**3GPP TSG-SA WG4 Meeting #128S4-241025\_r01**

**Jeju, South Korea, 20 May - 24 April 2024**

**Source: Samsung Electronics Co., Ltd.**

**Title: [FS\_AI4Media] pCR on related work**

**Agenda item: 9.6**

**Document for: Agreement**

**1. Introduction**

The contribution provides text on related work in 3GPP.

**2. Discussion**

In Rel-18:

* SA1 completed both their study item on requirements for AI/ML model transfer in 5GS (FS\_AMMT), and also a following work item (AIML\_MT)
* SA2 AI/ML related activities included a Study on 5G System Support for AI/ML-based Services (FS\_AIMLsys), and subsequently normative stage 2 work for AIML in the AIMLsys WI which was completed in June 2023.

**3. Proposal**

It is proposed to agree the following changes to 3GPP TR 26.927 v0.7.0.

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

## 4.3 Related work

### 4.3.1 3GPP SA1

TR 22.874 (Study on traffic characteristics and performance requirements for AI/ML model transfer) describes a variety of different use cases for AI/ML in 5G, with many that are related to media services. The media related use cases described in TR 22.874 are used as a basis for those listed and described in clause 4.2 of this TR.

Subsequently TS 22.261 includes new service requirements and KPIs for AI/ML model transfer in 5GS.

### 4.3.2 3GPP SA2

TR 23.700-80 documents a study on system support for AI/ML-based services. Enhanced features for AI/ML-based services are included in clause 5.46 of TS 23.501, defined as assistance to AI/ML operations in the application layer. Support for such features are also impacted in TS 23.502, TS 23.503, and TS 23.288. A brief summary of the features are given below.

* The AF may subscribe to features related to NEF monitoring events, in particular the subscription to session inactivity time monitoring event in order to assist in scheduling available UEs to participate in the AI/ML operation, and the subscription of notification on the traffic volume exchanged between the UE and the AI/ML application server for AI/ML data transfer assistance. The AF may also subscribe to QoS Monitoring as well as to Network Data Analytics such as End-to-end data volume transfer time analytics etc. in order to assist its AI/ML operations.
* The AF may request assistance from the 5GC through the member UE selection assistance functionality, hosted by the NEF to assist the AF to select member UEs that can be used in AI/ML based applications (e.g. Federated Learning). Through this functionality the AF can be notified about changes in the subset list of UE(s) that fulfill certain filtering criteria.
* Related to QoS, the AF may request the network to provide a recommended time window for the AI/ML operation using the Planned Data Transfer with QoS (PDTQ) requirements and procedures.
* The AF hosting an AI/ML based application may provision parameters related to expected UE behaviour.

\* \* \* End of Changes \* \* \* \*