**3GPP TSG RAN WG1 #109-e R1-220xxxx**

**e-Meeting, May 9th – 20th, 2022**

**Title: [DRAFT]** Draft reply LS on lower Rx beam sweeping factor for latency improvement

**Response to:** R1-2203022 (R4-2206980) LS on lower Rx beam sweeping factor for latency improvement

**Release:** Rel-17

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

**Source:** Moderator (Huawei)

**To:** RAN4

**Cc:** RAN2

**Contact Person:**

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

**Attachments:**

**1. Overall Description:**

RAN1 thanks RAN4 for implementing the lower Rx beam sweeping factor, and for raising the question in R1-2203022/R4-2206980

RAN1 has discussed this question, and provide answer below.

**Q1:** **Whether does UE need to be configured by LMF to perform PRS measurements in FR2 with a reduced Rx beam sweeping factor?**

**A1:** **RAN1 made the following agreement in RAN1#109-e on the Rx beam sweeping factor requested from the LMF to the UE.**

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| --- |
| **Agreement**  Support the LMF to request the Rx beam sweeping factor.  **Agreement**  The request from LMF on the Rx beam sweeping factor is a single bit per positioning method, which can take two values.   * Value 1: Equal to the UE’s reported Rx beam sweeping factor in the corresponding capability for the band UE supports the feature, and equal to 8 for the FR2 bands that UE does not support the feature. * Value 2: Equal to 8 (default assumption) for FR2 bands. * The bit value should be set to the same across DL-TDOA, DL-AoD, and Multi-RTT for hybrid positioning. |

**2. Actions:**

**To RAN4**

**ACTION:** RAN1 respectfully requests RAN4 to take above answer into account in their future work.

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

TSG-RAN WG1 Meeting #110 22 Aug – 26 Aug 2022 Toulouse, France