**3GPP TSG-CT WG3 Meeting #116eC3-213326**

**E-Meeting, 19th – 28th May 2021** (Revision of C3-213266)

**Source: Samsung**

**Title: Pseudo-CR on Eees\_AppClientInformation API definition**

**Spec: 3GPP TS 29.558 v0.3.0**

**Agenda item: 17.9**

**Document for: Decision**

**1. Introduction**

TS 23.558 specifies the Eees\_AppClientInformation service, for the EAS to subscribe to EES to receive Application Client Information based on certain criteria.

**2. Reason for Change**

This pCR proposes the API definition of the Eees\_AppClientInformation API.

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.558 v0.3.0.

\* \* \* 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 23.558: "Architecture for enabling Edge Applications".

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

[4] 3GPP TR 21.900: "Technical Specification Group working methods".

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

[6] 3GPP TS 29.122: "T8 reference point for Northbound Application Programming Interfaces (APIs)".

[7] IETF RFC 6455: "The Websocket Protocol".

[8] 3GPP TS 29.571: "5G System; Common Data Types for Service Based Interfaces; Stage 3".

[9] 3GPP TS 29.510: "5G System; Network Function Repository Services; Stage 3".

[10] 3GPP TS 29.522: "5G System; Network Exposure Function Northbound APIs; Stage 3".

[11] 3GPP TS 29.572: "5G System; Location Management Services; Stage 3".

[12] 3GPP TS 29.520: "5G System; Network Data Analytics Services; Stage 3".

[13] 3GPP TS 29.523: "5G System; Policy Control Event Exposure Service; Stage 3".

[r24558] 3GPP TS 24.558: "Enabling Edge Applications; Protocol specification".

\* \* \* Next Change \* \* \* \*

## 8.y Eees\_AppClientInformation API

### 8.y.1 API URI

The Eees\_AppClientInformation service shall use the Eees\_AppClientInformation API.

The request URIs used in HTTP requests from the Edge Application Server towards the EES shall have the Resource URI structure as defined in clause 7.5 with the following clarifications:

- The <apiName>shall be "eees-appclientinformation".

- The <apiVersion> shall be "v1".

- The <apiSpecificResourceUriPart> shall be set as described in clause 8.y.2.

### 8.y.2 Resources

#### 8.y.2.1 Overview



Figure 8.y.2.1-1: Resource URI structure of the Eees\_AppClientInformation API

Table 8.y.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.y.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| Application Client Information Subscriptions | /subscriptions | POST | Creates a subscription for reporting of AC information to the EAS. |
| Individual Application Client Information Subscription | /subscriptions/{subscriptionId} | GET | Retrieves the Individual AC information subscription information identified by subscriptionId.  |
| PATCH | Partially updates the Individual AC information subscription identified by subscriptionId. |
| PUT | Fully replaces the Individual AC information subscription identified by subscriptionId. |
| DELETE | Removes the Individual AC information subscription identified by subscriptionId. |

#### 8.y.2.2 Resource: Application Client Information Subscriptions

##### 8.y.2.2.1 Description

This resource represents all AC information subscriptions at a given EES.

##### 8.y.2.2.2 Resource Definition

Resource URI: **{apiRoot}/eees-appclientinformation/<apiVersion>/subscriptions**

This resource shall support the resource URI variables defined in the table 8.y.2.2.2-1.

Table 8.y.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.y.1 |

##### 8.y.2.2.3 Resource Standard Methods

###### 8.y.2.2.3.1 POST

This method creates the AC information subscription at the EES for reporting of the AC capabilities. This method shall support the URI query parameters specified in the table 8.y.2.2.3.1-1.

Table 8.y.2.2.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.y.2.2.3.1-2 and the response data structures and response codes specified in table 8.y.2.2.3.1-3.

Table 8.y.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ACInfoSubscription | M | 1 | Create a new AC information subscription. |

Editor’s Note: Details of how the EAS security credentials are submitted in the HTTP POST message is FFS and to be updated based on security aspects defined by SA3

Table 8.y.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ACInfoSubscription | M | 1 | 201 Created | The individual AC information subscription resource created successfully. The information about the confirmed subscription at the EES is provided in the response body.The URI of the created resource shall be retruned in the “Location” HTTP header. |
| NOTE: The manadatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [6] also apply. |

Table 8.y.2.2.3.1-4: Headers supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.2.3.1-5: Headers supported by the 201 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location  | String | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/eees-appclientinformation/<apiVersion>/subscriptions/{subscriptionId} |

Table 8.y.2.2.3.1-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

##### 8.y.2.2.4 Resource Custom Operations

None.

