**3GPP TSG-CT WG1 Meeting #137-eC1-225abc**

**E-Meeting, 18th – 26th August 2022 (was C1-224764)**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **24.558** | **CR** | **0009** | **rev** | **1** | **Current version:** | **17.0.0** |  |
|  |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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| --- |
|  |
| ***Title:***  | ” |
|  |  |
| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | CT1 |
|  |  |
| ***Work item code:*** | EDGEAPP |  | ***Date:*** | 2022-08-23 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-17 |
|  | *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)* |
|  |  |
| ***Reason for change:*** | According to stage 2 in TS 23.558, the EAS ID identifies a particular application and the definition of the EAS ID is out of scope of this specification.At stage 3 level (in CT protocols), the EAS ID(“easId”) is, quote: “the identifier of EAS” and it is defined as a string data type. This is not correct as it states that the EAS ID is the identifier of the EAS entity/instance, however the EAS ID is in fact the application identifier as stated by stage 2.Hence, there is need of changing the “identifier of EAS” to “application identifier of EAS. Also, a data type for “easId” should be defined at stage 3 level. The current use of “string” data type is not good enough for implementation and proper operation of the service. Mainly, as there is need of on using a data type which clearly shows to implementaters how to present a particular application. Based on how Internet works, it is propose to provide a data type with attributes of FQDN, URI, or other id (in TS 29.558).Note that for client-server communication, the most widely used application identifier is the FQDN or the URI. RFC 1034 describes the history and impetus of domain names. With the applications on the Internet getting more and more sophisticated, a general purpose name service seems required. |
|  |  |
| ***Summary of change:*** | 1. Change the “identifier of EAS” to “application identifier of EAS”; and2. define an appropiate data type for the “easId”. |
|  |  |
| ***Consequences if not approved:*** | The speciificaion is not aligned with stage 2 on the EAS ID and it also provides a definition of “easId” which is misleading and can lead to wrong implementations and misoperation. |
|  |  |
| ***Clauses affected:*** | 6.2.5.1, 6.2.5.2.4, 6.3.5.1, 6.3.5.2.7, 6.3.5.2.10, 6.3.5.2.13, 6.4.5.1, 6.4.5.2.2, 6.4.5.2.3, 6.4.5.2.5, 6.5.5.1, 6.5.5.2.2, 6.5.5.2.3, 6.5.5.2.4, 8.1.5.1, 8.1.5.2.9, A.2, A.2, A.4, A.5, B.1 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 29.558 CR 0015 |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* First Change \* \* \* \*

#### 6.2.5.1 General

This clause specifies the application data model supported by the Eees\_EECRegistration API.

Table 6.2.5.1-1 specifies the data types defined specifically for the Eees\_EECRegistration API service.

Table 6.2.5.1-1: Eees\_EECRegistration API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| EECRegistration | 6.2.5.2.2 | Describes the parameters to perform EEC Registration related operations |  |
| acProfile | 6.2.5.2.3 | Describes information about AC used to determine services and service characteristics required |  |
| EASDetail | 6.2.5.2.4 | Describes EAS along with service KPIs that serves the AC |  |
| acServiceKPIs | 6.2.5.2.5 | Describes the KPIs required by the AC in order to receive required services  |  |

Table 6.2.5.1-2 specifies data types re-used by the Eees\_EECRegistration API service.

Table 6.2.5.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| BitRate | 3GPP TS 29.571 [5] |  |  |
| DateTime | 3GPP TS 29.122 [3] |  |  |
| EndPoint | 3GPP TS 29.558 [4] |  |  |
| ScheduledCommunicationTime | 3GPP TS 29.122 [3] |  |  |
| LocationArea5G | 3GPP TS 29.122 [3] |  |  |
| Uinteger | 3GPP TS 29.571 [5] |  |  |
| DurationSec | 3GPP TS 29.122 [3] |  |  |
| SupportedFeatures | 3GPP TS 29.571 [5] |  |  |
| Gpsi | 3GPP TS 29.571 [5] |  |  |
| ACRScenario | 3GPP TS 29.558 [4] |  |  |
| EASId | 3GPP TS 29.558 [4] |  |  |

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

##### 6.2.5.2.4 Type: EasDetail

Table 6.2.5.2.2-1: Definition of type EasDetail

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| easId | EASId | M | 1 | The application identifier of the EAS |  |
| expectedSvcKPIs | ACServiceKPIs | O | 0..1 | Describes the KPIs expected in order for ACs to receive currently required services from the EAS |  |
| minimumReqSvcKPIs | ACServiceKPIs | O | 0..1 | Describes the minimum KPIs required in order for ACs to receive meaningful services from the EAS |  |

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

#### 6.3.5.1 General

This clause specifies the application data model supported by the Eees\_EASDiscovery API.

Table 6.3.5.1-1 specifies the data types defined specifically for the Eees\_EASDiscovery API service.

Table 6.3.5.1-1: Eees\_EASDiscovery API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| EasDiscoveryReq | 6.3.5.2.2 |  |  |
| EasDiscoveryResp | 6.3.5.2.3 |  |  |
| EasDiscoverySubscription | 6.3.5.2.4 |  |  |
| EasDiscoveryNotification | 6.3.5.2.5 |  |  |
| EasDiscoveryFilter | 6.3.5.2.6 |  |  |
| EasCharacteristics | 6.3.5.2.7 |  |  |
| DiscoveredEas | 6.3.5.2.8 |  |  |
| EasDynamicInfoFilter | 6.3.5.2.9 |  |  |

Table 6.3.5.1-2 specifies data types re-used by the Eees\_EASDiscovery API service.

