**TSG-CT WG3 Meeting #120-e *C3-221182***

**E-Meeting, 17th – 25th February 2022**

**Source: Huawei**

**Title: Correction to the TSCTSF functionality**

**Spec: 3GPP TS 29.565 v1.1.0**

**Agenda item: 17.16**

**Document for: Decision**

**1. Introduction**

<Introduction part (optional)>

**2. Reason for Change**

1) TSCTSF may interact with the related PCF to retrieve the capability of time synchronization service. (See step 4 of clause 4.15.9.2 in TS 23.502)

2) TSCTSF configures and initializes the PTP instance(s) when it receives the request to create or modify the time synchronization configuration from the NEF or AF, and disables the corresponding PTP instance(s) in the DS-TT(s) and NW-TT when it receives the request of time synchronization deactivation from the NEF or AF. (See step 5-6 of clause 4.15.9.3.1 in TS 23.502)

**3. Conclusions**

Make above corrections.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.565.

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

##### 5.2.1.2.1 TSCTSF

The TSCTSF supports to:

- receive the request to create the subscription to the notification of the capability of time synchronization service from the NEF or AF and interact with the related PCF;

- receive the request to delete the subscription to the notification of the capability of time synchronization service from the NEF or AF and remove the information from the related PCF;

- receive the notification of the availability of the user plane node information from the PCF and subscribe the notification of user plane node related events at the PCF;

- determine the capability of time synchronization service based on the capability information received from the DS-TT(s) and NW-TT and notify the NEF or AF of the capability;

- receive the request to create or modify the time synchronization configuration from the NEF or AF, configure and initialize the PTP instance(s) by constructing a PMIC to each DS-TT/UE to activate the time synchronization service in DS-TT and PMIC(s) and UMIC to NW-TT to activate the time synchronization service in NW-TT and provision them to the PCF;

- Notify the NEF or AF of the current state of the time synchronization service configuration;

- receive the request of time synchronization deactivation from the NEF or AF and disable the corresponding PTP instance(s) in the DS-TT(s) and NW-TT.

- receive the request to activate or update the 5G access stratum time distribution configuration from the NEF or AF and store it in the UDR;

- receive the request to delete the 5G access stratum time distribution configuration from the NEF or AF and remove the information from the UDR;

- receive the request to query the status of the access stratum time distribution from the NEF or AF and respond to the NEF or AF with the status of the access stratum time distribution.

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