



3GPP TSG RAN Rel-19 workshop  
Taipei, June 15 - 16, 2023

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Agenda Item: 5

# Views on Low Power WUS/WUR for R19

Apple

# Rel-19 WI on Low Power WUS/WUR

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- Justification

- The power saving evaluations in the study (RP-222644) showed that LP WUS/WUR provides power saving gain for UEs in both RRC\_IDLE/RRC\_INACTIVE and RRC\_CONNECTED states.
- Different use cases have different requirements on the power consumption, coverage and mobility support.

- Objectives

- LP WUS is supported for **both RRC\_IDLE/RRC\_INACTIVE and RRC\_CONNECTED** states.
- Specify the duty-cycled operation for LP WUS.
- **A harmonized design for LP WUS that can accommodate both OOK-based receiver and OFDM-based receiver [RAN1]**
  - *This provides the flexibility to address different use cases including IoT, wearable and eMBB.*
- **Synchronization signal** design for low power receiver, if needed [RAN1]
- LP WUS related **physical layer and higher layer procedures** [RAN1, RAN2]
  - Including LP-WUS configuration, activation and deactivation of LP WUS monitoring, wake-up procedures for UEs in RRC\_IDLE/RRC\_INACTIVE state, procedures for LP WUS monitoring and PDCCH monitoring for UEs in RRC\_CONNECTED state
- LP WUS related **RRM enhancements** [RAN1, RAN2, RAN4]



