**3GPP TSG-RAN Meeting #106 Rev of 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:**

 Name: Jinqiang Xing

E-mail Address: xingjinqiang@oppo.com

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

**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 for a CA configuration with a single UL CC with DL CA and applicability note for the supported power class is not present in RAN4 specification. In this case, the UE shall be verified with default power class MSD requirements with Tx power being configured with default power class.

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 UEs already under development may confront the situation that they were not designed to meet the HPUE MSD requirements to be defined in the future, it was agreed that a 6 month transition period is applied. The transition period is defined as the moment that the HPUE MSD requirement of a band combination with 1UL CC is added into RAN4 specification to the end of the 6 month period following the introduction. During this transition period, the MSD requirements for UEs shall be verified with the default power class as opposed.

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

# 2 Actions

**To RAN5**

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

# 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