**3GPP TSG-RAN WG4 Meeting #111 *R4-2410301***

**Fukuoka City, Fukuoka, Japan, 20th – 24th May, 2024**

**Title: [DRAFT]** LS on synchronization source change at the transmitting anchor UE in SL positioning

**Release:** Rel-18

**Work Item:** NR\_pos\_enh2-Core

**Source:** 3GPP TSG-RAN WG4

**To:** 3GPP TSG-RAN WG1, 3GPP TSG-RAN WG2

**Contact Person:**

**Name:** Iana Siomina

**E-mail Address:** iana.siomina @ ericsson.com

**Attachments:** None

1. **Overall Description:**

During the discussion on RRM core requirements, RAN4 observed that for UE performing SL measurements for positioning, if the measuring UE is not aware of the synchronization reference source change at a transmitting anchor UE, there can be performance degradation at least for timing-related measurements for SL positioning such as SL RSTD, SL Rx-Tx, and SL RTOA.

Therefore, RAN4 would like to check on:

* whether the measuring SL UE can be aware of the synchronization reference source change occurring at a transmitting anchor UE during an SL measurement, and
* if the measuring SL UE cannot be aware of this, introduce a corresponding solution to the identified issue.

**2. Actions:**

**To RAN1, RAN2:**

* **ACTION:** RAN4 kindly asks to:
  + clarify whether the measuring SL UE can be aware of the synchronization reference source change occurring at a transmitting anchor UE during an SL measurement, and
  + if the measuring SL UE cannot be aware of this, introduce a corresponding solution to the identified issue.

**3. Date of Next TSG-RAN WG4 Meetings:**

TSG-RAN WG4 Meeting #112 Maastricht, NL August 19 – August 23, 2024

TSG-RAN WG4 Meeting #112-bis China, CN October 14 – October 18, 2024