**3GPP TSG-CT WG3 Meeting #131 *C3-235233***

**Chicago, United States, 13 - 17 November, 2023 (Revision of C3-xxxxxx)**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.525** | **CR** | **0304** | **rev** | **-**  | **Current version:** | **18.3.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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|  |
| ***Title:***  | HTTP RFC uplifting |
|  |  |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | SBIProtoc18 |  | ***Date:*** | 2023-11-06 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | In CT4, it was agreed to do the following in SBI specs:1. Update HTTP/2 references from RFC 7540 to RFC 9113, HTTP semantics RFCs 7230, 7231, 7232, 7233, 7235, 7694 to RFC 9110, and HTTP Caching RFC 7234 to RFC 9111.
2. Update RFC references from RFC 7807 to RFC 9457 for all SBIs.
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| ***Summary of change:*** | 1. Updated HTTP/2 reference from RFC 7540 to RFC 9113 in the References and API description clause.
2. Update RFC references from RFC 7807 to RFC 9457 in the Reference and API description clauses.
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| ***Consequences if not approved:*** | The obsoleted RFC and their functionality are referred to and the specification is not according to up to date IETF HTTP specifications. |
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| ***Clauses affected:*** | 2, 5.2.1, 5.2.2.2 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR 29.501 CR 0148   |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | This CR does not impact the OpenAPI descriptions defined in this specification. |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* \* Start of changes \* \* \* \*

# 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 23.501: "System Architecture for the 5G System; Stage 2".

[3] 3GPP TS 23.502: "Procedures for the 5G System; Stage 2".

[4] 3GPP TS 23.503: "Policy and Charging Control Framework for the 5G System; Stage 2".

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

[6] 3GPP TS 29.501: "5G System; Principles and Guidelines for Services Definition; Stage 3".

[7] 3GPP TS 29.513: "5G System; Policy and Charging Control signalling flows and QoS parameter mapping; Stage 3".

[8] IETF RFC 9113: "HTTP/2".

[9] IETF RFC 8259: "The JavaScript Object Notation (JSON) Data Interchange Format".

[10] OpenAPI: "OpenAPI Specification Version 3.0.0", <https://spec.openapis.org/oas/v3.0.0>.

[11] 3GPP TS 29.571: "5G System; Common Data Types for Service Based Interfaces; Stage 3".

[12] 3GPP TS 23.402: "Architecture enhancements for non-3GPP accesses".

[13] 3GPP TS 29.510: "5G System; Network Function Repository Services; Stage 3".

[14] 3GPP TS 29.518: "5G System; Access and Mobility Management Services; Stage 3".

[15] 3GPP TS 24.501: "Non-Access-Stratum (NAS) protocol for 5G System (5GS); Stage 3".

[16] 3GPP TS 24.526: "UE policies for 5G System (5GS); Stage 3".

[17] 3GPP TS 29.519: "5G System; Usage of the Unified Data Repository service for Policy Data, Application Data and Structured Data for Exposure; Stage 3".

[18] 3GPP TS 32.422: "Telecommunication management; Subscriber and equipment trace; Trace control and configuration management".

[19] 3GPP TS 33.501: "Security architecture and procedures for 5G system".

[20] IETF RFC 6749: "The OAuth 2.0 Authorization Framework".

[21] IETF RFC 9457: "Problem Details for HTTP APIs".

[22] 3GPP TR 21.900: "Technical Specification Group working methods".

[23] 3GPP TS 23.316: "Wireless and wireline convergence access support for the 5G System (5GS)".

[24] 3GPP TS 24.587: "Vehicle-to-Everything (V2X) services in 5G System (5GS); Stage 3".

[25] 3GPP TS 24.588: "Vehicle-to-Everything (V2X) services in 5G System (5GS); User Equipment (UE) policies; Stage 3".

[26] 3GPP TS 29.505: "5G System; Usage of the Unified Data Repository service for Subscription Data; Stage 3".

[27] 3GPP TS 29.504:"5G System; Unified Data Repository Services; Stage 3".

[28] 3GPP TS 24.554: "Proximity based services (ProSe) in 5G system (5GS) protocol aspects; Stage 3".

[29] 3GPP TS 24.555: "Proximity based services (ProSe) in 5G system (5GS); User Equipment (UE) policies; Stage 3".

[30] 3GPP TS 29.523: "5G System; Policy Control Event Exposure Service; Stage 3".

[31] 3GPP TS 29.512: "5G System; Session Management Policy Control Service; Stage 3".

[32] 3GPP TS 24.577: "Aircraft-to-Everything (A2X) services in 5G System (5GS) protocol aspects; Stage 3".

[33] 3GPP TS 24.588: "Aircraft-to-Everything (A2X) services in 5G System (5GS); UE policies".

[34] 3GPP TS 29.531: "5G System; Network Slice Selection Services; Stage 3"

[35] 3GPP TS 29.521: "5G System; Binding Support Management Service; Stage 3".

[36] 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3".

[37] 3GPP TS 29.514: "5G System; Policy Authorization Service; Stage 3".

[38] 3GPP TS 29.520: "5G System; Network Data Analytics Services; Stage 3".

[39] 3GPP TS 29.594: "5G System; Spending Limit Control Service; Stage 3".

[40] 3GPP TS 29.502: "5G System; Session Management Services; Stage 3".

[41] 3GPP TS 29.522: "5G System; Network Exposure Function Northbound APIs; Stage 3".

\* \* \* \* Next changes \* \* \* \*

### 5.2.1 General

HTTP/2, IETF RFC 9113 [8], shall be used as specified in clause 5 of 3GPP TS 29.500 [5].

HTTP/2 shall be transported as specified in clause 5.3 of 3GPP TS 29.500 [5].

The OpenAPI [10] specification of HTTP messages and content bodies for the Npcf\_UEPolicyControl is contained in Annex A.

\* \* \* \* Next changes \* \* \* \*

#### 5.2.2.2 Content type

JSON, IETF RFC 8259 [9], shall be used as content type of the HTTP bodies specified in the present specification as specified in clause 5.4 of 3GPP TS 29.500 [5]. The use of the JSON format shall be signalled by the content type "application/json".

"Problem Details" JSON object shall be used to indicate additional details of the error in a HTTP response body and shall be signalled by the content type "application/problem+json", as defined in IETF RFC 9457 [21].

\* \* \* \* End of changes \* \* \* \*