**3GPP TSG RAN WG1 #108-e R1-220xxxx**

**e-Meeting, February 21 – March 3, 2022**

**Title: [DRAFT]** Draft reply LS on positioning issues needing further input (MG, PRS processing window)

**Response to:** R1-2202620(R2-2203597) LS to RAN1 on positioning issues needing further input

**Release:** Rel-17

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

**Source:** Moderator (Huawei)

**To:** RAN2

**Cc:** RAN3

**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 RAN2 LS (R1-2202620/R2-2203597), which requests RAN1 inputs for a number of issues. In this reply LS, RAN1 would like to provide the feedbacks for the following two issues related to MG and PRS processing window in the RAN2 LS.

With regards to the issue of preconfigured MG

**Issue:** FFS on whether MG activation/deactivation request from the LMF can also be applicable to R16 MG configuration in addition to positioning MG preconfiguration, i.e. Can LMF ask the gNB to configure the MG (e.g. via RRC) directly?

**RAN1 Answer:** The MG activation/deactivation request from the LMF agreed in rel17 is not applicable to R16 GM configuration. It is RAN1 understanding that the reception of MG activation request from the LMF facilitates gNB to activate the preconfigured MG, and gNB does not expect to be asked by the LMF to configure MG with RRC, but RAN1 also understands gNB may still configure the MG with RRC as in Rel-16， given that gNB behaviour for this is up to gNB implementation.

With regards to the issues of PRS processing window

**Issues:**

FFS:Whether PRS processing window configuration is provided per BWP or not is up to RAN1 to decide.

FFS: Whether UE can be configured with multiple PRS processing windows should be decided by RAN1.

FFS on the max number of PPW configurations (from Stage 2 discussion)

FFS: whether UE should monitor PDCCH during RAR window/msgB window ot contention resolution timer for the affected symbols by PPW

**RAN1 Answer:**

RAN1 agreed that PRS processing window configuration is provided per DL BWP.

UE can be configured with multiple PRS processing windows in one DL BWP.

The maximum number of PPW configuration is 4 per DL BWP, but the number of activated PRS processing window per DL BWP is 1. In addition, RAN1 would like to note the maximum number of activated PRS processing windows across all active DL BWPs is 4, and those activated PRS processing windows are not overlapping in time.

It is RAN1 understanding that UE should monitor PDCCH during RAR window/msgB window or contention resolution timer for the affected symbols by the PRS processing window.

**2. Actions:**

**To RAN2**

**ACTION:** RAN1 respectfully requests RAN2 to take above information into account in their future work.

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

TSG-RAN WG1 Meeting #109-e 16 May – 27 May 2022 E-Meeting

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