correction
* TS 38.213
  + 10.1:
    - Remove ‘a SL-RNTI, a SL-CS-RNTI, or a SL-L-CS-RNTI’ (see Sharp (TP4-1 and TP4-2))
      * FL assessment: reasonable correction. Take the simpler proposal, which requires no new agreement.
    - Other editorial (see Sharp (TP1-1))
  + 16.5:
    - Clarify that the UE does not expect to multiplex SL HARQ and Uu UCI on PUCCH or PUSCH (see vivo (P9))
      * FL assessment: reasonable clarification
    - “One bit” (see Sharp (TP6))
      * FL assessment: this was brought up last meeting but there was no consensus.
    - Other editorial (see Sharp (TP1-1))
* TS 38.214
  + 8.1.2:
    - Clause number (see ASUSTeK (TP3), Sharp (TP1-2))
  + 8.1.2.1:
    - 2xTypo (see vivo (P5))
    - RRC parameter name (see ASUSTeK (TP3))
  + 8.1.4: ASUSTeK (TP3)
    - FL Assessment: the misalignment of priority values (0-7 vs 1-8) was also an issue in LTE. It would be good to discuss whether this is the case here too.
  + 8.2.1: See OPPO

# Company views

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# List of identified contributions

R1-2102368 Remaining open issues and corrections for mode 1 RA OPPO

R1-2102710 A remaining issue on Mode-1 resource allocation for NR sidelink Fujitsu

R1-2102940 Maintenance on NR sidelink mode-1 resource allocation mechanism vivo

R1-2103376 Discussion on essential corrections in resource allocation procedure LG Electronics

R1-2103467 Remaining issues on resource allocation for NR sidelink Sharp

R1-2103499 Remaining issues on mode1 ZTE, Sanechips

R1-2103555 Maintenance for resource allocation mechanism mode 1 NTT DOCOMO, INC.

R1-2103672 Remaining issues on resource allocation mode-1 and sidelink procedure ASUSTeK

R1-2103764 Maintenance for Resource allocation for sidelink - Mode 1 Nokia, Nokia Shanghai Bell