3GPP TSG-WG SA2 Meeting #149E e-meeting *S2-220xxxx*

Elbonia, February 14th – 25th, 2022 (revision of S2-220xxxx)

**Source: CATT**

**Title: New Key Issue: Study the traffic characteristics of media service enabling improved network resources usage and QoE**

**Document for: Approval**

**Agenda Item: 9.19**

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

*Abstract: Proposes a new key issue to study the traffic characteristics of media service enabling improved network resources usage and QoE for WT#3.1*

# 1. Introduction

In this release, it is anticipated that 5GS QoS framework will be enhanced to support different QoS handling for different XR media units. There are different levels of media units in the same QoS Flow, e.g, slice/tiles in the same I/B/P frame, I/B/P frame, GOP, multi-layer sub-streams and media stream. In order to help the different QoS handling for the different levels of media units, the 5GS QoS framework can request different media unit level QoS characteristics from the XR AF, and the XR AF also can provide or push the different QoS characteristics for different media units levels to the 5GS.

The QoS characteristics for the media units can include but not limited with Periodicity, Size, Bitrates, Delay, Jitter, Priority, PER, ID/Label/Filter of the media unit.

# 2. Text Proposal

It is proposed to capture the following changes vs. TR 23.700-60.

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

## 6.x Key Issue #x - Study the traffic characteristics of media service enabling improved network resources usage and QoE

### 6.x.1 Description

In this release, it is anticipated that 5GS QoS framework will be enhanced to support different QoS handling for different XR media units. There are different levels of media units in the same QoS Flow, e.g, slice/tiles in the same I/B/P frame, I/B/P frame, GOP, multi-layer sub-streams and media stream. In order to help the different QoS handling for the different levels of media units, the 5GS QoS framework can request different media unit level QoS characteristics from the XR AF, and the XR AF also can provide or push the different QoS characteristics for different media units levels to the 5GS.

This key issue proposes to study the traffic characteristics of media service enabling improved network resources usage and QoE. The key issue includes the following aspects:

- What the traffic characteristics of media can be defined and be used in the 5GS to improve the network resource usage and QoE?

- How the 5GS gets the traffic characteristics of the media?

- How the traffic characteristics are used in the 5GS to improve the network resource usage and QoE?

- How the 5GS reliably gets and uses these traffic characteristics if the media is encrypted and or adaptively changed?

- What types of the media to be studied in this release? e.g. UL/DL/UL+DL media streaming, audio/video/subtitle/others media streaming, multiple layer/view/channels media streaming?

Note: The 5GS also includes the UE.