3GPP TSG RAN 95E
March 17 - 23, 2022

RP-220762
Agenda Item 9.9

Handling of Canada n77 band

MediaTek Inc.

Background

- In RAN4#100e meeting
  - RAN4 endorsed CR R4-2115112 to modify the n77 NOTE so that it supports both US C-band and DoD band with UE capability report.
- In RP#93e meeting
  - In additional to reporting UE capability via extendedBand-n77-r16, new NS value to bar legacy UE is needed.
  - RP endorsed CRs RP-212597, RP-212598, RP-212599 to define NS value 55 as specified in TS 38.101-1.
- In RAN4#102e meeting
  - RAN4 endorsed LS R4-2206568 for differentiating current n77 UEs that support 3450-3650 MHz (2022 devices) and Canada band n77 (3450-3980 MHz range, 2023+ devices)
  - A solution similar to that for US n77 DoD band is recommended.

Discussion

- **[Note in TS 38.101-1]** N77 UEs are required to operate in the entire band unless there is a note, like Note 12 for the US.
- **[ModifiedMPR bits/New UE capabilities]** UE capability is needed for the network to know whether UEs are capable for 3450-3980MHz in n77.
- **[New NS values]** NS value can be used to prevent legacy UEs (3450-3650 MHz, 2022 devices) supporting n77 from accessing a cell in 3650-3980MHz.
- **[New bands/ New band numbers]** Handling extended n77 frequencies in Canada with a new frequency band or band number is also one way. May need additional clarifications for handling existing n77 inter/intra-bands combinations.

Proposal

- **Proposal 1:** Endorse RAN4 proposal in R4-2206568 in Rel-17. RAN2 is tasked to draft the corresponding CR to address n77 Canada, in Rel-17, for approval at RAN#96e / June 22.

Thank You!