**3GPP TSG-CT WG3 Meeting #134C3-242334\_R1**

**Changsha, China, 15th – 19th April 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.549** | **CR** | **0280** | **rev** | **-** | **Current version:** | **18.5.0** |  |
|  | | | | | | | | |
| *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:*** | Updates to the API Definition for SS\_ADAE\_EdgeLoadAnalytics API | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | ADAES | | | | |  | ***Date:*** | | | 2024-04-02 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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 can be 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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19) Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The API definition for SS\_ADAE\_EdgeLoadAnalytics API is not align with stage 2 TS 23.436 clause 8.8. There are ENs need to be solved.   * In clause 7.10.7.4.2.2 "Whether use data type ReportingConfig for reportReq is FFS and will align with stage 2."   This CR proposes to update the API definition to align with stage 2, and solve the ENs. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The changes include:   * Solved and removed the following ENs: * The EN in clause 7.10.7.4.2.2 "Whether use data type ReportingConfig for reportReq is FFS and will align with stage 2." * Removed the data type definition in clause 7.10.7.4.2.6 for ReportingConfig. * Corrected errors and updated the other clauses. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The API Definition for SS\_ADAE\_EdgeLoadAnalytics API is not align with stage 2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.10.7.2.1, 7.10.7.4.1, 7.10.7.4.2.2, 7.10.7.4.2.6, 7.10.7.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR does not impact any OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

##### 7.10.7.2.1 Overview

This clause describes the structure for the Resource URIs and the resources and methods used for the service.

Figure 7.10.7.2.1-1 depicts the resource URIs structure for the SS\_ADAE\_EdgeLoadAnalytics API.



Figure 7.10.7.2.1-1: Resource URI structure of the SS\_ADAE\_EdgeLoadAnalytics API

Table 7.10.7.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 7.10.7.2.1-1: Resources and methods overview



|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method | Description |
| Edge Load Event Subscription | /edge-load | POST | Creates a new individual Event Subscription for edge load analytics. |
| Individual Edge Load Event Subscription | /edge-load/{edgeLdId} | GET | Retrieve an individual edge load analytics according to query parameter on the resource identified by {edgeLdId}. If there are no query parameter, fetch the whole edge load resource identified by {edgeLdId}. |
| DELETE | Deletes an individual Event Subscription identified by the {edgeLdId}. |

\*\*\* 2nd Change \*\*\*

##### 7.10.7.4.1 General

This clause specifies the application data model supported by the API. Data types listed in clause 6.2 apply to this API.

Table 7.10.7.4.1-1 specifies the data types defined specifically for the SS\_ADAE\_EdgeLoadAnalytics API service.

Table 7.10.7.4.1-1: SS\_ADAE\_EdgeLoadAnalytics API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| EdgeSub | 7.10.7.4.2.2 | Represents the subscription to the edge load event. |  |
| EdgeNotif | 7.10.7.4.2.3 | Notification information of the edge load analytics event. |  |

Table 7.10.7.4.1-2 specifies data types re-used by the SS\_ADAE\_EdgeLoadAnalytics API service:

Table 7.10.7.4.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| AnalyticsType | 7.10.1.4.2.6 | Type of analytics for the event of the edge load analytics. |  |
| Dnai | 3GPP TS 29.571 [21] | Identifies a user plane access to one or more DN(s). |  |
| Dnn | 3GPP TS 29.571 [21] | Identifies a DNN. |  |
| LocationArea5G | 3GPP TS 29.122 [3] | Represents location information. |  |
| NotificationMethod | 3GPP TS 29.508 [32] | Used to indicate the reporting mode. |  |
| ProdProfileInfo | 7.10.1.4.2.4 | Information about the data producer's support data collection and its access to the produced data. |  |
| ReportingInformation | 3GPP TS 29.523 [20] | Used to indicate the reporting requirement, only the following information are applicable for SEAL:  - immRep  - notifMethod  - maxReportNbr  - monDur  - repPeriod |  |
| SupportedFeatures | 3GPP TS 29.571 [21] | Used to negotiate the supported optional features of the API. |  |
| TimeWindow | 3GPP TS 29.122 [3] | Represents a period of time with start time and end time. |  |
| Uinteger | 3GPP TS 29.571 [21] | Used to represent integer attributes. |  |
| Uri | 3GPP TS 29.122 [3] | Used to indicate the notification URI. |  |

\*\*\* 3rd Change \*\*\*

###### 7.10.7.4.2.2 Type: EdgeSub

Table 7.10.7.4.2.2-1: Definition of type EdgeSub

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| analyticsType | AnalyticsType | M | 1 | Represents the anaytics type of the edge load analytics. Only the "category" attribute is applicable here. |  |
| destinationEasInfo | string | O | 0..1 | Represents the information for the destination EAS, including destination EAS ID and detination EAS address. (NOTE 1) |  |
| destinationEesId | string | O | 0..1 | The identifier of the destination EES. (NOTE 1) |  |
| dnai | Dnai | O | 0..1 | Represents the Data Network Access Identifier of user plane access to DN(s) which the subscription applies. (NOTE 1) |  |
| dnn | Dnn | O | 0..1 | Represents the target DNN which the subscription applies. (NOTE 1) |  |
| dataProdProfile | ProdProfileInfo | O | 0..1 | Represents the characteristics of the data producer to be used. |  |
| confLevel | Uinteger | O | 0..1 | Represents the accuracy level for the edge load analytics in case of prediction.  Minimum = 0. Maximum = 100. |  |
| area | LocationArea5G | O | 0..1 | Represents the geographical or service area, to which the edge load analytics subscription is applied. |  |
| notifUri | Uri | M | 1 | Represents the notification URI. |  |
| report | EdgeNotif | C | 0..1 | Indicates the reporting data for one-time immediate report. It shall be provided if one-time immediate reporting is requested by indicated in the "reportReq” attribute, and the outputs are available. |  |
| reportReq | ReportingInformation | O | 0..1 | Represents the reporting requirements of the subscription.  (NOTE 2) |  |
| timeInterval | TimeWindow | O | 0..1 | The time interval as the start and the end time, to which the edge load analytics subscription applies. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Used to negotiate the applicability of optional features.  This attribute shall be present only if feature negotiation needs to take place. |  |
| NOTE 1: At least one of the attributes, "destinationEasInfo”, "destinationEesId", and either "dnai" or "dnn", shall be present. | | | | | |
| NOTE 2: If absent, the applied reporting parameters are based on local configuration. | | | | | |

\*\*\* 4th Change \*\*\*

###### 7.10.7.4.2.6 Void



\*\*\* 5th Change \*\*\*

#### 7.10.7.6 Feature Negotiation

General feature negotiation procedures are defined in clause 6.8. Table 7.10.7.6-1 lists the supported features for SS\_ADAE\_EdgeLoadPatternAnalytics API.

Table 7.10.7.6-1: Supported Features

|  |  |  |
| --- | --- | --- |
| Feature number | Feature Name | Description |
|  |  |  |

\*\*\* End of Changes \*\*\*