

Sidelink Enhancements for Rel-18

3GPP TSG RAN Rel-18 workshop
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Agenda Item: 4.3

RWS-210316

Source: Sony

Motivations of sidelink enhancement for Rel-18

Increased data rate

- Especially for commercial use-case like home entertainment including XR which will be required for broadband communication for 4K/8K videos.
- For V2X use-case, the increased data rate would be necessary for advanced sensor sharing.

Enhanced reliability and reduced latency

- In Rel-17, inter-UE coordination has been specified for these requirements, but the main focus was reliability enhancement for collision avoidance/detection.
- Considering a smart factory, especially in a network-controlled environment, further enhancements for reliability and latency would be necessary.

Improved power saving

- Pending progress in Rel-17, further work and enhancement for UE power saving over sidelink would be necessary.

Sidelink positioning

- See separate contribution (RWS-210301).

Coverage enhancement by sidelink relay

- See separate contribution (RWS-210365.)

Proposal for Rel-18 sidelink enhancement

It is proposed that the following features should be supported in Rel-18 for sidelink enhancements:

- Intra-band / inter-band carrier aggregation.
- Operation in new carrier frequencies such as unlicensed band and FR2.
- Enhancements to enable transmission for improved reliability and reduced latency.
- Enhancements on UE power saving.

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