**SA WG2 Meeting #S2-159 S2-2311765**

**9 - 13 Oct, 2023, Xiamen, China**

Title: [Draft] Reply LS to Reply LS to SA2 on assistance information provided to UE

Response to: Reply LS to SA2 on assistance information provided to UE (S2-2310118/R2-2309228)

Release: Release 18

Work Item: Ranging\_SL

Source: SA2

To: RAN2, CT1, CT4

Cc:

**Contact Person:** **Sherry (Yang) Shen**

 **shenyang6@xiaomi.com**

**Send any reply LS to: 3GPP Liaisons Coordinator,** **mailto:3GPPLiaison@etsi.org**

Attachments:

**1. Overall Description:**

SA2 thanks RAN2 on the feedback about their views on assistance information.

SA2 has defined the following information and messages provided from the LMF to the UE:

1. list of candidate Located UE(s) identified with Application Layer ID in the SL-MO-LR Procedure defined in clause 6.20.1 of TS 23.273
2. SL-MT-LR request, including the application layer IDs of the other UEs 2 to n and the types of required location results in the SL-MT-LR Procedure defined in clause 6.20.3 of TS 23.273
3. Application Layer ID of the selected SL Positioning Server UE in the Procedures for Network-assisted SL Positioning for UE with NAS connection defined in clause 6.5.3 of TS 23.586
4. Indication of whether it is the LMF or the Target UE that select the Located UE(s).

The following information and messages provided from the UE to the LMF:

1. List of candidate Located UE(s) identified with Application Layer ID to the LMF for the selection defined in clause 6.20.3 of TS 23.273.

SA2 would like to highlight that the above-mentioned information and messages may not be exhaustive.

**SA2 Agreement 1:**

* Item 2 is transmitted over SLPP to be developed by RAN2.
* Item 1, 3, 4 and 5, are transmitted within supplementary services message to be developed by CT WGs.

Additionally, SA2 has defined the following information and messages transmitted between Target UE/SL Reference UE and the SL Client UE:

* SL Positioning Service Request / SL Positioning Service Response messages in the Procedures for Ranging/SL Positioning service exposure through PC5 defined in clause 6.7.1.1 of TS 23.586

**SA2 Agreement 2:** The SL Positioning Service Request / SL Positioning Service Response messages are transmitted over PC5 user plane as the application layer traffic.

Moreover, SA2 has defined the following information and messages transmitted between Target UE and the Located UE:

* The request sent from a Target UE to the Located UE to trigger the 5GC-MO-LR procedure as defined in 6.20.1 of TS 23.273

**SA2 Agreement 3:** This request is transmitted over PC5 user plane as the application layer traffic.

SA2 will update the corresponding procedures based on **SA2 Agreement 1-3**.

Furthermore, SA2 is also evaluating whether the information and messages transferred between Target UE/SL Reference UE and the SL Server UE are considered as SLPP messages or not.

SA2 expects RAN2 and CT WGs to feedback to SA2 if the above agreements are not technically feasible.

SA2 expects RAN2 and CT WGs to feedback to SA2 if more information and messages are identified with the similar issue.

**2. Actions:**

**To RAN2, CT1, CT4**

**ACTION:**

SA2 kindly asks RAN2, CT1 and CT4 to take SA2’s agreements into account to develop related specifications and feedback if the above agreements are not technically feasible.

**3. Date of Next SA2 Meetings**

SA2#160 13th-17th, Nov 2023 Chicago, US

SA2 Ad-hoc 22nd-26th, Jan 2024 online