Table 6.3.5.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| TimeWindow | 3GPP TS 29.122 [3] |  |  |
| DurationSec | 3GPP TS 29.122 [3] |  |  |
| LocationArea5G | 3GPP TS 29.122 [3] |  |  |
| ACProfile | clause 6.2.5.2.3 |  |  |
| LocationInfo | 3GPP TS 29.122 [3] |  |  |
| EndPoint | 3GPP TS 29.558 [4] |  |  |
| EASProfile | 3GPP TS 29.558 [4] |  |  |
| Dnai | 3GPP TS 29.571 [5] |  |  |
| RouteToLocation | 3GPP TS 29.571 [5] |  |  |
| Gpsi | 3GPP TS 29.571 [5] | Used to identify a UE.  |  |
| Uri | 3GPP TS 29.122 [3] |  |  |
| EASId | 3GPP TS 29.558 [4] |  |  |

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

##### 6.3.5.2.7 Type: EasCharacteristics

Table 6.3.5.2.7-1: Definition of type EasCharacteristics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| easId | EASId | O | 0..1 | The application identifier of the EAS |  |
| easProvId | string | O | 0..1 | EAS provider identifier |  |
| easType | string | O | 0..1 | EAS type |  |
| easSched | TimeWindow | O | 0..1 | EAS availability schedule |  |
| svcArea | LocationArea5G | O | 0..1 | Service availability area (geographical and topological) |  |
| easSvcContinuity | array(ACRScenario) | O | 0..1 | The ACR scenarios required by the EAS for service continuity. If this attribute is not present, then the EAS does not require to support service continuity. |  |
| svcPermLevel | string | O | 0..1 | Service permissions level |  |
| svcFeats | array(string) | O | 1..N | Service features |  |
| NOTE: Must include at least one optional IE |

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

##### 6.3.5.2.10 Type: EasDynamicInfoFilterData

Table 6.3.5.2.10-1: Definition of type EasDynamicInfoFilterData

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| easId | EASId | M | 1 | The application identifier of the EAS |  |
| easStatus | boolean | O | 0..1 | Notify if EAS status changed |  |
| easAcIds | boolean | O | 0..1 | Notify if list of AC identifiers changed |  |
| easDesc | boolean | O | 0..1 | Notify if EAS description changed |  |
| easPt | boolean | O | 0..1 | Notify if EAS endpoint changed |  |
| easFeature | boolean  | O | 0..1 | Notify if EAS feature changed |  |
| easSchedule | boolean | O | 0..1 | Notify if EAS schedule changed |  |
| svcArea | boolean | O | 0..1 | Notify if EAS service area changed |  |
| svcKpi | boolean | O | 0..1 | Notify if EAS KPIs changed |  |
| svcCont | boolean | O | 0..1 | Notify if EAS supported ACR changed |  |

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

##### 6.3.5.2.13 Type: RequestorId

Table 8.6.5.2.13-1: Definition of type RequestorId

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| EesId | string | C | 0..1 | The identifier of the EES (e.g. S-EES). |  |
| EasId | EASId | C | 0..1 | The application identifier of the EAS (e.g. S-EAS). |  |
| eecId | string | C | 0..1 | The identifier of the EEC. |  |
| NOTE: Either the "eecId" attribute, the "EesId" attribute or the "EasId" attribute shall be provided, they are mutually exclusive. |

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

#### 6.4.5.1 General

This clause specifies the application data model supported by the Eees\_ACREvents API.

Table 6.4.5.1-1 specifies the data types defined specifically for the Eees\_ACREvents API service.

Table 6.4.5.1-1: Eees\_ACREvents API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| ACREventsSubscription | 6.4.5.2.2 |  |  |
| ACRInfoNotification | 6.4.5.2.3 |  |  |
|  |  |  |  |
| ACREventIDs | 6.4.5.3.3 |  |  |

Table 6.4.5.1-2 specifies data types re-used by the Eees\_ACREvents API service.

Table 6.4.5.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| DateTime | 3GPP TS 29.122 [3] |  |  |
| Uri | 3GPP TS 29.122 [3] |  |  |
| WebsockNotifConfig | 3GPP TS 29.122 [3] |  |  |
| SupportedFeatures | 3GPP TS 29.571 [5] |  |  |
| EDNConfigInfo | Clause 8.1.5.2.7 |  |  |
| DiscoveredEas | Clause 6.3.5.2.8 |  |  |
| ImplicitRegDetail | 3GPP TS 29.558 [4] |  |  |
| EASId | 3GPP TS 29.558 [4] |  |  |

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

##### 6.4.5.2.2 Type: ACREventsSubscription

Table 6.4.5.2.2-1: ACREventsSubscription

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| eecId | string | M | 0..1 | Represents a unique identifier of the EEC. |  |
| ueId | Gpsi | O | 0..1 | Represents the identifier of the UE. |  |
| expTime | DateTime | O | 0..1 | Indicates the expiration time of the subscription. If the expiration time is not present, then it indicates that the EEC subscription never expires. |  |
| easIds | array(EASId) | M | 1..N | The list of application identifiers of the EASs |  |
| acIds | array(string) | O | 1..N | The list of identifier of the AC(s) (NOTE) |  |
| eventIds | ACREventIDs | M | 1 | Specifies the events for which EEC is subscribing. |  |
| notificationDestination | Uri | M | 1 | URI where the ACR Information Notification should be delivered to.  |  |
| requestTestNotification | boolean | O | 0..1 | Set to true by Subscriber to request the ECS to send a test notification as defined in clause 7.6 of 3GPP TS 29.558 [4]. 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 of 3GPP TS 29.558 [4]. | Notification\_websocket |
| suppFeat | SupportedFeatures | O | 0..1 | Used to negotiate the supported optional features of the API as described in clause 7.8 of 3GPP TS 29.558 [4].This attribute shall be provided in the HTTP POST request and in the response of successful resource creation. |  |
| NOTE: If acIds attribute is not included, it implies that the subscription corresponds to all ACs that can be served by the EAS(s) included this message. |

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

##### 6.4.5.2.3 Type: ACRInfoNotification

Table 6.4.5.2.3-1: ACRInfoNotification

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| subId | string | M | 1 | String identifying the Individual ACR events subscription for which the ACT Information notification is delivered. |  |
| easId | EASId | M | 1 | The application identifier of the EASs  |  |
| eventId | ACREventIDs | M | 1 | Specifies the events for which notification is sent |  |
| acId | string | O | 0..1 | Contains the identifier of the AC. |  |
| trgtInfo (NOTE 1) | TargetInfo | O | 0..1 | Details of the selected T-EAS and the T-EES. |  |
| acrRes (NOTE 2) | boolean | O | 0..1 | Indicates whether the ACR is successful or failure |  |
| failReason (NOTE 3) | string | O | 0..1 | Indicates the cause information for the failure |  |
| eecCtxtReloc (NOTE 4) | EecCtxtRelocStatus | O | 0..1 | Specifies the registration id and expiry time of the registration. |  |
|  |  |  |  |  |  |
| NOTE 1: This attribute shall be included when Event ID indicates 'TARGET\_INFORMATION' eventNOTE 2: This attribute shall be included when Event ID indicates 'ACR\_COMPLETE' eventNOTE 3: This attribute shall be included when the ACRRes attribute indicates failure.NOTE 4: This attribute shall be included when eventId indicates 'ACR\_COMPLETE' event and EEC context relocation was attempted. |

