**3GPP TSG-SA5 Meeting #158 *S5-246751rev1***

Orlando, USA, 18 - 22 November 2024

**Source: CSCN**

**Title: pCR 28.846 Add Use cases, Potential charging requirements and Key issues for MVNO providing satellite service**

**Document for: Approval**

**Agenda Item: 7.5.1**

# 1 Decision/action requested

***The group is asked to discuss and approve the proposal.***

# 2 References

[1] 3GPP TS 28.846 Study on charging aspects of satellite access phase 3

# 3 Rationale

MVNO can rent network resource from MNOs and then provide satellite communication services to its subscribers, i.e. it allows the subscribes usage of 5G data connectivity while in the host MNO.

The host MNO will collect charging information related to 5G data connectivity usage for charging the MVNO, and may collect charging information related to the 5G data connectivity usage for MVNO subscribes (per UE) and convey this to the MVNO. MVNO could be charged by host MNO based on the total data volume or other types of resource usage.

# 4 Detailed proposal

This document proposes the following changes in TR 28.846 [1].

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| **First change** |

## 6.X Topic X: Charging scenarios for MVNO which provide satellite communication services

### 6.X.1 Use cases

6.X.1.1 Use Case #1.1: MVNO charges SCC

This use case focuses on SCC and MVNO business scenario.

An SCC has a subscription with an MVNO which rents network resource from MNOs and then provide satellite communication services to its subscribers.

The charging party and charged party can be:

- Charged party: the SCC identified by the UE.

- Charging party: MVNO.

The MVNO charges the subscribers based on data connectivity usage.

6.X.1.2 Use Case #1.2: MVNO charged by MNO

This use case focuses on MVNO and MNO business scenario.

An MVNO has a wholesale agreement to use the network resource from MNOs and then provide satellite communication services to its subscribers.

The charging party and charged party can be:

- Charged party: MVNO.

- Charging party: MNO.

The MNO charges MVNO based on the total data volume or other types of resource usage.

### 6.X.2 Potential charging requirements

The following are potential high-level charging requirements for MVNO which provide satellite communication services:

**REQ-CH\_ SAT\_MVNO-01**: The charging mechanism should support collecting and conveying charging information related to 5G data connectivity usage for each UE.

**REQ-CH\_ SAT\_MVNO-02**: The charging mechanism should support collecting and conveying charging information related to 5G data connectivity usage for each MVNO.

### 6.X.3 Key issues

#### 6.X.3.1 Key issue #X.1: Charging information, architecture and procedure

This key issue is for investigating how to support MVNO which provide satellite communication services considering REQ-CH\_ SAT\_MVNO-01 and REQ-CH\_ SAT\_MVNO-02. This investigation covers the following:

- identification of charging information required to support MVNO which provide satellite communication services.

- identification of the charging architecture and procedure for MVNO which provide satellite communication services.

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| **End of change** |