3GPP TSG-RAN WG4 Meeting #111 draft R4-2410574

Fukuoka, Japan, May 20th – 24th, 2024

**Title:** WF on Rel-19 phase 3 NR-NTN UE RF requirements

**Agenda Item:** 10.15.4

**Source:** Qualcomm Inc.

**Document for:** Approval

## Issue 1-1 UL RB allocation for HD-FDD Refsens, both for 1Rx and 2Rx

**Agreement**: Full RB allocation.

## Issue 1-2: HD-FDD refsens for 2 Rx

**Agreement**: 0.5 dB tightening for n254 and n256, FFS for n255. n256 to be confirmed in RAN4#112.

Note: RAN4#111 maintenance agreement on n256 refsens in R4-2408787 was not considered for this agreement.

## Issue 1-3: HD-FDD refsens for 1 Rx

**Agreement:** 2.5 dB relaxation compared to 2Rx HD-FDD

## Issue 1-4: Frequency error

**Agreement:** Discuss changes common to non-Redcap NTN and (e)RedCap NTN NR UE frequency error in maintenance agenda.

**Agreement:** (e)Redcap UE frequency error will be concluded based on the discussion in maintenance agenda.

## Issue 1-5: Maximum output power

**options for further discussion:**

Option 1: Consider increase in PC3 power level for NTN RedCap UE which only supports HD-FDD operation for a band.

Option 2: PC3 power level is the same for non-RedCap NR NTN UE and (e)RedCap NR NTN UE

## Issue 1-6: Specification structure and baseline changes

**Agreement:** Use R4-2408816 as starting point for (e)RedCap NR NTN UE RF requirements specification structure. Further changes on requirement values and additional impacted clauses (e.g. according to issue 1-4 and 1-5) as well as other improvements can be added.

## Issue 1-7: Release independence

**Agreement:** Updates on 38.307 may be needed unless there is no physical layer design impacts and new capability definition, and whether 38.307 should be included in WI scope is up to RAN plenary.