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

##### 6.4.5.2.5 Type: ACREventsSubscriptionPatch

Table 6.4.5.2.5-1: ACREventsSubscriptionPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| expTime | DateTime | O | 0..1 | Indicates the expiration time of the subscription. If the expiration time is not present, then it indicates that the EEC subscription never expires. |  |
| easIds | array(EASId) | O | 1..N | The list of application identifiers of the EASs |  |
| eventIds | ACREventIDs | O | 0..1 | Specifies the events for which EEC is subscribing. |  |
| notificationDestination | Uri | O | 0..1 | URI where the ACR Information Notification should be delivered to. This attribute shall be present in HTTP POST message to EES. |  |

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

#### 6.5.5.1 General

This clause specifies the application data model supported by the Eees\_AppContextRelocation API.

Table 6.5.5.1-1 specifies the data types defined specifically for the Eees\_AppContextRelocation API service.

Table 6.5.5.1-1: Eees\_AppContextRelocation API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| AcrDecReq | 6.5.5.2.4 |  |  |
| AcrDetermReq | 6.5.5.2.2 |  |  |
| AcrInitReq | 6.5.5.2.3 |  |  |
| EecCtxtReloc | 6.5.5.2.5 |  |  |

Table 6.5.5.1-2 specifies data types re-used by the Eees\_AppContextRelocation API service from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Eees\_AppContextRelocation.

Table 6.5.5.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| RouteToLocation | 3GPP TS 29.571 [5] | Represent the N6 traffic routing information and/or routing profile ID for a DNAI. |  |
| EndPoint | 3GPP TS 29.558 [4] | Represents the endpoint information of an EAS. |  |
| Gpsi | 3GPP TS 29.571 [5] | Represents a GPSI. |  |
| EASId | 3GPP TS 29.558 [4] |  |  |

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

##### 6.5.5.2.2 Type: AcrDetermReq

Table 6.5.5.2.2-1: Definition of type AcrDetermReq

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| requestorId | string | M | 1 | Contains the identifier of the EEC or the EAS that is sending the request. |  |
| easId | EASId | O | 0..1 | Contains the application identifier of the EAS. |  |
| sEasEndpoint | EndPoint | M | 1 | Contains the endpoint information of the selected S-EAS. |  |
| ueId | Gpsi | M | 1 | Contains the identifier of the concerned UE. |  |
| acId | string | O | 0..1 | Contains the identifier of the AC. |  |

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

##### 6.5.5.2.3 Type: AcrInitReq

Table 6.5.5.2.3-1: Definition of type AcrInitReq

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| requestorId | string | M | 1 | Contains the identifier of the EEC that is sending the request. |  |
| easId | EASId | O | 0..1 | Contains the application identifier of the EAS. |  |
| ueId | Gpsi | M | 1 | Contains the identifier of the concerned UE. |  |
| acId | string | O | 0..1 | Contains the identifier of the AC. |  |
| tEasEndpoint | EndPoint | M | 1 | Contains the endpoint information of the T-EAS. |  |
| sEasEndpoint | EndPoint | C | 0..1 | Contains the endpoint information of the S-EAS.This attribute shall be provided when the "easNotifInd" attribute is set to "true" or when the "prevEasNotifInd" attribute is present and set to "true". |  |
| prevTEasEndpoint | EndPoint | C | 0..1 | Contains the endpoint information of the previous T-EAS.This attribute shall be provided when the EEC re-sends the ACR request to indicate that a previous ACR is to be cancelled. |  |
| routeReq | RouteToLocation | O | 0..1 | Contains the T-EAS's DNAI information and the corresponding N6 traffic routing information and/or routing profile ID. |  |
| easNotifInd | boolean | C | 1 | Indicates whether the EAS should be notified about the need for ACR or ACR cancellation."true": Notification required."false" (default): Notification not required. |  |
| prevEasNotifInd | boolean | C | 0..1 | Indicates whether the EAS should be notified about ACR cancellation."true": Notification required."false" (default): Notification not required.This attribute shall be provided when the EEC re-sends the ACR request to indicate that a previous ACR is to be cancelled. |  |
| eecCtxtReloc | EecCtxtReloc | O | 0..1 | Contains EEC context relocation information. |  |

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

##### 6.5.5.2.4 Type: AcrDecReq

Table 6.5.5.2.4-1: Definition of type AcrDecReq

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| requestorId | string | M | 1 | Contains the identifier of the EAS that is sending the request. |  |
| ueId | Gpsi | M | 1 | Contains the identifier of the concerned UE. |  |
| acId | string | O | 0..1 | Contains the identifier of the AC. |  |
| tEasId | EASId | M | 1 | Contains the application identifier of the selected target EAS. |  |
| tEasEndpoint | EndPoint | M | 1 | Contains the endpoint information of the selected target EAS. |  |

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

#### 8.1.5.1 General

This clause specifies the application data model supported by the API. Data types listed in clause 7.2 of 3GPP TS 29.558 [4] apply to this API.

Table 8.1.5.1-1 specifies the data types defined specifically for the Eecs\_ServiceProvisioning API service.

Table 8.1.5.1-1: Eecs\_ServiceProvisioning API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| ECSServProvReq | 8.1.5.2.2 |  |  |
| ECSServProvResp | 8.1.5.2.3 |  |  |
| ECSServProvSubscription | 8.1.5.2.4 | Represents the service provisioning subscription. |  |
| ConnectivityInfo | 8.1.5.2.5 |  |  |
| ServProvNotification | 8.1.5.2.6 | Service provisioning information notification from ECS to EEC.  |  |
| EDNConfigInfo | 8.1.5.2.7 |  |  |
| EDNConInfo | 8.1.5.2.8 |  |  |
| EESInfo | 8.1.5.2.9 |  |  |

Table 8.1.5.1-2 specifies data types re-used by the Eecs\_ServiceProvisioning API service.

