3GPP TSG-RAN WG4 Meeting #112 draft R4-2413527

Maastricht, Netherlands, August 19 – 23, 2024

**Title:** Way Forward for [112][311] NR\_NTN\_Ph3\_UE\_RF

**Agenda Item:** 8.25.5

**Source:** Qualcomm Inc.

**Document for:** Approval

## Issue 1-1 PC3 output power for HD-FDD (e)RedCap

**Agreement**: As baseline +23 ± 2 dBm

* Further discussion on upper tolerance is not precluded

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

**Agreement**: As baseline

* n256: 0.5 dB tightening

Further discussion on the values is not precluded

## Issue 1-4: Simultaneous operation with GNSS

**Agreement:** Further study NR NTN UE simultaneous operation with GNSS considering e.g.

* Operating bands with UL close to GNSS frequencies (n254, n255)
* Emissions on GNSS frequencies
* Whether transmission gaps enabling successful GNSS reception are present
* Potential impacts on frequency error requirements due to different condition.
* Potential impact on field performance
* Potential need for specification updates

## Issue 1-5: Specification updates

**Agreement:**

* Include information in specification suffix clause on suffix applicability on FR1-NTN, FR2-NTN or both, with RedCap being applicable to FR1-NTN
* Use suffix I for RedCap
* Add a clause on max output power for RedCap indicating RedCap supports only PC3, similar to TN spec 38.101-1 clause 6.2I.1

## Issue 2-1: UL capacity enhancements

**Agreement:**

* Continue evaluation on potential UE RF specification impact
  + As starting point, no UE RF impact at least from inter-symbol OCC scheme