3GPP TSG RAN#93e
September 13th-17th, 2021

RP-212319
Agenda Item 9.0.3

XR/CG Enhancements

MediaTek Inc.

XR/CG Enhancements
RAN2-led

3GPP TUs (Total w/ 9 meetings)			
RAN1	RAN2	RAN3	RAN4
-	8	TBD	-

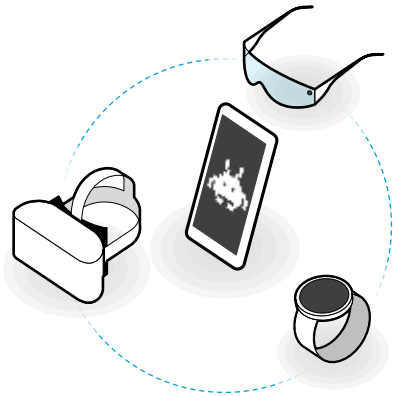
SA/CT Dependency: Yes

Optimized support for Low-latency throughput-intensive applications esp. CG, XR

Objective I: QoS improvements for LLeMBB traffic
- Investigate issues pertaining to data rates fluctuation, jitter, congestion and packet dropping. Investigate QoS handling of application “media frames”
- Mutual awareness between application and 5GS, possibly including x-layer optimization
- Work to be carried out in tight coordination with SA2/SA4

Objective II: C-DRX optimization taking into account XR/CG traffic periodicity and jitter

All other radio optimizations to be channeled in generic S/WIDs

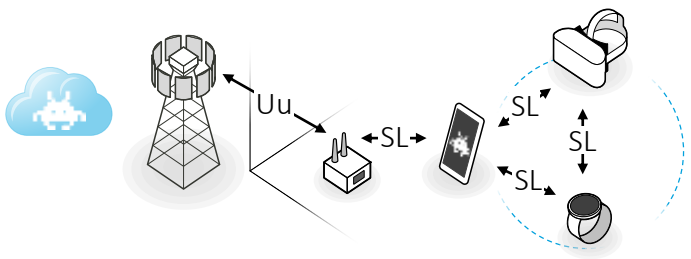


XR/CG Enhancements
Radio-Related Optimizations

- Motivation
  - Stimulate creation and adoption of new consumer services and applications with unprecedented user experience
  - Ensure 5G viability for popular consumer services
  - Rel-17 Gap analysis:

Spectrum \ Scenarios	Outdoor (AR/CG)	Outdoor to Indoor (VR)
FR1 Lic.	Capacity (latency constrained)	
FR1 Lic. + Unlic.	Capacity (latency constrained)	
FR1 + FR2	SCG change, UE complexity	Service coverage
FR2 only	Mobility, UE complexity	Service coverage

- **Proposal:** Generic Enh. in DC/CA, Mobility and SL



Spectrum \ Scenarios	Outdoor (AR/CG)	Outdoor to Indoor (VR)
FR1 Lic.	CA enhancement	
FR1 Lic. + Unlic.	CA enhancement	
FR1 + FR2	DC enh., CA enh.	Low-latency 1Gbps SL
FR2 only	Mobility enh., CA enh.	Low-latency 1Gbps SL

NOTE: Leverage Rel-17 Power Saving Enh. and QoS Enh.

Thank You!

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