
Agenda Item: 9.1.1
Source: TCL Communication
Title: Views on Unlicensed Enhancement priorities for R17
Document for: Discussion and Decision

1 Introduction and Discussion

The RAN1 Rel-16 WI on *NR-based Access to Unlicensed Spectrum* was declared completed in RAN1#99 [1]. In parallel, an email discussion was initiated to collect inputs for a potential Rel-17 NR-U WI [2]. As per RAN plenary guidance, the NR-U enhancements identified are to be integrated into the relevant topics considered for Rel-17, e.g. HARQ enhancement for low latency in URLLC. The only topics left to potentially comprise a dedicated NR-U WI are channel access procedures and RLM/RRM leftovers. In a second step, it was asked if the channel access enhancements are to be treated in a *Beyond 52.6 GHz* WI if approved. More precisely, the following enhancements have been identified:

- Directional LBT
- LBT to facilitate spatial reuse
- Receiver-assisted LBT

Even though those enhancements are more beneficial in higher frequency bands, our view is that channel access is core to NR-U and should be part of a dedicated NR-U WI. These improvements should be designed to work at all frequencies.

Proposal 1: Enhancements to channel access are core to NR-U and should be included in a dedicated NR-U WI.

Other relevant topics to consider in a dedicated NR-U WI include

- Enhancements to COT sharing
- Synchronized channel access
- Wide-band LBT with single measurement
- Spatial reuse

It is our view that many relevant topics for a Rel-17 WI are proposed and a dedicated WI is well motivated.

Proposal 2: Support a dedicated NR-U Rel-17 WI.

2 Conclusion

In this contribution the following proposals have been made:

Proposal 1: Enhancements to channel access are core to NR-U and should be included in a dedicated NR-U WI.

Proposal 2: Support a dedicated NR-U Rel-17 WI.

References

- [1] TSG RAN1, “Chairman’s Notes RAN1#99,” 3GPP RAN1, Tech. Rep., Nov. 2019.
- [2] Nokia, Nokia Shanghai Bell (Moderator), “Rel-17 NR-U Enhancements email discussion [Unlicensed_enh] Summary,” 3GPP DRAFT RP-19xxxx, Tech. Rep., Nov. 2019.