**3GPP TSG-RAN WG3 #129 R3-255889**

**Bengaluru, India, 25 – 29 August 2025**

**Agenda item: 14.3**

**Source: Nokia, Nokia Shanghai Bell, Ericsson, Xiaomi, ZTE, Huawei, CATT, Thales, LG Electronics Inc., Airbus**

**Title: (TP to BL CR for TS 38.300) Clarification on the OAM requirements**

**Document for: Discussion and Decision**

# 1 Introduction

This contribution proposes TP on the missing OAM requirement for NTN payload(s) serving neighbour cell(s).

# TP to BL CR for TS 38.300

***-----------------Start of the Changes-------------------***

### 16.14.7 O&M Requirements

The following NTN related parameters shall be provided by O&M to the gNB providing NTN access:

- Ephemeris information describing the orbital trajectory information or coordinates for the hosting NTN payload of the serving gNB, and optionally for the NTN payload(s) serving neighbour cell(s). This information is provided on a regular basis or upon demand to the gNB;

- Two different sets of ephemeris format shall be supported:

- Set 1: NTN payload position and velocity state vectors:

- Position;

- Velocity.

- Set 2: At least the following parameters in orbital parameter ephemeris format, as specified in NIMA TR 8350.2 [51]:

- Semi-major axis;

- Eccentricity;

- Argument of periapsis;

- Longitude of ascending node;

- Inclination;

- Mean anomaly at epoch time.

- The explicit epoch time associated to ephemeris data;

- The location of the NTN Gateways;

NOTE 1: The ephemeris of the NTN payloads and the location of the NTN Gateways, are used at least for the Uplink timing and frequency synchronization. It may also be used for the random access and the mobility management purposes.

- Additional information to enable gNB operation for feeder/service link switch overs.

NOTE 2: The NTN related parameters provided by O&M to the gNB may depend on the type of supported service links, i.e., Earth-fixed, quasi-Earth-fixed, or Earth-moving.

***-----------------End of the Changes-------------------***