

**3GPP TSG RAN Meeting #93-e**

**RP-212012**

**Electronic Meeting, September 13 - 17, 2021**

**eRedCap in Rel-18**

**Source: vivo**

**Document for: Discussion & Decision**

**Agenda Item: 9.0.2**

# eRedCap in Rel-18

## Justification

- Rel-17 RedCap established a basic framework to support the device with reduced capabilities.
  - To support high-end RedCap devices, the design in terms of cost/complexity or power consumption is excessive
    - e.g. High-end video/high-end wearables requiring up to 150 Mbps for DL and up to 50 Mbps for UL
- Rel-18 eRedCap should target for further enhancement of cost/complexity reduction and power efficiency for RedCap devices.
  - Embracing new use cases and applications towards lower tiers
    - e.g. fill in the gap between the NR Rel-17 RedCap and LPWA (eMTC/NB-IoT), targeting the data rates roughly in 5-20 Mbps.

# eRedCap in Rel-18

## Objectives

- Cost and complexity reduction
  - Further UE BW reduction down to 5 MHz and 10MHz in both RF and BB
  - UE processing timeline relaxation for both data and CSI
  - Reduced max number of HARQ processes
  - Lower UE power class (14dBm and 20dBm)
- RedCap specific power saving
  - Further RRM measurement relaxation, e.g. serving cell RRM relax
  - eDRX with much longer cycle (up to 10485.76s) for RRC\_INACTIVE, if any left from Rel-17
- Note: Same as Rel-17, the generic UE power saving improvements i.e., low-power wake-up receiver/wake-up signal that are applicable to all device types should be studied separately in Rel-18 UE power saving item.

**THANK YOU.**

**谢谢。**