

The vivo logo is positioned in the top left corner of the slide. The background of the entire slide is a dark blue, abstract pattern of glowing, fiber-like structures that radiate from a central point, resembling a microscopic view of neural tissue or a complex network of fibers.

3GPP TSG RAN Rel-19 Workshop

RWS-230054

Taipei, June 15 – 16, 2023

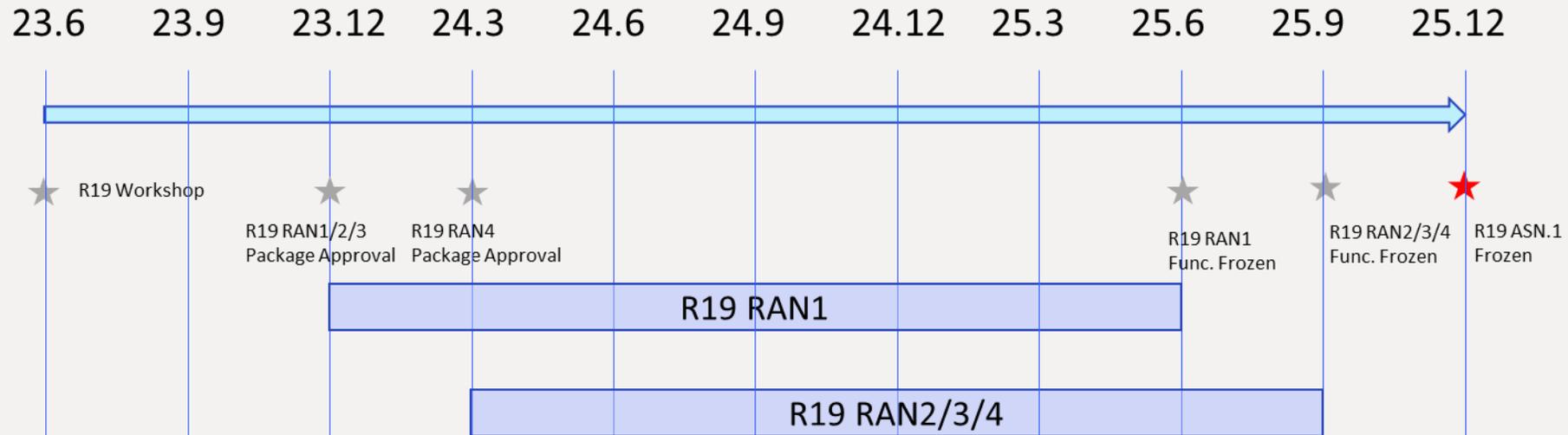
Agenda Item: 4

Source: vivo

Title: Views on RAN1 and RAN2 led items in Rel-19 package

RAN Rel-19 Timeline

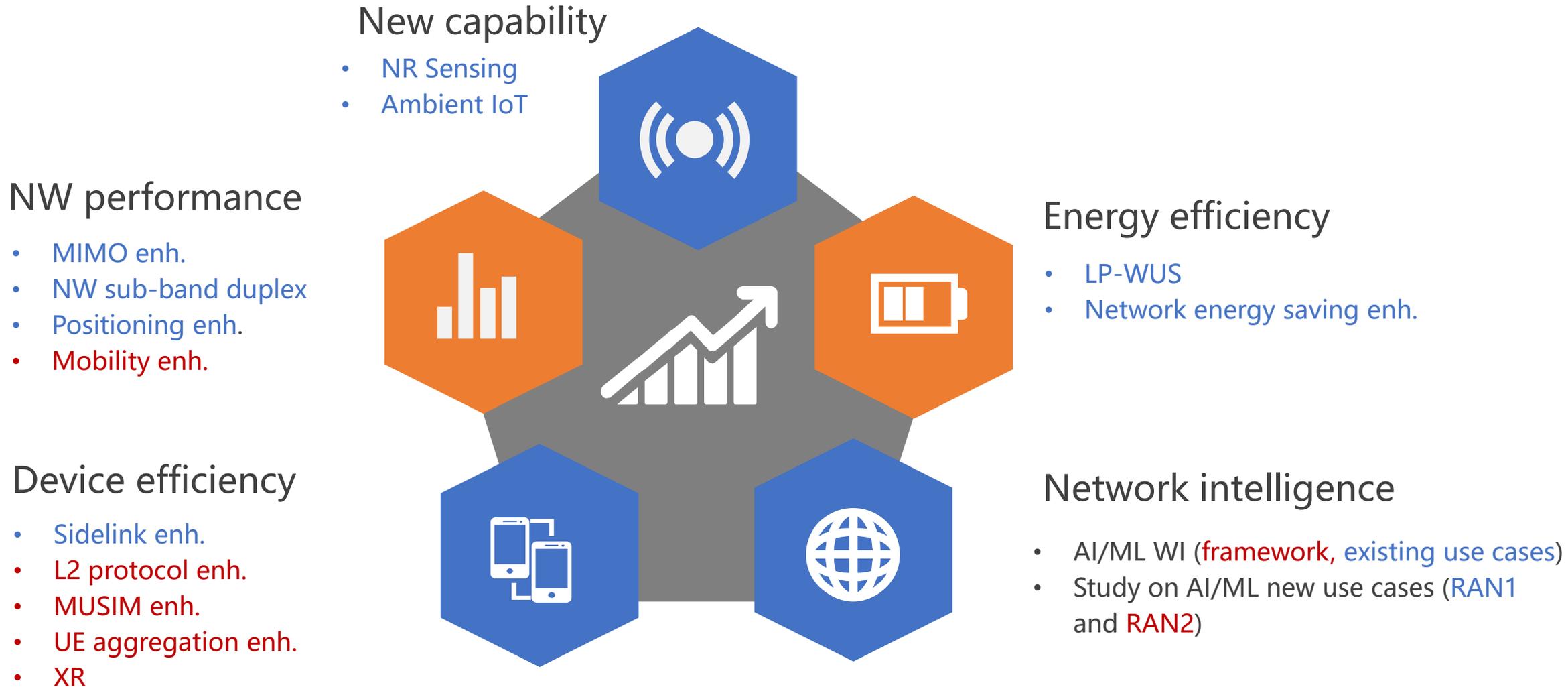
Release timeline



- 18 months release duration is proposed for Rel-19 function completion
- Target Dec 2025 for R19 ASN.1 frozen (3 months gap between func. Frozen and ASN.1 Frozen)
- No WG TU reserved for IMT-2030 study in Release-19 timeframe

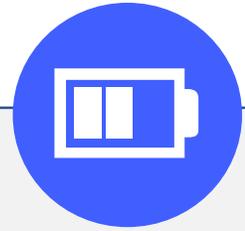
Overview of RAN Rel-19 package

RAN1 and RAN2 part



RAN Rel-19 package content (RAN1-led/RAN2-led)

vivo



● LP-WUS WI(0061)

1. OOK based LP-WUS design
2. For IDLE/INACTIVE: Paging procedure, OOK based LP-SS and measurements, further MR RRM relaxation
3. For CONNECTED: PDCCH monitoring and DRX procedure
4. RAN4 core & perf

● NES WI (0062)

1. On demand SSB/SSB1 by UE WUS
2. Spatial Adaption for mTRP
3. SIB-less cell operation



● AI WI (0063)

1. **General Framework (RAN2-led):** model transfer/deliver, model/function identification, data collection, RAN & SA coordination
2. **Sub use cases (RAN1-led):** CSI, beam, positioning
3. RAN4 test

● AI new use case SIs (0063)

1. AI based mobility enhancement: RRM measurement predication, target cell predication, unintended events prediction (RAN2-led)
2. AI based PA efficiency/nonlinearity improvement (RAN1/4-led)

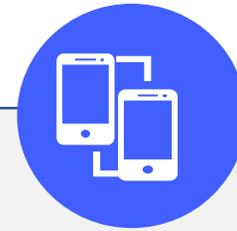


● Sensing SI (0055)

