**3GPP TSG-CT WG1 Meeting #146C1-240219**

**E-meeting, 22 – 26 January 2024**

**Source: Xiaomi**

**Title: Update on Located UE discovery and selection**

**Spec: 3GPP TS 24.514 v0.5.0**

**Agenda item: 18.2.23**

**Document for: Agreement**

**1. Introduction**

This p-CR provides update on Located UE discovery and selection.

**2. Reason for Change**

For located UE discovery and selection, the general description for Located UE discovery and selection was agreed captured in clause 6.4.1 3GPP TS 24.514 v0.5.0, based on the stage 2 description on located UE discovery and selection in clause 5.2.2 and clause 5.11 3GPP TS 23.586.

Furthermore, the following is indicated in clause 5.2.2 3GPP TS 23.586:

*When LMF determines SL positioning for target UE and trigger the discovery of the Located UE, LMF can decide that LMF or target UE selects Located UEs. If the decision is LMF selecting Located UEs, Target UE sends the multiple discovered candidate Located UEs to the LMF for the selection. After the LMF determines the selected Located UE(s), the LMF sends the selected Located UE(s) to the Target UE.*

And in clause 6.20.2 and clause 6.20.5 3GPP TS 23.273, the following is dscribed:

*After LMF determines that the assistance of Located UE is needed for Target UE Positioning, LMF decides that Target UE or LMF selects Located UE, and SL-MT-LR request also includes the indication of Target UE/LMF selecting Located UE.*

Additionally, the following item considered for located UE selection is covered in the UE discovery procedure, so it is removed from here.

- Whether the serving PLMN of candidate located UE(s) is same with serving PLMN of target UE;

Therefore, the related general description and procedure description for Located UE discovery and selection should be covered in stage 3.

**3. Proposal**

It is proposed to agree the following changes to 3GPP TS 24.514 v0.5.0.

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

#### 6.4.2.1 Target UE selecting located UE

##### 6.4.2.1.x1 General

The located UE selection is performed by target UE in following cases:

a) when the LMF is not involved, UE-only operation for ranging and sidelink positioning is used (see clause 6.4.2.1.x2); and

b) when the LMF is involved, network-based operation or network-assisted operation for ranging and sidelink positioning is used and the LMF determines the located UE selection is performed by the target UE (see clause 6.4.2.1.x3).

##### 6.4.2.1.x2 Target UE selecting located UE for UE-only operation

The target UE selects the located UE(s) from the UE(s) which are discovered using:

a) the monitoring procedure for UE discovery as specified in clause 6.2.2.1 or clause 6.2.2.3 when located UE acts as announcing UE; or

b) the discoverer procedure for UE discovery as specified in clause 6.2.2.2 or clause 6.2.2.4 when located UE acts as discoveree UE.

The target UE selects the located UE(s) based on the received RSPP metadata and serving PLMN ID in the PROSE PC5 DISCOVERY message. A UE is selected as located UE by the target UE if:

a) the UE role in the RSPP metadata indicates the UE supports UE role as an Anchor UE (see 3GPP TS 38.355 [xx]); and

b) the serving PL MN ID indicating the same PLMN as the serving PLMN of the target UE.

Editor's note: whether the target UE needs to select the located UE based on the capability received via capability transfer procedure over PC5-U is FFS.

##### 6.4.2.1.x3 target UE selecting located UE for network-based operation or network-assisted operation

Editor's note: This clause will specify how the target UE select located UE(s) when LMF is involved.

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

#### 6.4.2.2 LMF selecting located UE

Editor's note: This clause will specify how the LMF selects located UE(s) if it is determined that the LMF is responsible for located UE selection in case of using network-based or network-assisted operation.

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