Table 8.1.5.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| PlmnId | 3GPP TS 29.571 [5] |  |  |
| ACProfile | clause 6.2.5.2.3 |  |  |
| DateTime | 3GPP TS 29.122 [3] |  |  |
| Uri | 3GPP TS 29.122 [3] |  |  |
| SupportedFeatures | 3GPP TS 29.571 [5] | Used to negotiate the applicability of optional features. |  |
| Snssai | 3GPP TS 29.571 [5] |  |  |
| LocationArea5G | 3GPP TS 29.122 [3] |  |  |
| EndPoint | 3GPP TS 29.558 [4] |  |  |
| Dnai | 3GPP TS 29.571 [5] |  |  |
| LocationInfo | 3GPP TS 29.122 [3] | The location information related to the UE. |  |
| Dnn | 3GPP TS 29.571 [5] |  |  |
| Gpsi | 3GPP TS 29.571 [5] | Used to identify the UE.  |  |
| ACRScenario | 3GPP TS 29.558 [4] |  |  |
| EASId | 3GPP TS 29.558 [4] |  |  |

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

##### 8.1.5.2.9 Type: EESInfo

Table 8.1.5.2.9-1: Definition of type EESInfo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| eesId | string | M | 1 | The identifier of the EES |  |
| endPt | EndPoint | M | 1 | Endpoint information (e.g. URI, FQDN, IP address) used to communicate with the EES. This information is provided to the EEC to connect to the EES.  |  |
| easIds | array(EASId) | O | 1..N | The list of application identifiers of the Edge Application Servers registered with the EES.  |  |
| ecspInfo | string | O | 0..1 | String representing the EES Provider (such as ECSP Information) |  |
| svcArea | LocationArea5G | O | 0..1 | The list of geographical and topological areas that the EES serves. EECs in the UE that are outside the area shall not be served. |  |
| dnais | array(Dnai) | O | 0..1 | Represents list of Data network access identifier |  |
| eesSvcContSupp | array(ACRScenario) | O | 0..1 | The ACR scenarios supported by the EES for service continuity. If this attribute is not present, then the EEC does not support service continuity. |  |
| eecRegConf | boolean | M | 1 | Indicates whether the EEC is required to register on the EES to use edge services or not |  |

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

# A.2 Eees\_EECRegistration

openapi: 3.0.0

info:

 title: Eees\_EECRegistration

 version: "1.0.0"

 description: |

 API for EEC registration.

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externalDocs:

 description: >

 3GPP TS 24.558 V17.0.0 Enabling Edge Applications; Protocol specification.

 url: 'https://www.3gpp.org/ftp/Specs/archive/24\_series/24.558/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eees-eecregistration/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.1 of 3GPP TS 24.558

paths:

 /registrations:

 post:

 description: Create a new EEC registration at the EES.

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EECRegistration'

 responses:

 '201':

 description: Created (EEC information is registered successfully at EES).

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EECRegistration'

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /registrations/{registrationId}:

 put:

 description: Update an existing EEC registration a the EES.

 parameters:

 - name: registrationId

 in: path

 description: Identifies an individual EEC registration

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to replace the existing registration

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EECRegistration'

 responses:

 '200':

 description: OK (An individual EEC registration resource updated successfully).

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EECRegistration'

 '204':

 description: >

 No Content (An individual EEC registration resource updated successfully).

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 delete:

 description: Remove an existing ECC registration at EES.

 parameters:

 - name: registrationId

 in: path

 description: Identifies an individual EEC registration

 required: true

 schema:

 type: string

 responses:

 '204':

 description: >

 No Content (An individual EEC registration resource deleted successfully).

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 patch:

 description: partially update an existing EEC registration a the EES.

 parameters:

 - name: registrationId

 in: path

 description: Identifies an individual EEC registration

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to replace the existing registration

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EECRegistrationPatch'

 responses:

 '200':

 description: OK (An individual EEC registration resource updated successfully).

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EECRegistration'

 '204':

 description: >

 No Content (An individual EEC registration resource updated successfully).

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 EECRegistration:

 description: Describes the parameters to perform EEC Registration related operations.

 type: object

 properties:

 eecId:

 type: string

 description: Represents a unique identifier of the EEC.

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 acProfs:

 type: array

 items:

 $ref: '#/components/schemas/ACProfile'

 description: Profiles of ACs for which the EEC provides edge enabling services.

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 eecSvcContSupp:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: Profiles of ACs for which the EEC provides edge enabling services.

 eecCntxId:

 type: string

 description: Identifier of the EEC context obtained from a previous registration.

 srcEesId:

 type: string

 description: Identifier of the EES that provided EEC context ID.

 endPt:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 unfulfilledAcProfs:

 $ref: '#/components/schemas/UnfulfilledAcProfile'

 required:

 - eecId

 ACProfile:

 description: ECS service provisioning response information.

 type: object

 properties:

 acId:

 type: string

 description: Identity of the AC.

 acType:

 type: string

 description: The category or type of AC.

 prefEcsps:

 type: array

 items:

 type: string

 description: Indicates to the ECS which ECSPs are preferred for the AC.

 acSchedule:

 $ref: 'TS29122\_CpProvisioning.yaml#/components/schemas/ScheduledCommunicationTime'

 expAcGeoServArea:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 acSvcContSupp:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: Profiles of ACs for which the EEC provides edge enabling services.

 eass:

 type: array

 items:

 $ref: '#/components/schemas/EasDetail'

 minItems: 1

 description: List of EAS information.

 required:

 - acId

 EasDetail:

 description: EAS details.

 type: object

 properties:

 easId:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 description: Application identifier of the EAS.

 expectedSvcKPIs:

 $ref: '#/components/schemas/ACServiceKPIs'

 minimumReqSvcKPIs:

 $ref: '#/components/schemas/ACServiceKPIs'

 required:

 - easId

 ACServiceKPIs:

 description: EAS details.

 type: object

 properties:

 connBand:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/BitRate'

 reqRate:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

 respTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DurationSec'

 avail:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uinteger'

 reqComp:

 type: string

 description: The compute resources required by the AC.

 reqGrapComp:

 type: string

 description: The graphical compute resources required by the AC.

 reqMem:

 type: string

 description: The memory resources required by the AC.

 reqStrg:

 type: string

 description: The storage resources required by the AC.

