

3GPP TSG RAN Meeting #90-e  
e-meeting, December 7-11, 2020

RP-202217

Agenda Item: 9.8.3

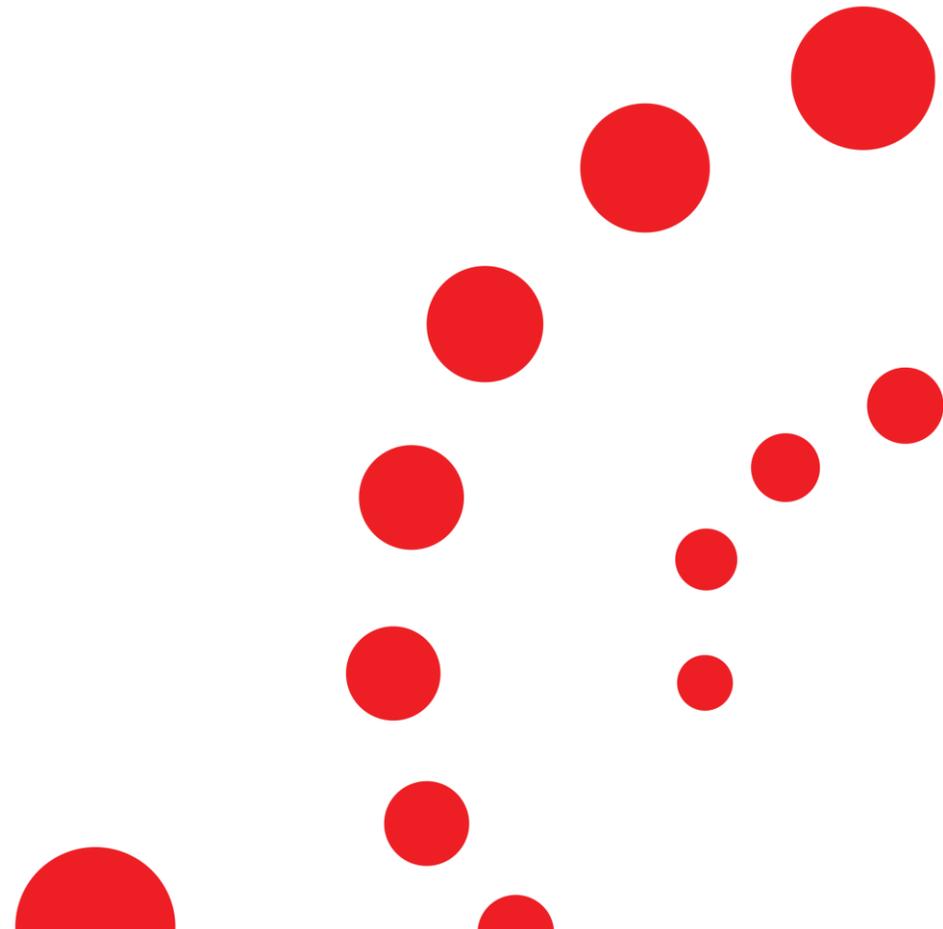
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Document for: Discussion and decision



# Scope update for R17 Sidelink Enhancements

FUTUREWEI



# Discussion points for WID objectives

- One aspect of the sidelink WID is a study and must be decided at RAN#90:
  - *Study the feasibility and benefit of the enhancement(s) in mode 2 for enhanced reliability and reduced latency in consideration of both PRR and PIR defined in TR37.885 (by RAN#91), and specify the identified solution if deemed feasible and beneficial [RAN1, RAN2]*
    - *Inter-UE coordination with the following until RAN#90.*
      - *A set of resources is determined at UE-A. This set is sent to UE-B in mode 2, and UE-B takes this into account in the resource selection for its own transmission.*
    - *Note: The study scope after RAN#90 is to be decided in RAN#90.*
    - *Note: The solution should be able to operate in-coverage, partial coverage, and out-of-coverage and to address consecutive packet loss in all coverage scenarios.*
- RAN1 has reported on UE cooperation in [R1-2009841](#):
  - A set of schemes was categorized with: signaling of the preferred resources, non-preferred resources, resources where resource conflict is expected
  - After a slow start at RAN1#-102-e, work has progressed well, with RAN1 having agreed on clear directions on what to study
- What should RAN do?

# Should UE coordination be standardized in Rel-17?

- The benefit of inter-UE coordination is obvious upon inspection
  - Provides mode-1-like benefits to mode 2
  - There are clear use cases already identified for UE coordination:
    - Public safety deployment with UE relaying and CentCOM UE allocating resources for other UEs
    - RSU allocating resources for pedestrian UEs at an intersection
    - Significant operator support for sidelink resource allocation mode-2d
- Feasibility of UE coordination, while not concluded by RAN1, does not appear to be a problem
  - RRC signaling, DCI signaling (either first or second stage SCI), MAC CE all possible
  - Note: Still significant work in WGs to determine best signaling
- Simulation efforts can be spent on selecting and designing scheme(s) as part of work, rather than treating as a SI-level “simulation campaign”
  - If the CE can move from a SI to a WI, this objective should be able to as well
- **Recommendation:** ‘Study’ objective is changed to a ‘Specify’ objective

# Thank You.

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