

Views on Rel-19 XR Enhancement

Source: China Unicom

Motivation for Rel-19 XR enhancement

□ Motivation:

- As an emerging business, the popularity and ecosystem scale of XR business have shown an explosive growth trend in the past two years. R18 XR has completed SI work and is carrying out WI standardization work.
- Furthermore, the demands of commercial market for this new XR service are promising from operators' point of view.
- In R19, XR enhancement WI should be further standardized. New requirements from SA , such as multi-modal and meta-universe, should be considered. And outcome and leftover issues of R18 XR should also be involved.

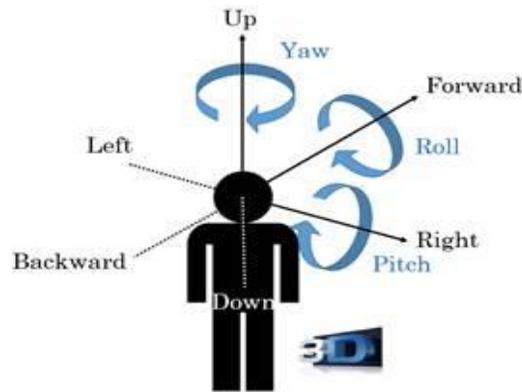


Figure 1. XR interaction mode-6DoF



Gaming



VR education

Figure 2. Typical scenarios of XR

Multi-modal XR requirements in SA1 and SA2

Related progress in SA WGs:

- As specified in SA1 TS 22.261, the tactile and multi-modal communication service has been defined and typical synchronization thresholds for multi-modality VR applications have been provided.

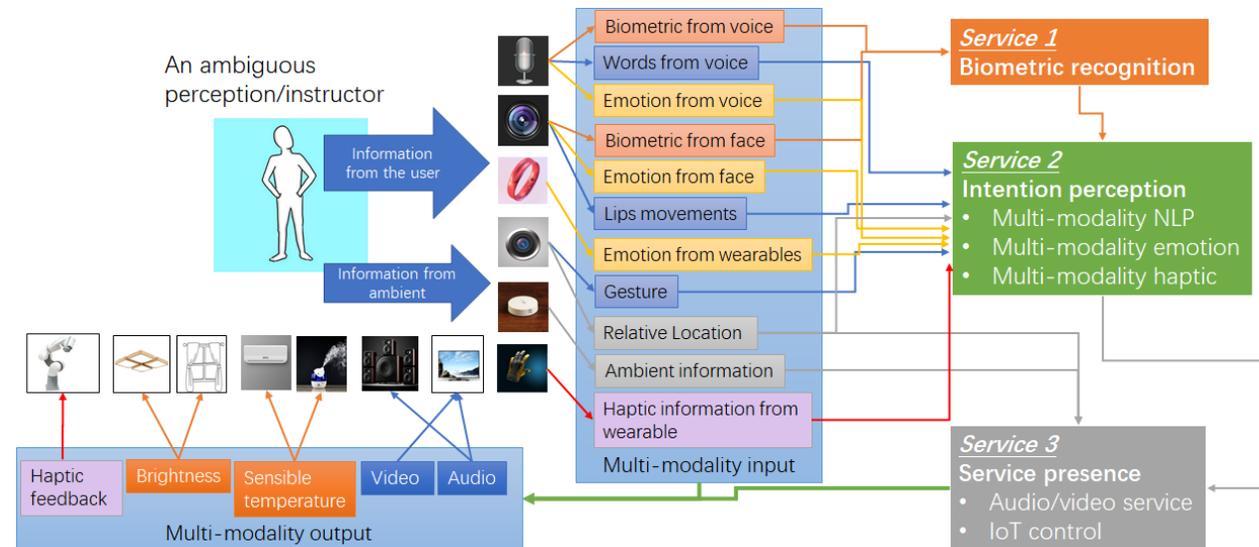


Figure 3. Multi-modal interactive system

- As specified in SA2 TS 23.501, it has defined policy control enhancements to support multi-modal services.

Proposal 1: It is proposed to support multi-modal XR in Rel-19 RAN XR WI, as the requirements for multi-modal XR services have been specified in SA1 and SA2.

- ❑ It is suggested potential objectives for Rel-19 XR enhancement as the following:
 - Study and specify aspects related to multi-modality XR. [RAN2, RAN3]
 - Study the potential solutions in RAN WGs, and coordinate with SA2 and other SA WG if related specification impacts are identified.
 - Note: Inter-UE scenario should not be precluded.
 - Specify the enhancement of measurement gaps/ scheduling restrictions. [RAN1, RAN2, RAN4]
 - For UE static and low-speed (pedestrian speed) mobility scenarios, specify the potential solutions.
 - Specify the delay aware/ delay adaptive (remaining time) scheduling enhancement. [RAN2, RAN1]

Proposal 2: It is suggested to consider the above objectives in Rel-19 XR enhancement.

Thanks