**SA WG2 Meeting #149eS2-220xxx**

**February 14th – 25th, 2022; Elbonia**

**Source: China Mobile**

**Title: Key issue for coodinately transmission for multi-modality traffic with single UE related with WT1&WT2.1**

**Document for: Approval**

**Agenda Item: 9.19**

**Work Item / Release:** **FS\_XRM / Rel-18**

*Abstract of the contribution: Propose key issue for WT1&WT2.1*

# 1 Discussion

This key issue focus on multi-modality data with single UE. Some specific scenarios includes:

1. The devices for immersive multi-modal VR application may include multiple types of devices such as VR glass, the gloves and other potential devices that support haptic and/or kinaesthetic modal. These devices may connect through wireline and only single UE can access to 5GS. So in this UE, there are multiple kinds of flows e.g. video, audio, tactile as defined in TS22.261 clause 6.43.1. These flows within this UE need synchronization transmission.

# 2 Proposal

**It is proposed to update TR 23.700-60 on FS\_XRM as follows**

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\* \* \* \* First change \* \* \* \*(all new texts)

## 5.X Key Issue #X: Policy control enhancements to support multi-modality flows within single UE coordinately transmission

### 5.X.1 Description

This key issue studies how to support co-ordinately transmission for multi-modality flows with single UE. Some advanced XR or media services may include more type of flows besides video and audio stream, such as information from different sensors and tactile for more immersive experience e.g. haptic data or sensor data. To support such tactile and multi-modality communication services (identified by SA WG1 TACMM in TS 22.261 clause 6.43 and 7.10), 5G system need to address service requirement of multi-modality flows with single UE with coordinated QoS selection , packet processing, guaranteed latency, reliability, bandwidth or time synchronization, in order to ensure best service experience.

Specific scenarios:

The devices for immersive multi-modal VR application may include multiple types of devices such as VR glass, the gloves and other potential devices that support haptic and/or kinaesthetic modal. These devices may connect through wireline and only single UE can access to 5GS. So in this UE, there are multiple kinds of flows e.g. video, audio, tactile as defined in TS 22.261 clause 6.43.1. These flows within this UE need synchronization transmission.

Key issue description: the following aspects should be studied to support coordination transmission for multi-modality flows with single UE:

* How to identify the multi-modality flows for single UE that need such coordination transmission.
* The coordination aspect should be specified e.g. QoS profile selection, latency, reliability or time synchronization.
* How to support such coordination transmission with utilizing policy control enhancement, e.g. defining new QoS parameter, extension QoS control mechanism.
* What parameters/information the AF can provide to 5GS or vice verse, to assist the coordination transmission for single UE, e.g. to help identify the specific flows, information to help create the coordinated policy, or triggering events.

- During UE mobility, how to support the coordination transmission.

\* \* \* \*end of change \* \* \* \*