3GPP TSG-RAN WG2 Meeting #115-eR2-2108945

**Electronic Meeting, August 16 – 27, 2021**

**Title: [draft] Response LS on storage of UE Positioning Capabilities**

**Response to: R2-2106971 (S2-2105153) Response LS on storage of UE Positioning Capabilities**

**Release:** Rel-17

**Work Item:** NR\_pos\_enh

**Source:** Qualcomm Incorporated (to be RAN2)

**To:** SA2

**Cc:** RAN3

**Contact Person:**

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**1. Overall Description:**

RAN2 thanks SA2 for their LS and CR0176 (Rel-17, 'B') to TS 23.273 on storage of UE Positioning Capabilities.

Regarding the question from SA2:

 "Whether the UE positioning capability is variable or not? If yes, in which situation it is changed?"

RAN2 would like to provide the following response:

The UE positioning capability can be variable. Example situations where the UE positioning capability may change include:

- Radio configuration dependency: Positioning capabilities based on current/active radio configuration are not static (e.g., the *srs-PosResourceConfigCA-BandList* in TS 37.355 is provided for the current configured CA band combination).

- Power Savings: A (e.g., IoT) UE whose battery level is low may switch off positioning support in order to conserve battery power for more important tasks such as communicating with an external server or may report lower processing capabilities.

- Processing Resources Constraints: The available processing resources (processors, memory, etc.) may be shared between "communication" and "positioning operations". If the "communication operation" requires increased processing resources, the resources allocated to the "positioning operation" may temporarily be reduced.

RAN2 would like to point out that the above are examples and there may be other situations in which the UE positioning capability may change. Also, the examples may not be supported on all UEs and may not always need to be supported.

**2. Actions:**

**To SA2 group.**

**ACTION:** RAN2 kindly asks SA2 to take the above information into account.

**3. Date of Next TSG-RAN2 Meetings:**

TSG-RAN2 Meeting #116-e 1-12 November 2021 Electronic Meeting

TSG-RAN2 Meeting #117-e 17-26 January 2022 Electronic Meeting