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

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

**Source: China Mobile**

**Title: Key issue related with WT3.5**

**Document for: Approval**

**Agenda Item:**

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

*Abstract of the contribution:*

# 1 Discussion

In FS\_XRM SID, the WT#3.5 is focus on how to minimize jitter:

WT#3.5: Potential policy enhancements to minimize the jitter, focusing on i.e. requirement provisioning from AF, extension of PCC rule.

The key issue about WT#3.5 is proposed in this paper.

# 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 enhancement to minimize the jitter

### 5.X.1 Description

This key issue studies how to minimize the jitter focusing on the AF requirement and also the PCC rule extension. Jitter can be used as an important parameter to show 5G E2E network delay variance, and also is a quite important value to show the deterministic performace of 5G network.

Specific scenario requirement is as following:

In TS 22.261 clause 7.6, in order to support VR environments with low motion-to-photon capabilities, the 5G system shall support:

- motion-to-photon latency in the range of 7 ms to 15ms while maintaining the required resolution of up to 8k giving user data rate of up to [1Gbit/s] and

- motion-to-sound delay of [< 20 ms].

NOTE: The motion-to-photon latency is defined as the latency between the physical movement of a user's head and the updated picture in the VR headset. The motion-to-sound latency is the latency between the physical movement of a user's head and updated sound waves from a head mounted speaker reaching their ears.

So the 5GS should support the motion-to-photon delay (round trip) in the range of 7 ms to 15ms, i.e. the jitter requirement.

The following aspects shall be studied to support minimize the jitter:

* Specify how to calculate the 5GS end-to-end jitter.
* How the AF provides jitter requirement to 5GS.
* How to minimize the jitter based on the policy enhancement, focusing on extension of PCC rule

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