**3GPP TSG RAN WG1 #106-e R1-21xxxxx**

**e-Meeting, August 16th – 27th, 2021**

**Title: [Draft]** LS on NR Positioning support for TA measurement in NR UL E-CID

**Reply to:**

**Release:** Rel-17

**Work Item:** TEI17

**Source:** NTT DOCOMO [RAN WG1]

**To:** RAN WG2, RAN WG3

**Cc:**

**Contact Person:**

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

**Attachments:** None

**1. Overall Description:**

RAN1 has discussed NR Positioning support for TA measurement in NR UL E-CID. The following agreement was made by RAN1.

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| --- |
| [Agreement:]* Define a new timing advance measurement for NR as below
	+ Timing advance (TADV) is defined as the time difference TADV = TgNB-TX –TgNB-RX, where
		- TgNB-RX is the Transmission and Reception Point (TRP) [18]  received timing of uplink subframe #*i* containing PRACH associated with UE, defined by the first detected path in time
		- TgNB-TX is the TRP transmit timing of downlink subframe #*j* that is closest in time to the subframe #*i* received from the UE
		- PRACH is used to determine the start of one subframe containing PRACH
* Send an LS to RAN2 and RAN3 with the agreement to add TADV reporting for NR UL E-CID so that their corresponding specification changes can be updated
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**2. Actions:**

**To RAN2, RAN3**

**ACTION:** RAN1 respectfully asks RAN2 and RAN3 to take into account the above RAN1 agreement and update the corresponding specification changes.

**3. Date of Next TSG-RAN WG1 Meetings:**

TSG RAN WG1 Meeting #106bis-e 11 – 19 October 2021 Electronic Meeting

TSG RAN WG1 Meeting #107-e 11 – 19 November 2021 Electronic Meeting