3GPP TSG SA WG5 Meeting #158 S5-246977

Orlando, Florida, USA 18 - 22 November 2024

**Source: China Mobile**

**Title: TR 28.853 Add Evaluation and Conclusion for charging with UAV indication**

**Document for: Approval**

**Agenda Item: 7.5.4**

# 1 Decision/action requested

***This is a pCR to add evaluation and conclusion for charging with UAV indication in TR 28.853.***

# 2 References

[1] 3GPP TR 28.853: "Charging management; Study on charging aspects of uncrewed aerial systems".

# 3 Rationale

This contribution proposes to add evaluation and conclusion for charging with UAV indication in TR 28.853.

# 4 Detailed proposal

The following changes are proposed to be incorporated into TR 28.853 [1].

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| **First change** |

## 5.1 Topic 1：Converged charging with UAV Indication

### 5.1.1 Use cases

#### 5.1.1.1 Use case #1a: Converged charging with UAV Indication

As defined in TS 23.256 [3], the UAV is associated with the following identifiers in the 3GPP system:

* CAA-level UAV Identity: A UAV is assigned a CAA-level UAV Identity by functions in the aviation domain (e.g. USS). The UAV provides the CAA-level UAV Identity to the 3GPP system during UUAA procedures.
* 3GPP UAV ID: A 3GPP UAV ID is associated to the UAV by the 3GPP system in the subscription information and is used by the 3GPP system to identify the UAV. GPSI in the format of External Identifier is used as the 3GPP UAV ID.

The UAV, as a 3GPP UE configured for UAS services, can be identified by the UAV identifier, which makes it possible for charging differentiation.

For the scenario of using 3GPP network as the transport network for supporting UAS services, the charged party and charging party can be:

* Charged party: UAS-SC who accesses the 3GPP network.
* Charging party: UAS-MNO who provides UAS services to UAS-SC.

The potential charging requirements for this Use Case are: REQ-CH\_ UAS\_ID-01.

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| **Next change** |

### 5.1.5 Evaluation

Solution #1.1 and #1.2 both addresses Key issue #1a with no impact on the charging architecture and operation.

Solution #1.1 applies to data connectivity charging between SMF and CHF with new parameter (i.e. UAV Indication) required. Solution #1.2 applies to connection and mobility between AMF and CHFwith new parameters (i.e. UAV Indication, 3GPP UAV ID) required.

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| **End of changes** |