**3GPP TSG-RAN Meeting #106 RP-243248
Madrid, Spain, Dec 09-12, 2024**

**Title: Draft LS on HPUE MSD application for DL CA with 1UL CC**

**Response to:**

**Release:** Rel-17

**Work Item:** Power\_Limit\_CA\_DC-Core

**Source: RAN**

**To: RAN5**

**Cc: RAN4**

**Contact person:**

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**Attachments:** N/A

# 1 Overall description

In RAN#104, RAN4 was tasked to investigate how to enable HPUE in DL CA with 1UL CC configured scenario [1], and in RAN#106 the task was closed with CR [2,3] and WF [4] being agreed in RAN4.

According to the agreements, in order to fully utilize the hardware capability of a UE to achieve better coverage, as an exception, UE is allowed to indicate higher power class than default power class (PC3) when it is configured with DL CA with 1UL CC before the HPUE MSDs are defined in RAN4 specification. And this UE shall be verified by PC3 MSD requirements with Tx power be configured with PC3.

However, for UEs already on the market before the HPUE MSD requirements are introduced into RAN4 specification, they are not required to meet the HPUE MSD requirements considering the UE hardware cannot be updated.

And considering UEs already under development may also confront the situation that their hardware cannot be updated timely when the HPUE MSDs are defined, it was agreed that a 6 months transition period is introduced which means from the moment that the HPUE MSD requirement of a band combination is added into RAN4 specification, it can only be used to test UEs after 6 months transition period has passed, and during the 6 months transition period the PC3 MSDs are used.

RAN would like to inform RAN5 about these agreements, and respectfully ask RAN5 to take them into account when developing HPUE conformance test specifications or related work managements.

# 2 Actions

**To RAN5**

**ACTION:** RAN respectfully ask RAN5 to take above agreements into account when developing HPUE conformance test specifications or related work managements.

# 3 Dates of next TSG-RAN WG4 meetings

TSG-RAN Meeting #107 12-14 Mar, 2025 Incheon, KR

TSG-RAN Meeting #108 9-13 Jun, 2025 Prague, CZ

# 4 Reference

[1] RP-241687 Moderator's summary for offline discussion on CA Power Class Support, RAN vice-chair (AT&T), RAN#104 2024-06

[2] R4-2420520 CR to TS 38.101-1: DL CA HPUE, Qualcomm, RAN4#113 2024-11

[3] R4-2420524 CR to TS 38.101-1: DL CA HPUE (R18), Qualcomm, RAN4#113 2024-11

[4] R4-2420525 WF on solution to enable HPUE max transmit power in DL CA, RAN4#113 2024-11