3GPP TSG RAN WG1 Meeting #112bis-e R1-230xxxx

e-Meeting, April 17th – April 26th, 2023

**Title: [Draft] Reply LS to RAN4 on LP WUR architectures**

**Response to: R1-2302287 /** **R4-2303712**

**Release: Rel-18**

**Work Item: FS\_NR\_LPWUS**

**Source: [RAN1]**

**To: RAN4**

**Cc:**

**Contact person: [Sigen Ye]**

**[sigen\_ye@apple.com]**

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

**Attachments:** **None**

# 1 Overall description

RAN1 would like to thank RAN4 for the reply LS on low-power wake-up receiver architectures, and would like to provide the following feedback on the clarification questions from RAN4 based on the progress until RAN1#112.

1. **Whether IoT/wearables/smartphone UE types are all considered for LP-WUR design**

[RAN1 response]

1. **Power consumption, coverage and SNR targets**

[RAN1 response]

1. **Max occupied RB number in channel bandwidth for LP-WUS, for 1.4MHz and 5MHz RF bandwidth case**

[RAN1 response]

1. **Possible supported SCS for LP-WUS, if applicable**

[RAN1 response]

1. **Whether WUS can be located in a band separate from the UE’s NR band**

[RAN1 response]

1. **Whether FR1 is considered as first priority frequency range**

[RAN1 response]

1. **Whether in-band power boosting of LP-WUS is considered from RAN1 perspective**

[RAN1 response]

RAN1 will inform RAN4 if further progress is made on any of the aspects above.

# 2 Actions

**To RAN4:**

**ACTION:** RAN1 respectfully asks RAN4 to take the above into consideration.

# 3 Dates of next TSG RAN WG1 meetings

TSG RAN WG1 Meeting #113 May 22-26, 2023 Incheon, KR

TSG RAN WG1 Meeting #114 August 21-25, 2023 Toulouse, FR