3GPP TSG RAN#95-e
Electronic meeting, 17th – 23rd March, 2022

RP-220754
Agenda Item 10.1.5

IoT NTN RAN4 work planning

MediaTek Inc., Deutsche Telekom, ESA, Eutelsat, GateHouse Satcom, Hispasat, Hughes/Echostar, Inmarsat, Intelsat, Ligado Networks, Lockheed Martin, Novamint, Omnispace, Sateliot, Sony, Thales

Background & Motivation

- "Baseline" RAN4 requirements work is still outstanding for the Rel-17 IoT NTN system
  - Key stakeholder customers have requested this work to be completed "as soon as possible"
  - RF/RRM Core and Demodulation Performance requirements work can progress in parallel due to protocol specs being stable
  - A WID proposal was submitted to RAN#94-e and again submitted to RAN#95-e to cover baseline reqs.
- Due to outstanding "baseline" RAN4 requirements work, "enhancement" RAN4 requirements objectives for Rel-18 "IoT NTN enhancements" WI features not yet agreed
  - From both 3GPP Project Management and Market perspectives, it makes sense for the "enhancement" RAN4 requirements work to also target completion within the Rel-18 timeframe
  - IoT NTN Enhancements WI will start in March-22, available time to complete RAN4 work in Rel-18
  - Proposed objectives for these enhancement RAN4 requirements are included in a proposed "IoT NTN Enhancements" WID revision to RAN#95-e

Proposal

- Approve a new WID for the *Baseline* RAN4 requirements for IoT NTN
  - Defines RAN4 requirements for functionality specified in original Rel-17 IoT NTN WI
  - Starting RF and RRM work from RAN#96, and starting Demod Performance work from RAN#97 (*earlier start at RAN#96 possible depending on NR NTN progress*)
  - Target completion dates: Core requirements - RAN#98; Performance requirements - RAN#100
- Add objectives for *Enhancement* RAN4 requirements to the IoT NTN Enhancements (Rel-18) WID
  - Defines RAN4 requirements for enhanced functionality being specified in ongoing Rel-18 IoT NTN Enhancements WI
  - Start dates: Core requirements - RAN#98; Performance requirements – RAN#100
  - Target completion dates: Core requirements – RAN#102; Performance requirements – RAN#104
- Approve TUs for IoT NTN in Rel-18 according to the above schedule (also shown below)