 EECRegistrationPatch:

 description: Describes the parameters to perform EEC Registration update.

 type: object

 properties:

 acProfs:

 type: array

 items:

 $ref: '#/components/schemas/ACProfile'

 description: Profiles of ACs for which the EEC provides edge enabling services.

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 unfulfilledAcProfs:

 $ref: '#/components/schemas/UnfulfilledAcProfile'

 UnfulfilledAcProfile:

 description: Desrcibes AC Profile ID and reason sent by EES in EEC Register response.

 type: object

 properties:

 acId:

 type: string

 description: The AC ID of a AC profile.

 reason:

 $ref: '#/components/schemas/UnfulfillACProfRsn'

 UnfulfillACProfRsn:

 anyOf:

 - type: string

 enum:

 - EAS\_NOT\_AVAILABLE

 - REQ\_UNFULFILLED

 description: represents reason for unfulfilled AC profile requirements.

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

# A.3 Eees\_EASDiscovery API

openapi: 3.0.0

info:

 title: Eees\_EASDiscovery

 description: |

 API for EAS Discovery.

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 version: "1.0.0"

externalDocs:

 description: >

 3GPP TS 24.558 V17.0.0 Enabling Edge Applications; Protocol specification.

 url: https://www.3gpp.org/ftp/Specs/archive/24\_series/24.558/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eees-easdiscovery/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.1 of 3GPP TS 24.558

paths:

 /subscriptions:

 post:

 description: Creates a new individual EAS discovery subscription.

 tags:

 - EAS Discovery Subscriptions

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoverySubscription'

 responses:

 '201':

 description: >

 Created. A new Individual EAS Discovery Subscription resource was successfully

 created.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoverySubscription'

 headers:

 Location:

 description: Contains the URI of the newly created resource.

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 callbacks:

 notificationDestination:

 '{request.body#/notificationDestination}':

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoveryNotification'

 responses:

 '204':

 description: No Content (The receipt of the Notification is acknowledged)

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /subscriptions/{subscriptionId}:

 put:

 description: >

 Updates an existing individual EAS discovery subscription identified by the subscriptionId.

 tags:

 - Individual EAS Discovery Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual EAS discovery subscription resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to replace the existing subscription

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoverySubscription'

 responses:

 '200':

 description: >

 OK. The individual EAS discovery subscription resource was updated successfully.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoverySubscription'

 '204':

 description: No Content (updated successfully).

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 delete:

 description: >

 Deletes an existing individual EAS discovery subscription identified by the subscriptionId.

 tags:

 - Individual EAS Discovery Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual EAS discovery subscription resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: >

 An individual EAS discovery subscription resource deleted successfully.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 patch:

 description: >

 Partial update an existing EAS Discovery Subscription resource identified by a

 subscriptionId.

 tags:

 - Individual EAS Discovery Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual EAS discovery subscription resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to replace the existing subscription

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoverySubscriptionPatch'

 responses:

 '200':

 description: >

 OK (An individual EAS discovery subscription resource updated successfully)

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoverySubscription'

 '204':

 description: No Content (modified successfully).

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /eas-profiles/request-discovery:

 post:

 description: Provides EAS information requested by the service consumer (i.e. EEC, EAS or EES).

 tags:

 - EAS Profiles

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoveryReq'

 responses:

 '200':

 description: >

 OK (The requested EAS discovery information was returned successfully).

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/EasDiscoveryResp'

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 EasDiscoveryReq:

 description: ECS service provisioning request information.

 type: object

 properties:

 requestorId:

 $ref: '#/components/schemas/RequestorId'

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 easDiscoveryFilter:

 $ref: '#/components/schemas/EasDiscoveryFilter'

 eecSvcContinuity:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: Indicates if the EEC supports service continuity or not, also indicates which ACR scenarios are supported by the EEC.

 eesSvcContinuity:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: Indicates if the EEC supports service continuity or not, also indicates which ACR scenarios are supported by the EEC.

 easSvcContinuity:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: Indicates if the EEC supports service continuity or not, also indicates which ACR scenarios are supported by the EEC.

 locInf:

 $ref: 'TS29122\_MonitoringEvent.yaml#/components/schemas/LocationInfo'

 easTDnai:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnai'

 required:

 - requestorId

 EasDiscoveryResp:

 description: ECS discovery response.

 type: object

 properties:

 discoveredEas:

 type: array

 items:

 $ref: '#/components/schemas/DiscoveredEas'

 description: List of EAS discovery information.

 required:

 - discoveredEas

 EasDiscoverySubscription:

 description: Represents an Individual EAS Discovery Subscription resource.

 type: object

 properties:

 eecId:

 type: string

 description: Represents a unique identifier of the EEC.

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 easEventType:

 $ref: '#/components/schemas/EASDiscEventIDs'

 easDiscoveryFilter:

 $ref: '#/components/schemas/EasDiscoveryFilter'

 easDynInfoFilter:

 $ref: '#/components/schemas/EasDynamicInfoFilter'

 easSvcContinuity:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: Indicates if the EEC supports service continuity or not, also indicates which ACR scenarios are supported by the EEC.

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 notificationDestination:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 requestTestNotification:

 type: boolean

 description: Set to true by Subscriber to request the ECS to send a test notification. Set to false or omitted otherwise.

 websockNotifConfig:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/WebsockNotifConfig'

 suppFeat:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

 required:

 - eecId

 - easEventType

 EasDiscoveryNotification:

 description: Notification of EAS discovery information.

 type: object

 properties:

 subId:

 type: string

 description: Identifier of the individual service provisioning subscription for which the service provisioning notification is delivered.

 eventType:

 $ref: '#/components/schemas/EASDiscEventIDs'

 discoveredEas:

 type: array

 items:

 $ref: '#/components/schemas/DiscoveredEas'

 minItems: 1

 description: List of EAS discovery information.

 required:

 - subId

 - eventType

 - discoveredEas

 EasDiscoveryFilter:

 description: Represents the EAS characteristics.

 type: object

 properties:

 acChars:

 type: array

 items:

 $ref: '#/components/schemas/ACCharacteristics'

 minItems: 1

 description: AC description for which an EAS is needed.

 easChars:

 type: array

 items:

 $ref: '#/components/schemas/EasCharacteristics'

 minItems: 1

 description: Required EAS chararcteristics.

