**3GPP TSG-RAN2#119e Meeting *R2-22xxxxx***

**Electronic, 17th– 26th August, 2022**

**Title: (draft) LS on DL-PRS measurements with reduced samples capability**

**Response to: -**

**Release:** Rel-17

**Work Items:** NR\_pos\_enh-Core

**Source:** ZTE Corporation [to be RAN2]

**To:** RAN WG1, RAN WG4

**CC:**

**Contact Person:**

#### Name: Yu Pan

E-mail Address: pan.yu24@zte.com.cn

**Attachment:**

**1. Overall Description:**

RAN2 observes that the UE capability of reduced samples of PRS measurement has different granularities in different RRC states according to the RAN1 and RAN4 UE features list. To be specific, the RAN1’s UE feature 27-3-1: M-sample measurements in RRC\_CONNECTED is a per band capability:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 27-3-1 | M-sample measurements in RRC\_CONNECTED | The capability to support reporting a measurement based on measuring M=1 or 2 samples (instances) of a DL PRS resource set | If the UE does not provide the capability, the UE is assumed to support M=4 only | per band |

RAN4’s UE feature 14-2: PRS measurement for reduced sample in RRC\_INACTIVE state is a per UE capability:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 14-2 | PRS measurement for reduced sample in RRC\_inactive state | Capability of supporting reduced number of samples (M=1, 2) for PRS measurement in RRC\_inactive state | 27-17 | The reduced number of samples (M=1,2) for PRS measurement in RRC\_inactive state cannot be supported. The UE is assumed to support M=4 only. | Per UE |

Therefore, RAN2 requires a clarification on whether a unified design in terms of the granularity of the UE capability for reduced samples of PRS measurement in the UE feature 27-3-1 from RAN1 and the UE feature 14-2 from RAN4 is needed.

**2. Actions:**

**To RAN1 and RAN4,**

**ACTION:**

* RAN2 respectfully asks RAN1 and RAN4 to clarify whether a unified design in terms of the granularity (i.e., per band or per UE) of the UE capability for reduced samples of PRS measurement in the UE feature 27-3-1 from RAN1 and the UE feature 14-2 from RAN4 is needed and provide feedback to RAN2.

**3. Date of Next RAN WG2 Meetings:**

RAN2 #119-bis-e 10– 19 October 2022 Electronic Meeting

RAN2 #120 14-18 November 2022 Europe