**3GPP TSG-SA WG6 Meeting #40-e S6-202051**

**e-meeting, 16th – 24th November 2020 (revision of S6-201887)**

**Source: Tencent**

**Title: Pseudo-CR on key issue x: UAS Media session monitor and management.**

**Spec: 3GPP TR 23.755 v0.11.0**

**Agenda item: 8.5**

**Document for: Approval**

**Contact: Shuai Zhao (Shuaiizhao AT Tencent DOT com)**

 **Gilles Tenious (teniou AT Tencent DOT com)**

**1. Introduction**

The 3GPP TS 22.125 Stage 1 requirement defines KPIs that need to be fulfilled using a 5G system. There are two categories of KPIs identified for the 5G system:

1. KPIs for services provided to the UAV, as listed in Table 7.1-1 of TS 22.125,
2. KPIs for UAV C2 communication, listed in Table 7.2-2 in TS 22.125.

This contribution proposes to address the UAV media-related application enabler issue required to be supported as defined in Table 7.1-1 of TS 22.125.

**2. Reason for Change**

In most of the real-time media communications, the session is initialized with media parameters negotiation. Those parameters include codec types and profiles, maximum bitrate. This media capability negotiation is carried in an application control plane before the real media data traffic.

In TS 22.125, Clause 7.1 states the following requirement:

*The 5G system shall be able to provide unmanned aerial vehicle with the service performance requirements reported in Table 7.1-1*

SEAL already offers session management for all verticals. It is then worth investigating the application enabler aspects allowing the UAS application layer to monitor and manage media sessions, in line with the KPIs listed in Table 7.1-1 of Stage 1 requirement. Media-related aspects in the user plane should then be shared with 3GPP SA4.

**3. Conclusions**

This proposal identifies a new KI for Media session monitoring and management.

**4. Proposal**

It is proposed to add a Key Issue into 3GPP TR 23.755 focusing on media session monitoring and management as described below.

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

## 5.x Key issue #X: Media session monitoring and management

In most of the real-time media communications, the session is initialized with media parameters negotiation. Those parameters include codec types and profiles, maximum bitrate… This media capability negotiation is carried in an application control plane prior to the real media data traffic.

In TS 22.125, Clause 7.1 states the following requirement:

*The 5G system shall be able to provide unmanned aerial vehicle with the service performance requirements reported in Table 7.1-1*

SEAL, defined in TS 23.434, already offers session management for all verticals. It is then worth investigating the application enabler aspects allowing the UAS application layer to monitor and manage media sessions, in line with the KPIs listed in Table 7.1-1 of Stage 1 requirement in TS 22.125.

The following scenarios have been identified:

* The ~~negotiated media codec bitstream is beyond current network bandwidth, SEAL may terminate the connection prematurely, or request additional network resource to support this session.~~

NOTE: Negotiation of Media code parameters is out of the scope of this Technical Report.

* ~~SEAL may monitor the session management and provide network resource status to the UAS server for facilitating session management.~~
* The SEAL may be used to facilitate the application layer for media session control and monitoring,
* The SEAL may be used to provide network resource modification for media sessions used by the application layer.

Hence, it is required to study the following:

* Whether and how existing SEAL mechanisms are sufficient to monitor and manage the media session between UAV and UAV-C and USS/UTM.