

3GPP TSG RAN Meeting #102

RP-232873

Edinburgh, Scotland, December 11-15, 2023

Agenda item: 9.1.1.9 Additional RAN1-led Topics

Views on additional RAN1-led topics

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Overview on additional RAN1-led topics

- ◆ As captured in RP-232626^[1], the candidate additional RAN1-led topics are as follows:
 - Multi-Carrier enhancements
 - Coverage enhancements
 - Positioning enhancements
 - Sidelink evolution
 - Other RAN1-led proposals
- ◆ Rel-19 sidelink evolution is relatively more converged compared to other candidate topics and has a large number of proponents (around 20). Furthermore, we observed stable opinion to have a normative work of SL FR2 and SL CA. However, it may be hard to specify both of them due the remaining limited TU. Therefore, we support SL FR2 as a RAN1-led topic considering SL FR2 had a completed study period in Rel-18.

Moderator's observation(cited from RP-232626^[1]):

- **Proposed enhancements for Rel-19 SL evolution are relatively more converged compared to the other areas.** However, the proposed enhancements could potentially include wide range of sub-topics. A more focused scope would be beneficial in order to move forward.
- **Strong level of support** for the following proposed enhancements:
 - SL carrier aggregation enhancement (20 sources out of 24 sources)
 - SL FR2 enhancement (19 sources out of 24 sources).

[1] RP-232626, Moderator's summary for REL-19 RAN1 additional topics, 3GPP RANP#101

Sidelink Evolution

◆ Motivation

- NR sidelink features have been specified and enhanced in every release from Rel-16. There is a growing interest in industry to expand the applicability of NR sidelink.
- Among the possible topics, there is an overwhelming support of SL FR2 in previous Rel-19 scope discussions.
- RAN1 completed a study phase for SL FR2 beam management in Rel-18, which at least includes initial beam pairing, beam maintenance and beam failure recovery.

◆ Considerations for Rel-19 [RAN1, RAN2, RAN4]

- Specify SL FR2 beam management including initial beam pairing, beam maintenance and beam failure recovery, etc.
- Other aspects can be considered only if TU allows, including:
 - Specify necessary enhancements to resource allocation (both mode 1 and mode 2) considering the beam management impacts.
 - Specify SL FR2 for groupcast and broadcast communication.
 - Specify SL operation on FR2 unlicensed band.

Summary

- ◆ Based on our discussion in previous slides, we have following views on additional RAN1-led topics
 - Support Rel-19 sidelink evolution on SL FR2 beam management, which at least includes initial beam pairing, beam maintenance and beam failure recovery.

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