**3GPP TSG-RAN WG4 Meeting #113 R4-xxxxxx**

**Orlando, USA 18th – 22nd November 2024**

**Title:** DRAFT Reply LS on LP-WUS operation in IDLE/INACTIVE mode

**Response to:** LS R1-2407559 from RAN1

**Release:** Rel-19

**Work Item:** NR\_LPWUS-Core

**Source:** Vodafone [to be RAN4]

**To:** RAN Plenary, RAN1

**Cc:** RAN2

**Contact person:** Diogo Martins, diogo.martins@vodafone.com

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

**Attachments:** None

1 Overall description

RAN4 thanks RAN1 for their LS on R4-2414909/R1-2407559 and would like to provide the following answer:

**Question:**

“In RAN1, the common understanding is that UE may not support LP-WUS reception on all the bands supported by the UE.

RAN1 respectfully asks RAN2 and RAN4 to check if there is any issue and specification support needed for IDLE/INACTIVE UEs.”

**Answer:**

RAN4 would like to thank RAN1 for the LS on LP-WUS operation in IDLE/INACTIVE mode. RAN4 had a discussion on the understanding shared in the RAN1 LS, and the following observations have been made:

From RAN4 RF perspective it was agreed that there is no specific work related to RAN1 LS.

From Rel-19 RAN4 RRM requirement of MR offloading and relaxation perspective, RAN4 assumed LR and MR are operating on the same carrier frequency. It was also concluded that LR measurement requirements depends only on LR band. For LR measurement requirements, there is no extra specification work on RAN4 if LR and MR work at the different band.

The following impacts were identified:

* Usage of LP-WUS will be restricted if only operation on the same band is supported.
* On offloading and relaxation of RRM measurements, given that the measurements performed by LR in a different frequency than the MR might not be accurate.

RAN4 will further discuss requirements for MR and LR in different bands operation if supported by RAN1/2.

2 Actions

**To RAN Plenary and RAN 1:**

**ACTION:** RAN4 kindly asks RAN Plenary and RAN 1 to take the information above into account once deciding on the support of the use case mentioned above.

3 Dates of next TSG RAN WG 4 meetings

TSG-RAN WG4 Meeting #114 17th – 21st February 2025 Athens, Greece

TSG-RAN WG4 Meeting #114-bis 7th – 11th April 2025 TBC, China