**3GPP TSG-SA5 Meeting #141-e *S5-221118***

**e-meeting, 17th – 26th January2022** Revision of S5-21xxxx

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **32.291** | **CR** | **0366** | **rev** | **1** | **Current version:** | **16.10.0** |  |
|  |
| *For* [***HELP***](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:***  | Extensibility Mechanisms for charging |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | TEI16 |  | ***Date:*** | 2022-01-25 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** | Rel-16 |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | Based on the TS 29.500 clause 6.6 Extensibility Mechanisms, the extensibility mechanisms supported in the Service-Based Architecture in 3GPP 5GC, such as feature negotiation, vendor-specific extensions, etc. are present. The corresponding extensibility mechanisms should be supported in the 5G charging. |
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| ***Summary of change:*** | Add the Vendor-specific extensions for charging. |
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| ***Consequences if not approved:*** | The extensibility mechanisms is incomplete. |
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| ***Clauses affected:*** | 6.1.8,6.1.X(New) |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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| **First change** |

### 6.1.8 Feature negotiation

The optional features in table 6.1.8-1 are defined for the Nchf\_ConvergedCharging API. They shall be negotiated using the extensibility mechanism defined in subclause 6.6 of 3GPP TS 29.500 [299].

Table 6.1.8-1: Supported Features

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| --- | --- | --- |
| Feature number | Feature Name | Description |
| 1 | CHFCQM | CHF-controlled quota management i.e. support for temporary offline |
| 2 | AF\_Charging\_Identifier | Indicates the support of long character strings as charging identifiers. |
| 3 | 5GIEPC\_CH | 5GS interworking with EPC |
| 4 | ATSSS | This feature indicates support of Access Traffic Steering, Switching, Splitting (ATSSS). |
| 5 | ETSUN | This feature indicates support of Enhancing Topology of SMF and UPF in 5G Networks (ETSUN). |
| 6 | EnhancedDiagnostics | Support the enhanced diagnostics |
| 7 | AMF\_subs\_PRA | PRA(s) subscription by CHF in AMF |
| 8 | VendorSpecificExtensions | This feature indicates support of Vendor-specific extensions |

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| **Next change** |

### 6.1.x Usage of general functionalities in SBA

### 6.1.x.1 General

The general functionalities in Service Based Architecture specified in clause 6 3GPP TS 29.500 [299] isn’t explicitly stated, it may be supported and applicability for charging.

### 6.1.x.2 Extensibility Mechanisms

The information elements sent on the Nchf\_ConvergedCharging API can be extensible with vendor-specific data.

The only JSON data types that can be extended, by defining additional members, are JSON objects; simple data types (and arrays of items of simple data types) cannot be extended in this way. The charging vendor-specific extensions use the extensibility mechanism defined in clause 6.6 of 3GPP TS 29.500 [299].

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| **End of change** |