**3GPP TSG-RAN WG4 Meeting # 104-e R4-221xxxx**

**Electronic Meeting, 15– 26 August 2022**

**Title:** **WF on UL Segmented Transmission for UL synchronization for IoT NTN**

**Source:** **MediaTek inc.**

**Agenda item: 13.4**

**Document for: Approval**

# Introduction

This contribution is to capture the agreements for the email discussion for UL Segmented Transmission for UL synchronization for IoT NTN (R1-2205642) in RAN4 #104-e meeting.

# Way-forward

#### Sub-topic 3-1: timing adjustment during a UL repetition period

* The following proposals are discussed in this meeting and can be further discussed.
	+ Proposal 1: RAN4 shall clarify the IoT NTN behaviour in TS 36.133 for Rel-17 to allow UEs to adjust TA during the ongoing repetition.
	+ Proposal 1a: The restriction on UL transmission adjustment shall be updated according to RAN1 LS on per-segment TA pre-compensation.
	+ Proposal 2: RAN4 shall specify the IoT NTN behaviour in TS 36.133 to ensure the UE keeps a constant TA value within each segment
	+ Proposal 3: Segmented UL transmission can be covered by NTN UE transmit timing requirements, i.e. Te\_NTN. FFS whether and how to capture in RAN4

---------- The below discussion part will be removed from the Formal WF ---------------

*Recommendations for 2nd round:* The proposal 1a and 3 are moved from email thread [239]. Proposal 1a and 1 would address the same issue. The “restriction” in Proposal 1a is referring to the following statement

*When a repetition period is configured on the uplink for which R>1, the UE shall not adjust the uplink transmission timing autonomously during an ongoing repetition period other than at initial transmission as defined above.*

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| **Company** | **Comments** |
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