 EasCharacteristics:

 description: Represents the EAS chararcteristics.

 type: object

 properties:

 easId:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 description: EAS application identifier.

 easProvId:

 type: string

 description: EAS provider identifier.

 easType:

 type: string

 description: EAS type.

 easSched:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/TimeWindow'

 svcArea:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 easSvcContinuity:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: Indicates if the EEC supports service continuity or not, also indicates which ACR scenarios are supported by the EEC.

 svcPermLevel:

 type: string

 description: Service permissions level.

 svcFeats:

 type: array

 items:

 type: string

 minItems: 1

 description: Service features.

 DiscoveredEas:

 description: Represents an EAS discovery information.

 type: object

 properties:

 eass:

 type: array

 items:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASProfile'

 minItems: 1

 description: Contains the list of EAS matching the discovery request filters

 lifeTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 required:

 - eass

 EasDynamicInfoFilter:

 description: Represents EAS dynamic information changes filter.

 type: object

 properties:

 dynInfoFilter:

 type: array

 items:

 $ref: '#/components/schemas/EasDynamicInfoFilterData'

 minItems: 1

 description: List of EAS dynamic information required by the EEC per EAS.

 required:

 - dynInfoFilter

 EasDynamicInfoFilterData:

 description: Represents an EAS dynamic information.

 type: object

 properties:

 eecId:

 type: string

 description: Represents a unique identifier of the EEC.

 easStatus:

 type: boolean

 description: Notify if EAS status changed.

 easAcIds:

 type: boolean

 description: Notify if list of AC identifiers changed.

 easDesc:

 type: boolean

 description: Notify if EAS description changed.

 easPt:

 type: boolean

 description: Notify if EAS endpoint changed.

 easFeature:

 type: boolean

 description: NotiNotify if EAS feature changed.

 easSchedule:

 type: boolean

 description: Notify if EAS schedule changed.

 svcArea:

 type: boolean

 description: Notify if EAS service area changed.

 svcKpi:

 type: boolean

 description: Notify if EAS KPIs changed.

 svcCont:

 type: boolean

 description: Notify if EAS supported ACR changed.

 required:

 - eecId

 ACCharacteristics:

 description: Represents EAS dynamic information changes filter.

 type: object

 properties:

 acProf:

 $ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

 required:

 - acProf

 EASDiscEventIDs:

 anyOf:

 - type: string

 enum:

 - EAS\_AVAILABILITY\_CHANGE

 - EAS\_DYNAMIC\_INFO\_CHANGE

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: >

 Possible values are

 - EAS\_AVAILABILITY\_CHANGE: Represents the EAS availability change event.

 - EAS\_DYNAMIC\_INFO\_CHANGE: Represents the EAS dynamic information change event.

 EasDiscoverySubscriptionPatch:

 description: Represents an Individual EAS Discovery Subscription resource.

 type: object

 properties:

 easDiscoveryFilter:

 $ref: '#/components/schemas/EasDiscoveryFilter'

 easDynInfoFilter:

 $ref: '#/components/schemas/EasDynamicInfoFilter'

 easSvcContinuity:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: Indicates if the EEC supports service continuity or not, also indicates which ACR scenarios are supported by the EEC.

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 RequestorId:

 description: Represents identifier of the requestor.

 type: object

 properties:

 eesId:

 type: string

 easId:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 eecId:

 type: string

 oneOf:

 - required: [eesId]

 - required: [easId]

 - required: [eecId]

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

# A.4 Eees\_ACREvents API

openapi: 3.0.0

info:

 title: Eees\_ACREvents

 version: "1.0.0"

 description: |

 API for ACR events subscription and notification.

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externalDocs:

 description: >

 3GPP TS 24.558 V17.0.0 Enabling Edge Applications; Protocol specification.

 url: 'https://www.3gpp.org/ftp/Specs/archive/24\_series/24.558/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eees-acrevents/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.1 of 3GPP TS 24.558

paths:

 /subscriptions:

 post:

 description: Creates a new individual ACR events subscription.

 operationId: CreateACREventsSubscripton

 tags:

 - ACR events subscription (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ACREventsSubscription'

 responses:

 '201':

 description: Individual ACR events subscription resource created successfully.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ACREventsSubscription'

 headers:

 Location:

 description: Contains the URI of the newly created resource

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 callbacks:

 notificationDestination:

 '{request.body#/notificationDestination}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ACRInfoNotification'

 responses:

 '204':

 description: No Content (The receipt of the Notification is acknowledged).

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /subscriptions/{subscriptionId}:

 put:

 description: >

 Updates an existing individual ACR events subscription identified by the subscriptionId.

 operationId: UpdateACREventsSubscription

 tags:

 - Individual ACR Events Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual ACR Events subscription resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to replace the existing subscription

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ACREventsSubscription'

 responses:

 '200':

 description: >

 OK (An individual ACR Events subscription resource updated successfully).

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ACREventsSubscription'

 '204':

 description: No Content (updated successfully).

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 delete:

 description: >

 Deletes an existing individual ACR events subscription identified by the subscriptionId.

 operationId: DeleteACREventsSubscription

 tags:

 - Individual ACR Events Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual ACR Events subscription resource.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: An individual ACR Events subscription resource deleted successfully.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 patch:

 description: >

 Partially modifyan existing individual ACR events subscription identified by the subscriptionId.

 operationId: ModifyACREventsSubscription

 tags:

 - Individual ACR Events Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual ACR Events subscription resource.

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to replace the existing subscription

 required: true

 content:

 application/merge-patch+json:

 schema:

 $ref: '#/components/schemas/ACREventsSubscriptionPatch'

 responses:

 '200':

 description: >

 OK (An individual ACR Events subscription resource updated successfully).

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ACREventsSubscription'

 '204':

 description: No Content (successful notification).

