**3GPP TSG-SA WG6 Meeting #68S6-253073**

**Gothenburg, Sweden 25th – 29th August 2025 (revision of S6-253660)**

**Source: China Telecom**

**Title: Key Issue on** **Support satellite switch in data delivery**

**Spec: 3GPP TR 23.700-02 V0.0.0**

**Agenda item: 9.12**

**Document for: Approval**

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**1. Introduction**

When components of SEALDD architecture are deployed on satellites, it is necessary to study supporting satellite switch in data delivery.It is proposed to ensure uninterrupted data transmission before the satellite leaves users’ connection range.

**2. Reason for Change**

Enhancements in satellite access based AIML service, considering a senario that AIML model storaged and deployed on satellite.

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TR 23.700-02 V0.0.0.

\* \* \* First Change \* \* \* \*

# 4.X Key Issue #X: Support satellite switch in data delivery

## 4.x.1 Description

When operators deploy some components of the SEALDD architecture on satellites to ensure reliable data transmission via satellite communications, the following scenario may occur: to reduce latency, users initially select low-orbit satellites for satellite data transmission. However, due to the shorter connection time for users, low-orbit satellites may result in incomplete data transmission before the satellite is no longer within the user's connection range. Therefore, when the low-orbit satellite-assisted enabling layer performs data transmission, it is necessary to consider how to ensure uninterrupted data transmission before the satellite leaves users’ connection range. It is worth studying the need to arrange satellite switching and application context transmission in advance before the available time window of the data transmission auxiliary satellite is exceeded.

## 4.x.2 Open Issues

This key issue will study:

1. While a satellite is collecting and processing remote data, whether and how to select satellites for switching in data delivery (e.g. switching between satellites to continue transmitting processed result or original data to terrestrial network).

2. When a satellite switches to another satellite to support continuing data transmission, whether and how to relocate the context in satellite based data delivery (e.g. enhancenent on application context relocation to support satellite switch in data delivery).

\* \* \* End of Changes \* \* \* \*