**Source: Intel**

**Title: Additional feature for trust media server in GA4RTAR**

**Agenda Item: 10.7**

**Document for: Discussion and Agreement**

1. **Introduction**

The current GA4RTAR design allows WebRTC signaling server communication with 5G AF such as PCF for QoS requests. Since the WebRTC application is peer-to-peer communication by design and also supports multi-party communication through media-aware network elements (MANE) such as MCU or SFU. WebRTC media traffic should be categorized as uplink and downlink traffic. The uplink traffic is for uploading UE-generated media traffic, and the downlink traffic is for downloading media data from the media server to the UE.

The media server should have the ability to maintain the uplink and downlink ~~streaming~~ stream contexts such as QoS, remote control and etc. The reasons for that are the following:

* The WebRTC signaling server does not have features to maintain each WebRTC session.
* The media server can notify the WebRTC signaling server for QoS updates based on the current session status. For example, if there are increasing downlinks and uplink traffic, the media server can notify the WebRTC signaling server of possible QoS updates.

Therefore, in order for the media server to have the ability to maintain the uplink and downlink session status, it is essential for the media server to have the interface with the WebRTC signaling server to query the current QoS for each session.

1. **proposed changes:**

\* \* \* First Change \* \* \* \*

## 2.5.9 Trusted media server

A media server may be offered by the MNO to support WebRTC sessions. It may offer a wide range of functionality such as:

* a content server that serves content to the WebRTC application, e.g. through a data channel
* media processing functionality: may be used by the WebRTC application as a relay that performs some media processing function such as transcoding, recording, 3D reconstruction, etc.
* scene composition functionality: the server may compose a 3D scene and distribute it to several point-to-point WebRTC sessions
* MCU functionality: the server may offer multi-party conferencing functionality to merge a number of point-to-point WebRTC sessions
* SFU (Selective Forwarding Unit) functionality: the server may offer the selection, copy, and forwarding functionality of IP steams produced by multiple WebRTC endpoints (i.e., participants).
* Maintain uplink and downlink ~~streaming~~ flow context (QoS, remote control and etc.) by interacting with the WebRTC signaling server.

\* \* \* End Change \* \* \* \*

1. **Proposal**

It is proposed to add changes mentioned in clause 2 into the GA4RTAR permanent document and work on interfaces between the Media server and WebRTC signaling server for uplink and downlink ~~streaming~~ streams context definition.