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Views on scope for NR Sidelink evolution in Rel-19

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Overview

- Rel-18 sidelink was a large work item with successful outcome:
  - Introduced SL CA operation.
  - Introduced SL operation over unlicensed spectrum.
  - Introduced co-channel coexistence between LTE SL and NR SL.
  - Concluded a study on enhancing sidelink operation in licensed FR2 spectrum.

- Proposed focus of Rel-19 Sidelink on the following two aspects:
  - Normative phase corresponding to the study objective on sidelink FR2 enhancements.
  - Address new markets by enhancing sidelink operation to include eRedCap devices.

NR Sidelink Evolution: Further enhancements

Description	• Sidelink enhancements for FR2: normative phase of the Rel-18 study objective on enhanced sidelink operation in FR2 licensed spectrum. • Sidelink for eRedCap devices.

Objectives	• Specify sidelink enhancements for operation in FR2 licensed spectrum:
	  • Initial beam pairing before and/or during link establishment, beam maintenance, beam failure recovery [RAN1, RAN2]
	  • QCL source definition and indication over SL and Uu measurements and L1/L2/L3 reporting over SL and Uu, techniques to limit beam management overhead [RAN1, RAN2, RAN4]
	  • Support enhancements to procedure for resource selection with beam-based operation [RAN1, RAN2]
	• Study and specify sidelink operation for eRedCap devices:
	  • Sidelink communications support with eRedCap constraints (20MHz RF BW, 10Mbps peak rate) [RAN1, RAN2, RAN4].
	  • Power saving techniques, including bandwidth adaptation [RAN1, RAN2, RAN4].
	  • Ensure the ability to communicate between SL eRedCap UEs and other SL UEs taking into account bandwidth and peak rate constraints [RAN2]

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Thank you

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