3GPP TSG RAN Meeting #97-e
12th – 16th September 2022

RP-222282

Views on Rel-18 eRedCap WID scope

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Document for: Discussion/Decision

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Views on Rel-18 eRedCap WID scope

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- Suggestions for Rel-18 eRedCap WID scope

Objective of Core part WI

This WI has the following objectives:

- Specify support UE complexity reduction for 5MHz BB BW for PDSCH and PUSCH in FR1 [RAN1, RAN2, RAN4]
  - The other physical channels and signals are still allowed to use a BWP up to the 20 MHz maximum UE RF+BB bandwidth
  - Possibly additional support for relaxation of the constraint $(\boldsymbol{v}_{\boldsymbol{Layers}}^{(j)} \cdot \boldsymbol{Q}_{\boldsymbol{m}}^{(j)} \cdot \boldsymbol{f}^{(j)} \geq \mathbf{4})$ for peak data rate reduction
    - Note: If specified, this solution can be applied independently to FR2.
- Specify relaxed processing timeline [RAN1, RAN2]
  - Relaxation of UE processing time for PDSCH/PUSCH in terms of N1 and N2 (as defined in TS 38.214) compared to those of UE processing time capability 1
  - Relaxation of UE processing time for CSI in terms of Z and Z' compared to the values defined in TS 38.214 clause 5.4
  - Note: Can be checked the status at RAN#98
- Specify support for enhanced eDRX in RRC_INACTIVE (>10.24s) [RAN2, RAN3, RAN4]
  - Note that this objective requires SA2, CT1 involvement

Views on Rel-18 eRedCap WID scope (continued)

- Suggestions for Rel-18 eRedCap WID scope

Objective of Core part WI

This WI has the following objectives:

- Specify functionality that will enable eRedCap UEs to be explicitly identifiable to networks, including the ability for the early indication to be configurable by the network. [RAN2, RAN1]
- Specify necessary updates of UE capabilities (38.306) and RRC parameters (38.331). [RAN2]
- Specify support for lower UE power class [RAN4]
  - Focus on non-coverage-limited scenarios, e.g., indoor industrial
- Specify RAN4 core requirements for the above. [RAN4]

Notes:

- Coexistence with non-RedCap UEs and Rel-17 RedCap UEs is to be ensured.
- Both 15 kHz SCS and 30 kHz SCS are supported for Rel-18 eRedCap in FR1.
- This WI focuses on SA mode and single connectivity with operation in a single band at a time.
- It is not precluded that some solutions for FR1 can be applied to FR2 in WI stage.
- Aim to define a single Rel-18 eRedCap UE type for further UE complexity reduction.

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