1. Sensing mode: Uu based sensing and gNB based sensing
2. Use case and KPI
3. Channel model for both gNB-UE bi-static and gNB mono-static
4. Performance evaluation & spec impacts

● Ambient IoT SI + Potential WI (0056)

1. Topology options: gNB & UE reader
2. Device type A/B/C
3. Higher layer protocol
4. Which topology/device type to be specified in Rel-19 can be further discussed based on the amount of spec effort and commercial needs



● MUSIM WI(0066)

1. Per CG, Per FR, Per CC MUSIM gap
2. Enhancement for same operator scenario
3. Identify and specify RAN impact for dual steering scenarios based on existing MUSIM mechanism

● Sidelink SI+WI (0060)

1. Sidelink & Uu dynamic spectrum sharing in licensed spectrum (SL underlay)
2. Sidelink RedCap: Lower power class, power saving (SL-WUS)

● UE agg. SI+WI (0067)

1. Enhanced inter-UE link
2. Lower layer UE aggregation
3. More than one Relay UEs

● L2 Enh WI (0065)

1. PDCP concatenation
2. Reduced RLC SDU retransmission

● XR WI (0068)

1. Leftovers: Relaxed scheduling restriction, PDU set handling
2. Further enh. for multi-modal: traffic awareness, capacity, power



● MIMO SI+WI (0057)

1. Study of spherical waves: channel modeling and performance impact
2. SRS based CSI predication
3. Inter/Intra-cell mTRP
4. Further UL enhancements
5. Enhanced interference cancellation

● SBFD WI (0058)

1. SBFD for CONNECTED mode UEs: L1 signaling and procedure, interference handling
2. BS RF requirements
3. No UE RF impact
4. Additional CLI handling for dynamic TDD, if justified

● Positioning WI (0059)

1. Further enh. for XR positioning: FR2-2, unlicensed spectrum
2. SL positioning enh
3. Power efficiency

● Mobility WI (0064)

1. Reduced data loss for LTM
2. Inter-CU LTM
3. Conditional LTM
4. UL measurement based LTM

THANK YOU.

谢谢。