**3GPP TSG-RAN WG3 Meeting #124 R3-243950**

**Fukuoka, Japan, May 20- May 24, 2024**

**Title:** (TP for TR 38.769) Locating Ambient-IoT device

**Source:** CMCC, ZTE, CATT, Xiaomi, LGE, Huawei, Lenovo

**Agenda item:** 16.4

**Document for:** Discussion & Approval

# 1. Introduction

This contribution provides the TP for TR 38.769 on locating Ambient-IoT device based on online and offline discussion.

# 2. Text Proposal for TR 38.769

<<<<<<<<<<<<<<<<<<<< First Change >>>>>>>>>>>>>>>>>>>>

6.8 Locating Ambient IoT devices

Editor’s note: Proximity determination may be in a 6.8.x sub-clause, or another arrangement, depending on how the study proceeds.

6.8.1 General

AIoT device location information may be used for the following purposes:

AIoT device location information may be used for the following purposes:

(a) improving the AIoT operation itself, e.g. by sending a Command to the last reader associated to the device rather than sending it blindly.

(b) providing location information to the consumer of the AIoT service.

In Topology 1, a AIoT RAN node may consist of multiple Readers.

Locating an Ambient IoT device at “reader ID granularity” is useful for both purposes.

Editor’s Note 1: (b) may benefit from finer granularity, which may be achieved e.g. by knowledge of the “readers” geographical position or by utilizing more than one “reader” within one AIoT RAN for locating an AIoT device.

Editor’s Note 2: how to know the “reader” location is FFS. How to utilize more than one “reader” for location purposes is FFS.

Editor’s Note 3: Signalling details on how to provide the location information of the AIoT device to the AIoT CN needs further study.

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