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 ACREventsSubscription:

 description: ACE Events subscription request.

 type: object

 properties:

 eecId:

 type: string

 description: Represents a unique identifier of the EEC.

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 easIds:

 type: array

 items:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 minItems: 1

 description: The list of application identifiers of the EASs.

 eventIds:

 $ref: '#/components/schemas/ACREventIDs'

 notificationDestination:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 requestTestNotification:

 type: boolean

 description: >

 Set to true by Subscriber to request the ECS to send a test notification. Set to

 false or omitted otherwise.

 websockNotifConfig:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/WebsockNotifConfig'

 suppFeat:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

 required:

 - eecId

 - easIds

 - eventIds

 - notificationDestination

 ACRInfoNotification:

 description: Notification of ACR events information.

 type: object

 properties:

 subId:

 type: string

 description: >

 String identifying the Individual ACR events subscription for which the ACT

 Information notification is delivered.

 easId:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 description: Application identifier of the EAS.

 eventId:

 $ref: '#/components/schemas/ACREventIDs'

 trgtInfo:

 $ref: '#/components/schemas/TargetInfo'

 acrRes:

 type: boolean

 description: Indicates whether the ACR is successful or failure.

 failReason :

 type: string

 description: Indicates the cause information for the failure.

 eecCtxtReloc:

 $ref: '#/components/schemas/EecCtxtRelocStatus'

 required:

 - subId

 - easId

 - eventId

 TargetInfo:

 description: Details of the selected T-EAS and the T-EES.

 type: object

 properties:

 trgetEASInfo:

 $ref: 'TS24558\_Eees\_EASDiscovery.yaml#/components/schemas/DiscoveredEas'

 trgetEESInfo:

 $ref: 'TS24558\_Eecs\_ServiceProvisioning.yaml#/components/schemas/EDNConfigInfo'

 ACREventsSubscriptionPatch:

 description: An individual ACR events subscription resource to be updated.

 type: object

 properties:

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 easIds:

 type: array

 items:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 minItems: 1

 description: The list of application identifiers of the EASs.

 eventIds:

 $ref: '#/components/schemas/ACREventIDs'

 notificationDestination:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 ACREventIDs:

 anyOf:

 - type: string

 enum:

 - TARGET\_INFORMATION

 - ACR\_COMPLETE

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: >

 Possible values are

 - TARGET\_INFORMATION: Represents the target information event.

 - ACR\_COMPLETE: Represents the ACR complete event.

 EecCtxtRelocStatus:

 description: Indicates the registration id and expiry time of the registration.

 type: object

 properties:

 implReg:

 $ref: 'TS29558\_Eees\_EECContextRelocation.yaml#/components/schemas/ImplicitRegDetails'

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

# A.5 Eees\_AppContextRelocation API

openapi: 3.0.0

info:

 title: Eees Application Context Relocation Service

 version: "1.0.0"

 description: |

 Eees Application Context Relocation Service.

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externalDocs:

 description: >

 3GPP TS 24.558 V17.0.0; Enabling Edge Applications; Protocol specification; Stage 3.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/24.558/'

servers:

 - url: '{apiRoot}/eees-appctxtreloc/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

 - {}

 - oAuth2ClientCredentials:

 - eees-appctxtreloc

paths:

 /determine:

 post:

 summary: Request ACR determination.

 operationId: Determine

 tags:

 - Determine ACR

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/AcrDetermReq'

 responses:

 '204':

 description: No Content.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /initiate:

 post:

 summary: Request the initiation of ACR.

 operationId: Initiate

 tags:

 - Initiate ACR

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/AcrInitReq'

 responses:

 '204':

 description: No Content.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /declare:

 post:

 summary: Informs about the selected target EAS and provides the associated information.

 operationId: Declare

 tags:

 - Declare selected target EAS

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/AcrDecReq'

 responses:

 '204':

 description: >

 No Content. The selected target EAS information is successfully received.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{nrfApiRoot}/oauth2/token'

 scopes:

 eees-appctxtreloc: Access to the Eees\_AppContextRelocation API

 schemas:

 AcrDetermReq:

 description: Represents the parameters to request ACR with action determination.

 type: object

 properties:

 requestorId:

 type: string

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 acId:

 type: string

 easId:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 sEasEndpoint:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 required:

 - requestorId

 - sEasEndpoint

 AcrInitReq:

 description: Represents the parameters to request ACR with action initiation.

 type: object

 properties:

 requestorId:

 type: string

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 acId:

 type: string

 easId:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 tEasEndpoint:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 sEasEndpoint:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 prevTEasEndpoint:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 routeReq:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/RouteToLocation'

 easNotifInd:

 type: boolean

 default: false

 prevEasNotifInd:

 type: boolean

 default: false

 eecCtxtReloc:

 $ref: '#/components/schemas/EecCtxtReloc'

 required:

 - requestorId

 - tEasEndpoint

 - easNotifInd

 AcrDecReq:

 description: >

 Represents the parameters to inform about the selected target EAS and provide the

 associated information.

 type: object

 properties:

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 acId:

 type: string

 tEasId:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 tEasEndpoint:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 required:

 - ueId

 - tEasId

 - tEasEndpoint

 EecCtxtReloc:

 description: Represents EEC Context relocation information.

 type: object

 properties:

 eecCtxtId:

 type: string

 sEesId:

 type: string

 sEecEndpoint:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 tEesId:

 type: string

 tEecEndpoint:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 required:

 - eecCtxtId

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

# B.1 Eecs\_ServiceProvisioning

openapi: 3.0.0

info:

 title: Eecs\_ServiceProvisioning

 version: "1.0.0"

 description: |

 API for ECS Service Provisioning.

