**3GPP TSG RAN meeting #95e Draft RP-220470**

**Electronic Meeting, March 17-23, 2022**

## Status Report to TSG

**Agenda item:** 9.2.7

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WI / SI Name** | Study on further NR RedCap (reduced capability) UE complexity reduction | | | | |
| included in this status report | Study Item:  Yes | Core part:  No | Performance part:  No | | Testing part:  No |
| **Acronym** | FS\_NR\_redcap\_enh | | | | |
| **Unique ID** | 940086 | | | | |
| **TSG Tdoc of latest approved WI/SI description (if any)** | [RP-213661](https://www.3gpp.org/ftp/tsg_ran/TSG_RAN/TSGR_94e/Docs/RP-213661.zip) | | | | |
| **Target Completion Date**  **(indicate if changed)** | Study Item:  09/2022 | Core part: | Performance part: | Testing part: | |
| **Overall Completion level** | Study Item:  0% | Core part: | Performance Part: | Testing part: | |

**Source:**

|  |  |  |
| --- | --- | --- |
| **Leading WG** | | RAN1 |
| **Rapporteur** | **Name** | Johan BERGMAN |
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## 1 Work plan related evaluation

|  |  |
| --- | --- |
| **Do you want to modify the time budget for this WI/SI compared to what was endorsed at the last RAN meeting?** | No |

## 2. Detailed progress in RAN WGs since last TSG meeting

## 2.1 RAN1

#### 2.1.1 Agreements

The study starts in RAN1#109-e (May 2022).

#### 2.1.2 Remaining Open issues

Based on the SI objective in the SID [1], there are the following remaining issues:

* Study further UE complexity reduction techniques based on Rel-17 evaluation methodology in TR 38.875
  + Consider network impact, coexistence of Rel-17 and Rel-18 RedCap and non-RedCap UEs in a cell, UE impact, specification impact
  + Potential solutions, which may complement each other, for reducing device complexity are focusing on:
    - UE bandwidth reduction to 5MHz in FR1,
      * Possibly in combination with relaxed UE processing timeline for PDSCH and/or PUSCH and/or CSI
    - reduced UE peak data rate in FR1,
      * Possibly including restricted bandwidth for PDSCH and/or PUSCH
      * Possibly in combination with relaxed UE processing timeline for PDSCH and/or PUSCH and/or CSI
* Capture the results of the study in TR 38.865

## 4. References

[1] [RP-213661](https://www.3gpp.org/ftp/tsg_ran/TSG_RAN/TSGR_94e/Docs/RP-213661.zip), “New SID on Study on further NR RedCap UE complexity reduction”, Ericsson