**3GPP TSG-CT WG1 Meeting #141eC1-23xxxx**

**Online 17– 21 April 2023 (Revision of C1-232284)**

**Source: OPPO**

**Title: Pseudo-CR on UE requested policy provisioning procedure for ranging**

**Spec: 3GPP TS 24.514**

**Agenda item: 18.2.23**

**Document for: Agreement**

**1. Introduction**

**2. Reason for Change**

In TS 23.586, there is the following requirement on UE requested policy provisioning:

*- Indicating UE Policy Provisioning Request in UE Policy Container for UE triggered Ranging/SL Positioning Policy provisioning, which requests one or multiple types of policies/parameters as listed below:*

*- Policy/parameters for Ranging/SL Positioning over PC5;*

*- Policy/parameters for Located UE;*

*- Policy/parameters for Target UE in addition to the functions defined in TS 23.273 [8] clause 4.3.5;*

*- Policy/parameters for SL Positioning Client UE;*

*- Policy/parameters for SL Positioning Server UE;*

This should be implemented to stage 3.

**3. Conclusions**

Implement the UE requested policy provisioning for ranging.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 24.514 v 0.0.0.

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

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[ts24501] 3GPP TS 24.501: "Non-Access-Stratum (NAS) protocol for 5G System (5GS); Stage 3".

[ts24587] 3GPP TS 24.587: "Vehicle-to-Everything (V2X) services in 5G System (5GS); Protocol aspects; Stage 3".

\* \* \* Next Change \* \* \* \*

## 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

RSLPP Ranging and sidelink provisioning policy\* \* \* Next Change \* \* \* \*

## a.x Procedures

### a.x.1 General

The procedure for provisioning of parameters for ranging/sidelink positioning over PC5 allows the UE to obtain the ranging and sidelink positioning over PC5 policy(RSLPP).

### a.x.2 UE-requested RSLPP provisioning procedure

#### a.x.2.1 General

The UE-requested RSLPP provisioning procedure enables the UE to request RSLPP from the PCF in the following cases:

a) if the T5aaa for a UE policies for ranging and sidelink positioning over PC5 expires;

b) if the T5bbb for a UE policies for ranging and sidelink positioning located UE expires;

c) if the T5ccc for a UE policies for ranging and sidelink positioning target UE expires;

d) if the T5ddd for UE policies for ranging and sidelink positioning client UE expires;

e) if the T5eee for UE policies for ranging and sidelink positioning server UE expires; and

f) if there are no valid configuration parameters, e.g., for the current area, or due to abnormal situation.

The UE shall follow the principles of PTI handling for UE policy delivery service procedures defined in 3GPP TS 24.501 [ts24501] clause D.1.2.

#### a.x.2.2 UE-requested RSLPP provisioning procedure initiation

In order to initiate the UE-requested RSLPP provisioning procedure, the UE shall create a UE POLICY PROVISIONING REQUEST message (see example in figure a.x.2.2.1). The UE:

a) shall allocate a PTI value currently not used and set the PTI IE to the allocated PTI value;

b) shall include the Requested UE policies IE indicating whether the UE policies for ranging and sidelink positioning over PC5, the UE policies for ranging and sidelink positioning located UE, the UE policies for ranging and sidelink positioning target UE, the UE policies for ranging and sidelink positioning client UE, the UE policies for ranging and sidelink positioning server UE, or any combination of them are requested;

c) shall transport the UE POLICY PROVISIONING REQUEST message using the NAS transport procedure as specified in 3GPP TS 24.501 [ts24501] clause 5.4.5; and

d) shall start timer T5040.



Figure a.x.2.2.1: UE-requested RSLPP provisioning procedure

#### a.x.2.3 UE-requested RSLPP provisioning procedure accepted by the network

Handling in 3GPP TS 24.587 [18] clause 5.3.2.3 shall apply.

If new UE policies for ranging and sidelink positioning over PC5 are included in the MANAGE UE POLICY COMMAND message, the UE shall stop timer T5aaa if it is running and start timer T5aaa with the value included in the UE policies for ranging and sidelink positioning over PC5 and start using the new UE policies for ranging and sidelink positioning over PC5 included in the MANAGE UE POLICY COMMAND message.

If new UE policies for ranging and sidelink positioning located UE are included in the MANAGE UE POLICY COMMAND message, the UE shall stop timer T5bbb if it is running and start timer T5bbb with the value included in the UE policies for ranging and sidelink positioning located UE and start using the new UE policies for ranging and sidelink positioning located UE included in the MANAGE UE POLICY COMMAND message.

If new UE policies for ranging and sidelink positioning target UE are included in the MANAGE UE POLICY COMMAND message, the UE shall stop timer T5ccc if it is running and start timer T5ccc with the value included in the UE policies for ranging and sidelink positioning target UE and start using the new UE policies for ranging and sidelink positioning target UE included in the MANAGE UE POLICY COMMAND message.

If new UE policies for ranging and sidelink positioning client UE are included in the MANAGE UE POLICY COMMAND message, the UE shall stop timer T5ddd if it is running and start timer T5ddd with the value included in the UE policies for ranging and sidelink positioning client UE and start using the new UE policies for ranging and sidelink positioning client UE included in the MANAGE UE POLICY COMMAND message.

If new UE policies for ranging and sidelink positioning server UE are included in the MANAGE UE POLICY COMMAND message, the UE shall stop timer T5eee if it is running and start timer T5eee with the value included in the UE policies for ranging and sidelink positioning server UE, and start using the UE policies for ranging and sidelink positioning server UE included in the MANAGE UE POLICY COMMAND message.

#### a.x.2.4 UE-requested RSLPP provisioning procedure not accepted by the network

Handling in 3GPP TS 24.587 [ts24587] clause 5.3.2.4 shall apply.

#### a.x.2.5 Abnormal cases on the network side

Handling in 3GPP TS 24.587 [ts24587] clause 5.3.2.5 shall apply.

#### a.x.2.6 Abnormal cases on the UE

Handling in 3GPP TS 24.587 [ts24587] clause 5.3.2.6 shall apply.

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