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externalDocs:

 description: 3GPP TS 24.558 V17.0.0 Enabling Edge Applications; Protocol specification.

 url: https://www.3gpp.org/ftp/Specs/archive/24\_series/24.558/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eecs-serviceprovisioning/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558

paths:

 /subscriptions:

 post:

 description: >

 Creates a new subscription in ECS in order to be notified of provisioning data

 changes of interest.

 tags:

 - Service Provisioning Subscriptions

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ECSServProvSubscription'

 callbacks:

 notificationDestination:

 '{request.body#/notificationDestination}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvNotification'

 responses:

 '204':

 description: No Content (successful notification)

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 responses:

 '201':

 description: >

 Individual ECS Service Provisioning Subscription resource created successfully.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ECSServProvSubscription'

 headers:

 Location:

 description: 'Contains the URI of the newly created resource'

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /subscriptions/{subscriptionId}:

 put:

 description: >

 Updates an existing individual service provisioning subscription identified

 by the subscriptionId.

 tags:

 - Individual Service Provisioning Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual service provisioning subscription

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to replace the existing subscription

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ECSServProvSubscription'

 responses:

 '200':

 description: >

 OK (The individual service provisioning subscription matching the subscriptionId

 was modified successfully).

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ECSServProvSubscription'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 delete:

 description: >

 Deletes an existing individual service provisioning subscription identified by

 the subscriptionId.

 tags:

 - Individual Service Provisioning Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual service provisioning subscription

 required: true

 schema:

 type: string

 responses:

 '204':

 description: >

 The individual service provisioning subscription matching the subscriptionId is

 deleted.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 patch:

 description: >

 Partially updates an existing individual service provisioning subscription identified

 by the subscriptionId.

 tags:

 - Individual Service Provisioning Subscription

 parameters:

 - name: subscriptionId

 in: path

 description: Identifies an individual service provisioning subscription

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to replace the existing subscription

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ECSServProvSubscriptionPatch'

 responses:

 '200':

 description: >

 OK (The individual service provisioning subscription matching the subscriptionId

 was modified successfully)

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ECSServProvSubscription'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /request:

 post:

 summary: Request service provisioning information.

 operationId: RequestServProv

 tags:

 - Request Service Provisioning

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ECSServProvReq'

 responses:

 '200':

 description: >

 OK (The requested service provisioning information was returned successfully).

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ECSServProvResp'

 '204':

 description: >

 No Content (the requested service provisioning information does not exist).

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 ECSServProvReq:

 description: ECS service provisioning request information.

 type: object

 properties:

 eecId:

 type: string

 description: Represents a unique identifier of the EEC.

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 acProfs:

 type: array

 items:

 $ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

 description: Information about services the EEC wants to connect to.

 eecSvcContSupp:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: >

 Indicates if the EEC supports service continuity or not, also indicates which

 ACR scenarios are supported by the EEC.

 connInfo:

 type: array

 items:

 $ref: '#/components/schemas/ConnectivityInfo'

 description: List of connectivity information for the UE.

 locInf:

 $ref: 'TS29122\_MonitoringEvent.yaml#/components/schemas/LocationInfo'

 required:

 - eecId

 ECSServProvResp:

 description: ECS service provisioning response information.

 type: object

 properties:

 ednCnfgInfo:

 type: array

 items:

 $ref: '#/components/schemas/EDNConfigInfo'

 minItems: 1

 description: List of EDN configuration information.

 required:

 - ednCnfgInfo

 ECSServProvSubscription:

 description: Represents an individual service provisioning subscription resource.

 type: object

 properties:

 eecId:

 type: string

 description: Represents a unique identifier of the EEC.

 ueId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

 acProfs:

 type: array

 items:

 $ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

 description: Information about services the EEC wants to connect to.

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 eecSvcContSupp:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: >

 Indicates if the EEC supports service continuity or not, also indicates which

 ACR scenarios are supported by the EEC.

 connInfo:

 type: array

 items:

 $ref: '#/components/schemas/ConnectivityInfo'

 description: List of connectivity information for the UE.

 notificationDestination:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 requestTestNotification:

 type: boolean

 description: >

 Set to true by Subscriber to request the ECS to send a test notification. Set to

 false or omitted otherwise.

 websockNotifConfig:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/WebsockNotifConfig'

 suppFeat:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

 required:

 - eecId

 ServProvNotification:

 description: Represents notification information of a service provisioning Event.

 type: object

 properties:

 subId:

 type: string

 description: >

 Identifier of the individual service provisioning subscription for which the service

 provisioning notification is delivered.

 ednCnfgInfo:

 type: array

 items:

 $ref: '#/components/schemas/EDNConfigInfo'

 minItems: 1

 description: List of EDN configuration information.

 required:

 - subId

 - ednCnfgInfo

 ConnectivityInfo:

 description: Represents the connectivity information for the UE.

 type: object

 properties:

 plmnId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

 ssId:

 type: string

 description: Identifies the SSID of the access point to which the UE is attached.

 EDNConfigInfo:

 description: Represents the EDN information.

 type: object

 properties:

 ednConInfo:

 $ref: '#/components/schemas/EDNConInfo'

 eess:

 type: array

 items:

 $ref: '#/components/schemas/EESInfo'

 minItems: 1

 description: Contains the list of EESs of the EDN.

 lifeTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 required:

 - ednConInfo

 - eess

 EDNConInfo:

 description: Represents an EDN connection information .

 type: object

 properties:

 dnn:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

 snssai:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

 ednTopoSrvArea:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 EESInfo:

 description: Represents EES information.

 type: object

 properties:

 eesId:

 type: string

 description: Identity of the EES

 endPt:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 easIds:

 type: array

 items:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EASId'

 description: Application identities of the Edge Application Servers registered with the EES.

 ecspInfo:

 type: string

 description: Represents an ECSP Information.

 svcArea:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 dnais:

 type: array

 items:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnai'

 description: Represents list of Data network access identifier.

 eesSvcContSupp:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: >

 Indicates if the EES supports service continuity or not, also indicates which ACR

 scenarios are supported by the EES.

 eecRegConf:

 type: boolean

 description: >

 Indicates whether the EEC is required to register on the EES to use edge services

 or not.

 required:

 - eesId

 - eecRegConf

 ECSServProvSubscriptionPatch:

 description: Represents an individual service provisioning subscription resource.

 type: object

 properties:

 acProfs:

 type: array

 items:

 $ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

 description: Information about services the EEC wants to connect to.

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 eecSvcContSupp:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 description: >

 Indicates if the EEC supports service continuity or not, also indicates which ACR

 scenarios are supported by the EEC.

 connInfo:

 type: array

 items:

 $ref: '#/components/schemas/ConnectivityInfo'

 description: List of connectivity information for the UE.

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