#### 8.y.2.3 Resource: Individual Application Client Information Subscription

##### 8.y.2.3.1 Description

This resource represents the individual location information subscription of an EAS at a given EES.

##### 8.y.2.3.2 Resource Definition

Resource URI: **{apiRoot}/eees-appclientinformation/<apiVersion>/subscriptions/{subscriptionId}**

This resource shall support the resource URI variables defined in the table 8.y.2.3.2-1.

Table 8.y.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.y.1 |
| subscriptionId | String | Identifies an individual AC information subscription. |

##### 8.y.2.3.3 Resource Standard Methods

###### 8.y.2.3.3.1 GET

This method retrieves the AC information subscription information at EES. This method shall support the URI query parameters specified in the table 8.y.2.3.3.1-1.

Table 8.y.2.3.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Editor’s Note: Details of how the EAS security credentials are submitted in the HTTP GET message is FFS and to be updated based on security aspects defined by SA3

This method shall support the request data structures specified in table 8.y.2.3.3.1-2 and the response data structures and response codes specified in table 8.y.2.3.3.1-3.

Table 8.y.2.3.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 8.y.2.3.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ACInfoSubscription | M | 1 | 200 OK | The AC information subscription information is returned by the EES. |
| NOTE: The manadatory HTTP error status code for the GET method listed in Table 5.2.6-1 of 3GPP TS 29.122 [6] also apply. |

Table 8.y.2.3.3.1-4: Headers supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.3.3.1-5: Headers supported by the 200 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.3.3.1-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

###### 8.y.2.3.3.2 PATCH

This method partially updates the individual AC information subscription information at the EES. This method shall support the URI query parameters specified in the table 8.y.2.3.3.2-1.

Table 8.y.2.3.3.2-1: URI query parameters supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Editor’s Note: Details of how the EAS security credentials are submitted in the HTTP PATCH message is FFS and to be updated based on security aspects defined by SA3

This method shall support the request data structures specified in table 8.y.2.3.3.2-2 and the response data structures and response codes specified in table 8.y.2.3.3.2-3.

Table 8.y.2.3.3.2-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ACInfoSubscriptionPatch | M | 1 | Request to partially update the individual AC information subscription matching the subscriptionId at the EES. |

Table 8.y.2.3.3.2-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ACInfoSubscription | M | 1 | 200 OK | The individual AC information subscription matching the subscriptionId was modified successfully and the updated AC information subscription information is returned in the response. |
| n/a |  |  | 204 No Content | The individual AC information subscription matching the subscriptionId was modified successfully. |
| NOTE: The manadatory HTTP error status code for the PATCH method listed in Table 5.2.6-1 of 3GPP TS 29.122 [6] also apply. |

Table 8.y.2.3.3.2-4: Headers supported by the PATCH method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.3.3.2-5: Headers supported by the PATCH response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.3.3.2-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

###### 8.y.2.3.3.3 PUT

This method updates the AC information subscription information at the EES by completely replacing the existing subscription data (except easId). This method shall support the URI query parameters specified in the table 8.y.2.3.3.3-1.

Table 8.y.2.3.3.3-1: URI query parameters supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Editor’s Note: Details of how the EAS security credentials are submitted in the HTTP PUT message is FFS and to be updated based on security aspects defined by SA3

This method shall support the request data structures specified in table 8.y.2.3.3.3-2 and the response data structures and response codes specified in table 8.y.2.3.3.3-3.

Table 8.y.2.3.3.3-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ACInfoSubscription | M | 1 | Details of individual AC information subscription matching the subscriptionId to be updated at the EES. |

Table 8.y.2.3.3.3-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ACInfoSubscription | M | 1 | 200 OK | The individual AC information subscription matching the subscriptionId was modified successfully and the updated AC subscription information is returned in the response. |
| n/a |  |  | 204 No Content | The individual AC information subscription matching the subscriptionId was modified successfully. |
| NOTE: The manadatory HTTP error status code for the PUT method listed in Table 5.2.6-1 of 3GPP TS 29.122 [6] also apply. |

Table 8.y.2.3.3.3-4: Headers supported by the PUT method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.3.3.3-5: Headers supported by the PUT response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.3.3.3-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

###### 8.y.2.3.3.4 DELETE

This method removes the AC information subscription information from the EES. This method shall support the URI query parameters specified in the table 8.y.2.3.3.4-1.

Table 8.y.2.3.3.4-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Editor’s Note: Details of how the EAS security credentials are submitted in the HTTP DELETE message is FFS and to be updated based on security aspects defined by SA3

This method shall support the request data structures specified in table 8.y.2.3.3.4-2 and the response data structures and response codes specified in table 8.y.2.3.3.4-3.

