3GPP TSG-RAN WG4 Meeting # 112 R4-241xxxx

Maastricht, NL, 19th - 23th Aug 2024

**Agenda item:** 8.26.4

**Source:** Moderator (MediaTek inc.)

**Title:** WF on RRM requirements for R19 IoT NTN Phase 3

**Document for:** Approval

# Introduction

This document is to capture all agreements in email thread [112][227] IoT\_NTN\_Ph3

# RRM core requirements

### Sub-Topic 1-1: RRM impact

#### Issue 1-1-1: RRM impact from EDT enhancement

Regarding the R19 EDT in capacity enhancements for uplink, RAN4 to further wait for more concrete agreements in other WGs.

#### Issue 1-1-2: RRM impact from other objectives

The work scope of RRM for Rel-19 IoT NTN is to discuss whether and how to define timing requirements for Msg3 transmission without msg1/ Random Access Response (RAR).

* Note: It can be revisited if the RRM impact from other objectives has been identified.

### Sub-Topic 1-2: Reply LS on Msg3 transmission

#### Issue 1-2-1: Reply LS

Further discuss the follow options to reply Q1 in LS R2-2405769:

* Option A
	+ UE can meet UL transmit timing error requirements defined for IoT NTN in TS 36.133.
	+ In addition, the UE UL transmit timing error is within CP/2 for NB-IoT with 3.75 kHz SCS and for LTE-MTC, and the UE UL transmit timing error can be larger than CP/2 for NB-IoT with 15 kHz SCS.
* Option B
	+ UE can meet UL transmit timing error requirements defined for IoT NTN in TS 36.133.