**3GPP TSG-RAN Meeting #87-e R4-20xxxxx**

**Electronic Meeting, March 16-19 2020**

**Agenda item:** 5.4

**Source:** Ericsson

**Title:** Email discussion summary for performance work timeline

**Document for:** Information

# Introduction

There is larger number of Rel-16 LTE/NR WIs containing both core and performance parts. The performance part may comprise RRM performance (e.g. accuracies and RRM tests) and/or UE demodulation/CSI/BS demodulation requirements.

The core part of all except 2 WIs is still ongoing and needs to be completed by June 2020 as per core target date. In order to make efficient progress any performance work during Q2 should not hamper core WI progress.

Interested companies are invited to express their views on starting timeline for different WIs. It is up to RAN4 leadership to take into consideration feedback of different companies in this regard.

Following is the list of Rel-16 LTE and NR WIs which involve both core and performance part.

**LTE Rel-16 WIs**

* Additional MTC enhancements for LTE (LTE\_eMTC5)
* Additional enhancements for NB-IoT (NB\_IOTenh3)
* DL MIMO efficiency enhancements for LTE (LTE\_DL-MIMO\_EE); core part=100%
* Even further Mobility enhancement in E-UTRAN (LTE\_feMob)

**NR Rel-16 WIs**

* 2-step RACH (NR\_2step\_RACH)
* 5G V2X with NR sidelink (5G\_V2X\_NRSL)
* Add support of NR DL 256QAM for FR2 (NR\_DL256QAM\_FR2)
* Cross Link Interference (CLI) handling and Remote Interference Management (RIM) for NR (NR\_CLI\_RIM)
* Integrated access and backhaul for NR (NR\_IAB)
* Multi-RAT Dual-Connectivity and Carrier Aggregation enhancements (LTE\_NR\_DC\_CA\_enh)
* NR-based access to unlicensed spectrum (NR\_unlic)
* NR mobility enhancements (NR\_Mob\_enh)
* NR MIMO enhancements (NR\_eMIMO)
* NR positioning support (NR\_POS)
* NR RRM requirement enhancement (NR\_RRM\_Enh)
* NR support for high speed train scenario (NR\_HST)
* Physical layer enhancements for NR ultra-reliable and low latency case (NR\_L1enh\_URLLC)
* Single Radio Voice Call Continuity from 5G to 3G (SRVCC\_NR\_to\_UMTS); core part =100%
* RRM requirements for CSI-RS based L3 measurement (NR\_CSIRS\_L3meas)
* UE Power Saving in NR (NR\_UE\_pow\_sav)

# RRM performance starting timeline

**Table 2-1: LTE WIs:**

|  |  |  |  |
| --- | --- | --- | --- |
| **LTE WI** | **Earliest RRM performance starting timeline** | | |
| **RAN4#94bis-e** | **RAN4#95** | **Q3-2020** |
| LTE\_eMTC5 |  | E/// |  |
| NB\_IOTenh3 |  | E/// |  |
| LTE\_feMob |  | E/// |  |

**Table 2-2: NR WIs:**

|  |  |  |  |
| --- | --- | --- | --- |
| **NR WI** | **Earliest RRM performance starting timeline** | | |
| **RAN4#94bis-e** | **RAN4#95** | **Q3-2020** |
| NR\_2step\_RACH |  |  | E/// |
| 5G\_V2X\_NRSL |  | E/// |  |
| NR\_CLI\_RIM |  | E/// |  |
| NR\_IAB |  |  | E/// |
| LTE\_NR\_DC\_CA\_enh |  |  | E/// |
| NR\_eMIMO |  |  | E/// |
| NR\_Mob\_enh |  | E/// |  |
| NR\_POS |  |  | E/// |
| NR\_RRM\_Enh |  |  | E/// |
| NR\_unlic |  |  | E/// |
| NR\_HST |  |  | E/// |
| SRVCC\_NR\_to\_UMTS | E/// |  |  |
| NR\_CSIRS\_L3meas |  |  | E/// |
| NR\_UE\_pow\_sav |  |  | E/// |

# Demodulation/CSI starting timeline

**Table 3-1: LTE WIs:**

|  |  |  |  |
| --- | --- | --- | --- |
| **LTE WI** | **Earliest demodulation/CSI starting timeline** | | |
| **RAN4#94bis-e** | **RAN4#95** | **Q3-2020** |
| LTE\_eMTC5 | E/// |  |  |
| NB\_IOTenh3 | E/// |  |  |
| LTE\_DL-MIMO\_EE | E/// |  |  |

**Table 3-2: NR WIs:**

|  |  |  |  |
| --- | --- | --- | --- |
| **NR WI** | **Earliest demodulation/CSI starting timeline** | | |
| **RAN4#94bis-e** | **RAN4#95** | **Q3-2020** |
| NR\_2step\_RACH | E/// |  |  |
| 5G\_V2X\_NRSL |  |  | E/// |
| NR\_DL256QAM\_FR2 |  |  | E/// |
| NR\_IAB |  |  | E/// |
| NR\_eMIMO | E/// |  |  |
| NR\_unlic |  |  | E/// |
| NR\_HST | E/// |  |  |
| NR\_L1enh\_URLLC | E/// |  |  |
| NR\_UE\_pow\_sav |  |  | E/// |