3GPP RAN WG4 Meeting #99-e R4-21xxxxx

Electronic Meeting, 02 – 13 November 2020

Agenda item: 9.14.2

Source: AT&T, FirstNet

Title: NR Sidelink in NR Band n14 and Coexistence Studies

WI: NR\_SL\_enh-Core

Release: Rel-17

Document for: Approval

# 1 Introduction

This contribution provides updated information for SL operation in NR Band n14 concerning the need for possible coexistence studies.

# 2 Discussion

Previously in [1] and [2], scenario information for sidelink operation in NR Band n14 was shared.

Based on feedback received during previous meetings and further developments in Rel-17 concerning NR sidelink relay and 5G ProSe, the operational scenarios for NR sidelink operation in NR Band n14 need to be revisited.

Although the primary use case for NR sidelink operation in NR Band n14 is for emergency situations where the UE is out of network coverage for NR and LTE, there will be a need to address operation of NR sidelink in NR Band n14 to support the additional public safety (PS) use cases required for the services noted above while other NR Band n14 and LTE Band 14 UEs are operating over Uu interface in NR Band n14 and LTE Band 14.

In addition, a concern was raised during a previous meeting on coexistence with adjacent bands (in particular, Band 13) for NR sidelink operation in NR Band n14.

Therefore, we propose to discuss the LTE ProSe public safety coexistence simulation scenario and related parameters and adopt it (or modified as necessary) for NR SL coexistence simulation as proposed in the Ericsson proposal in [3] while considering both PC1 and PC3 for NR SL operation in NR Band n14. Re-use of the LTE PS co-existence studies for ProSe could be considered as an option since it could help to minimize RAN4 work on this topic.

**Proposal: RAN4 is requested to take the additional information provided above into account concerning coexistence studies and developing the performance requirements for NR Band n14 as an NR sidelink operating band.**

# 3 Conclusion

We have provided updated information concerning the scenarios for SL operation in NR Band n14.

**Proposal: RAN4 is requested to take the additional information provided above into account concerning coexistence studies and developing the performance requirements for NR Band n14 as an NR sidelink operating band.**

# 4 References

1. R4-2016923, “WF on the proposed operating bands for NR SL operation in FR1”, AT&T, FirstNet, 3GPP RAN4 #97-e, November 2020
2. R4-2103005, “Additional Information for SL Operation in NR Band n14”, AT&T, FirstNet, 3GPP RAN4 #98-e, January/February 2021
3. R4-2102334, “Coexisting simulation assumption for public safety UC”, Ericsson, 3GPP RAN4 #98-e, January/February 2021