Table 8.y.2.3.3.4-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 8.y.2.3.3.4-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a | M | 1 | 204 No Content | The individual AC information subscription matching the subscriptionId is deleted. |
| NOTE: The manadatory HTTP error status code for the DELETE method listed in Table 5.2.6-1 of 3GPP TS 29.122 [6] also apply. |

Table 8.y.2.3.3.4-4: Headers supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.3.3.4-5: Headers supported by the DELETE response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.y.2.3.3.4-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

##### 8.y.2.3.4 Resource Custom Operations

None.

### 8.y.3 Custom Operations without associated resources

None.

### 8.y.4 Notifications

#### 8.y.4.1 General

Table 8.y.4.1-1: Notifications overview

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | Callback URI | HTTP method or custom operation | Description(service operation) |
| AC Information Notification | {notificationDestination} | POST | Notifies the subscriber EAS the AC information. |

#### 8.y.4.2 AC Information Notification

##### 8.y.4.2.1 Description

AC Information Notification is used by the EES to notify an EAS with AC information matching the filter criteria.

##### 8.y.4.2.2 Notification definition

The POST method shall be used by the EES for the notification and the callback URI shall be the one provided by the EAS during the creation or modification of Individual Application Client Information Subscription.

Callback URI: **{notificationDestination}**

This method shall support the URI query parameters specified in table 8.y.4.2.2-1.

Table 8.y.4.2.2-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.y.4.2.2-2 and the response data structures and response codes specified in table 8.y.4.2.2-3.

Table 8.y.4.2.2-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ACInfoNotification | M | 1 | Notification of AC(s) information. |

Table 8.y.4.2.2-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The receipt of the Notification is acknowledged. |
| NOTE: The manadatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [6] also apply. |

### 8.y.5 Data Model

#### 8.y.5.1 General

This clause specifies the application data model supported by the API. Data types listed in clause 7.2 apply to this API

Table 8.y.5.1-1 specifies the data types defined specifically for the Eees\_AppClientInformation API service.

Table 8.y.5.1-1: Eees\_AppClientInformation API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| ACInfoSubscription | 8.y.5.2.2 | Represents the AC information subscription. |  |
| ACInfoSubscriptionPatch | 8.y.5.2.3 | Used to request the partial update of AC information subscription. |  |
| ACFilter | 8.y.5.2.4 | Used to list the set of characteristics to discover the ACs. |  |
| ACInfoNotification | 8.y.5.2.5 | AC information notification matching the filter criteria. |  |
| ACInformation | 8.y.5.2.6 | Used to represent the AC information in the AC information notification. |  |

Table 8.y.5.1-2 specifies data types re-used by the Eees\_AppClientInformation API service.

Table 8.y.5.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| DateTime | 3GPP TS 29.122 [6] | Used to capture the expiration time of EAS subscription for location information reporting. |  |
| ReportingInformation | 3GPP TS 29.523 [13] | Used to indicate the reporting requirement, only the following information are applicable:- immRep- notifMethod- maxReportNbr- monDur- repPeriod |  |
| Uri | 3GPP TS 29.122 [6] |  |  |
| WebsockNotifConfig | 3GPP TS 29.122 [6] | Following differences apply:- The SCEF is the EES; and- The SCS/AS is the subscribing EAS. |  |
| SupportedFeatures | 3GPP TS 29.571 [8] | Used to negotiate the applicability of optional features. |  |
| TestNotification | 3GPP TS 29.122 [6] | Following differences apply:- The SCEF is the EES; and- The SCS/AS is the subscribing EAS. |  |
| LocationArea5G | 3GPP TS 29.122 [6] | Used to define the geographic and topological area. |  |
| ScheduledCommunicationTime | 3GPP TS 29.122 [6] | Used to define the operation schedule of AC. |  |
| Gpsi | 3GPP TS 29.571 [8] | Used to identify the UE in the query parameter, for which location information is queried.  |  |
| LocationInfo | 3GPP TS 29.122 [6] | The location information related to the UE. |  |
| ACProfile | 3GPP TS 24.558 [r24558] | Used to represent the profile the information of the Application Client.  |  |

