**3GPP TSG-SA5 Meeting #157 *S5-245890***

Hyderabad, India, 14 - 18 October 2024

**Source: Huawei, Nokia**

**Title: New charging scenario for service API discovery**

**Document for: Approval**

**Agenda Item: 7.5.2**

# 1 Decision/action requested

***This is a pCR to add the corresponding charging scenario about API management charging in TR 28.849.***

# 2 References

[1] 3GPP TR 28.849: "Study on charging aspects of Common API Framework for Northbound APIs (CAPIF) phase 2".

# 3 Rationale

This pCR proposes to introduce a new charging scenario of API management charging.

# 4 Detailed proposal

Propose to incorporate the following change into the TR 28.849 [1].

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| **First change** |

#### 6.1.2.3 Use Case #1.3: Service API discovery via CAPIF

The service API invokers (e.g. the 3rd party application provider) and the CAPIF providers (i.e. Operators) has the service agreement about the service API discovery. The Discovery Service API could be used to find a specific service by API Invoker.

The CAPIF core function enables the API invoker to discover, subscribe to, unsubscribe from and receive notifications from the CAPIF events, such as availability events of service APIs, change in service API information, monitoring service API invocations, API invoker onboarding events, etc , over CAPIF-1 or CAPIF-1e.

Note: The subscribing entity (i.e. the API invoker, the API exposing function, the API publishing function, the API management function) can subscribe to and unsubscribe the CAPIF events. The use case #1.3 only cover the relationship between API invoker and CAPIF.

- discover service APIs, as specified in TS 23.222 [2] Clause 8.7

- subscription, unsubscription and notifications for the CAPIF events, as specified in TS 23.222 [2] Clause 8.8

The charging party: the CAPIF providers

The charged party: the API invoker

The potential charging requirements for this UC are: REQ-3GPPCH-IVKO-01.

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| **Next change** |

### 6.1.3 Potential charging requirements

The following are potential high-level charging requirements, derived from the requirements in TS 23.222 [2].

**REQ-3GPPCH-APIM-01:** The CAPIF should support converged charging for APIs service management per API provider.

**REQ-3GPPCH-IVKM-01:** The CAPIF should support converged charging for APIs invoker management.

**REQ-3GPPCH-IVKO-01:** The CAPIF should support converged charging for service API discovery per API invoker.

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| **Next change** |

#### 6.1.4.3 Key issue#1.3: Charging events and charging information required

This key issue is for investigating how to support the charging considering REQ-3GPPCH-IVKO-01. This investigation covers the following:

- identification of the charging information for service API discovery;

- identification of the chargeable event for service API discovery;

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| **End of change** |