**3GPP TSG-SA5 Meeting #148e *S5-233305***

Electronic meeting, Online, 17 -25 April 2023

**Source: Ericsson LM**

**Title: Rel-18 pCR 28.826 New solutions for documenting binding in clause 6.3**

**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

Clarification of current solutions for binding and to which key issue they belong, and adding two new solutions either using a new TS 32.291 or new TS for binding.

# 4 Detailed proposal

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| **First change** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 32.255: "5G data connectivity domain charging; stage 2".

[3] 3GPP TS 23.503: "Policy and charging control framework for the 5G System (5GS); Stage 2".

[4] 3GPP TS 29.500: "5G System; Technical Realization of Service Based Architecture; Stage 3".

[5] 3GPP TS 32.240: "Telecommunication management; Charging management; Charging architecture and principles".

[6] 3GPP TS 32.291: "Telecommunication management; Charging management; 5G system; Charging service, stage 3".

[7] 3GPP TS 32.298: "Telecommunication management; Charging management; Charging Data Record (CDR) parameter description".

[8] 3GPP TS 32.299: "Telecommunication management; Charging management; Diameter charging application".

[9] 3GPP TS 23.501: "3GPP TS 23.501:"System Architecture for the 5G System".

[10] 3GPP TS 23.203: "Policy and charging control architecture".

[11] 3GPP TS 29.594: "5G System; Spending Limit Control Service; Stage 3".

[12] 3GPP TS 32.290: "Telecommunication management; Charging management; 5G system; Services, operations and procedures of charging using Service Based Interface (SBI)".

[13] IETF RFC 4006 (2005): "Diameter Credit-Control Application".

[14] IETF RFC 8506 (2019): "Diameter Credit-Control Application".

[15] 3GPP TS 29.513: "5G System; Policy and Charging Control signalling flows and QoS parameter mapping; Stage 3".

[16] 3GPP TS 29.594: "5G System; Spending Limit Control Service; Stage 3".

[17] 3GPP TS 32.254: “Telecommunication management; Charging management; Exposure function Northbound Application Program Interfaces (APIs) charging”.

[18] 3GPP TS 32.256: “Telecommunication management; Charging management; 5G Data connectivity domain charging; stage 2”.

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| **Second change** |

### 6.3.1 Solution #6.1: Binding in stage2 documents

A possible solution for key issues 6a, clarification of binding.

Currently the Information Elements are described in the 5G service charging specifications (e.g., TS 32.254 [17], TS 32.255 [2], and TS 32.256 [18]), the CDR parameters in TS 32.298 [7] (ASN.1), and the Nchf attributes in the TS 32.291 [6] (OpenAPI).

5G service charging specifications could provide binding between Information Elements, and both CDR parameters (ASN.1) and Nchf attributes and removing the binding from TS 32.291 [6].

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| **Third change** |

### 6.3.2 Solution #6.2: Binding in TS 32.298

A possible solution for key issues 6a, clarification of binding.

The TS 32.298 [7] provides binding between Information Elements, and CDR parameters (ASN.1).

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| **Fourth change** |

### 6.3.3 Solution #6.3: Binding in TS 32.291 and TS 32.298

A possible solution for key issues 6a, organization of OpenAPI and ASN.1.

Currently the Information Elements are described in the 5G service charging specifications (e.g., TS 32.254 [17], TS 32.255 [2], and TS 32.256 [18]) and the CDR parameters in TS 32.298 [7] (ASN.1), the Nchf attributes in the TS 32.291 [6] (OpenAPI).

The TS 32.298 [7] could provide binding between Information Elements and the CDR parameters (ASN.1), while the TS 32.291 [6] could provide binding between Information Elements and Nchf attributes (OpenAPI)

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| **Fifth change** |

### 6.3.2 Solution #6.x: Binding in TS 32.291

A possible solution for key issues 6a, clarification of binding.

The TS 32.291 [6] provides binding between Information Elements, and both CDR parameters (ASN.1) and Nchf attributes. The use of CDR filed would be discontinued.

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| **Sixth change** |

### 6.3.2 Solution #6.y: Binding in new TS

A possible solution for key issues 6a, clarification of binding.

Introduce a new TS only handling binding of the Information Elements to any other parameter, attribute, or field.

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| **End of changes** |