#### 8.y.5.2 Structured data types

##### 8.y.5.2.1 Introduction

##### 8.y.5.2.2 Type: ACInfoSubscription

Table 8.y.5.2.2-1: Definition of type ACInfoSubscription

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| easId | string | M | 1 | Identifier of the EAS subscribing for AC information report. |  |
| acFltrs | array(ACFilter) | O | 1..N | Filters to retrieve the information about particular ACs. |  |
| expTime | DateTime | O | 0..1 | Indicates the expiration time of the subscription. If the expiration time is not present, then it indicates that the EAS subscription never expires. |  |
| eventReq | ReportingInformation | O | 0..1 | Represents the reporting requirements of the AC information subscription. (NOTE) |  |
| notificationDestination | Uri | M | 1 | URI where the notification on information about particular ACs should be delivered to. This attribute shall be present in HTTP POST message to EES. |  |
| requestTestNotification | boolean | O | 0..1 | Set to true by Subscriber to request the EES to send a test notification as defined in clause 7.6. Set to false or omitted otherwise. | Notification\_test\_event |
| websockNotifConfig | WebsockNotifConfig | O | 0..1 | Configuration parameters to set up notification delivery over Websocket protocol as defined in clause 7.6. | Notification\_websocket |
| suppFeat | SupportedFeatures | O | 0..1 | Used to negotiate the supported optional features of the API as described in clause 7.8.This attribute shall be provided in the HTTP POST request and in the response of successful resource creation. |  |
| NOTE: The applicable values of the ReportingInformation data type are, "immRep", "notifMethod", "maxReportNbr", "monDur", "repPeriod". |

##### 8.y.5.2.3 Type: ACInfoSubscriptionPatch

Table 8.y.5.2.3-1: Definition of type ACInfoSubscriptionPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| eventReq | ReportingInformation | O | 0..1 | The reporting requirements of the AC information event subscription to be updated. |  |
| expTime | DateTime | O | 0..1 | Indicates the proposed expiration time of the subscription. |  |
| notificationDestination | Uri | O | 0..1 | Updated URI where the AC information notification should be delivered to. |  |
| acFltr | ACFilter | O | 0..1 | Filters to retrieve the information about particular ACs. |  |

##### 8.y.5.2.4 Type: ACFilter

Table 8.y.5.2.4-1: Definition of type ACFilter

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| acType | string | O | 0..1 | AC type or category to be matched. |  |
| ecspIds | array(string) | O | 1..N | The list of identifiers of the ECSPs associated with the EEC. |  |
| acIds | array(string) | O | 1..N | List of the identifiers of the AC(s) to be matched. |  |
| svcArea | LocationArea5G | O | 0..1 | EAS service area for identifying the UEs with matching expected geographical and topological location(s). |  |
| easKpi | EASServiceKPI | O | 0..1 | Service characteristics of the EAS for identifying the matched EEC and ACs. |  |
| prmRng | array(string) | O | 1..N | Parameter ranges to match the ACs profiles.  |  |
| opSchds | array(ScheduledCommunicationTime) | O | 1..N | The operation schedule of the EAS to be matched with operation schedule of the AC. |  |
| ueIds | array(Gpsi) | O | 1..N | List of UE identifiers hosting the AC. |  |
| locInfs | array(LocationInfo) | O | 1..N | List of location(s) of the UE(s) hosting the AC. |  |

##### 8.y.5.2.5 Type: ACInfoNotification

Table 8.y.5.2.5-1: Definition of type ACInfoNotification

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| subId | string | M | 1 | String identifying the individual AC information subscription for which the AC information notification is delivered. |  |
| acInfs | array(ACInformation) | M | 1..N | List of notifications that include the information of the ACs matching the filter criteria.  |  |

##### 8.y.5.2.6 Type: ACInformation

Table 8.y.5.2.6-1: Definition of type ACInformation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| acProfs | array(ACProfile) | M | 1 | List of ACs profile information. |  |
| ueIds | array(Gpsi) | O | 1..N | List of UE identifiers hosting the ACs. |  |
| ueLocInfs | array(LocationInfo) | O | 1..N | Location information of the UEs hosting the AC. |  |

#### 8.y.5.3 Simple data types and enumerations

None.

### 8.y.6 Error Handling

General error responses are defined in clause 7.7.

### 8.y.7 Feature negotiation

General feature negotiation procedures are defined in clause 7.8. Table 8.y.7-1 lists the supported features for Eees\_AppClientInformation API.

Table 8.y.7-1: Supported Features

|  |  |  |
| --- | --- | --- |
| **Feature number** | **Feature Name** | **Description** |
| 1 | Notification\_test\_event | Testing of notification connection is supported according to clause 7.6. |
| 2 | Notification\_websocket | The delivery of notifications over Websocket is supported according to clause 7.6. This feature requires that the Notification\_test\_event feature is also supported. |

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