**3GPP TSG-SA5 Meeting #148e *S5-233303***

Electronic meeting, Online, 17 -25 April 2023

**Source: Ericsson LM**

**Title: Rel-18 pCR 28.826 Updating cancelling using charging session identifier clause 5.4**

**Document for: Approval**

**Agenda Item: 7.5.1**

# 1 Decision/action requested

**Include the proposed changes in TR 28.826.**

# 2 References

[1] 3GPP TR 28.826: " Study on Nchf charging services phase 2 improvements and optimizations"

# 3 Rationale

Clarifying the use of ChargingDataRef and event type for cancelling charges.

# 4 Detailed proposal

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| **First change** |

#### 5.4.5.1 Solutions #4.1: Cancelling using cancel operation and charging session identifier

A possible solution for key issues 4a, covering requirements REQ-3GPPCH-ESC-01, cancelling of event would be to use the charging session identifier, see TS 32.290 [12], which corresponded to ChargingDataRef, TS 32.291 [6]. When a resource is created in the CHF the NF (CTF) will always receive a ChargingDataRef. This ChargingDataRef can be put in a new attribute (e.g., requestToCancel), and used in a new service operation (e.g., cancel) to cancel any previously created resources. After received the new service operation request, the CHF performs the cancel operation, how this is performed will be operator dependent. If CHF cannot handle the cancel request it will respond and indicate the cancel unsuccessfully.



Figure 5.4.5.1-1 Message flow of new service operation (e.g., cancel)

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| **Second change** |

#### 5.4.5.1 Solutions #4.x: Cancelling using create operation and charging session identifier

A possible solution for key issues 4a, covering requirements REQ-3GPPCH-ESC-01, cancelling of event would be to use the charging session identifier, see TS 32.290 [12], which corresponded to ChargingDataRef, TS 32.291 [6]. When a resource is created in the CHF the NF (CTF) will always receive a ChargingDataRef. This ChargingDataRef can be put in a new attribute (e.g., requestToCancel), and used in a new one-time event type (e.g., CANCEL) to cancel any previously created resources. If the ChargingDataRef uniqueness cannot be guarantied it can be used together with charging id. After received the new service operation request, the CHF performs the cancel operation, how this is performed will be operator dependent. If CHF cannot handle the cancel request it will respond and indicate the cancel unsuccessfully.



Figure 5.4.5.1-1 Message flow of new service operation (e.g., cancel)

The table 5.4.5.1-1 contain additional attributes of the type ChargingDataRequest defined in TS 32.291 [6] clause 6.1.6.2.1.1 for cancel.

Table 5.4.5.1-1: Cancel specified attribute of type ChargingDataRequest

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| requestToCancel | string | OC | 0..1 | This field holds the ChargingDataRef of the event that is to be cancelled. | CANCEL |

The table 5.4.5.1-2 contains additional values to the EventType for cancel.

**Table 5.4.5.1-2: Enumeration EventType**

|  |  |  |
| --- | --- | --- |
| **Enumeration value** | **Description** | **Applicability** |
| IEC | This value is used to indicate immediate event charging. |  |
| PEC | This value is used to indicate post event charging. |  |
| CANCEL | This value is used to indicate a cancel event | CANCEL |

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| **End of changes** |