**3GPP TSG-CT WG1 Meeting #141eC1-232463\_r1**

**Online 17– 21 April 2023**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.558** | **CR** | **0036** | **rev** | **-** | **Current version:** | **18.0.0** |  |
|  | | | | | | | | |
| *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:*** | Eees\_EECRegistration: "operationId" and "tags" fields | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson, Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NBI18 | | | | |  | ***Date:*** | | | 2023-03-27 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In accordance with TS 29.122:   * clause 5.2.9.13, an "operationId" field should be assigned to each specified service operation; * clause 5.2.9.14, all HTTP operations belonging to the same resource should include a "tags" field containing a same value, briefly describing that resource.   The OpenAPI file of the Eees\_EECRegistration API needs to be aligned with TS 29.122, clauses 5.2.9.13 and 5.2.9.14.  Furthermore, clause 5.2.9.2 of TS 29.122 specifies that trailing whitespaces (i.e. spaces and tabs located at the end of line, without any other character following it) should not be used in OpenAPI specification files. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Fields "operationId" and "tags" added to each service operation.  Trailing whitespaces removed.  Readability of the OpenAPI file improved by adding empty lines inside "paths" section between each resource definition block and inside "components/schemas" section between each data type definition.  **Backward compatibility analysis:**  This CR introduces backward correction to the name API since it adds missing "operationId" and "tags". | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The OpenAPI file of the Eees\_EECRegistration API is not aligned with requirements specified TS 29.122, clauses 5.2.9.13 and 5.2.9.14 and the OpenAPI Specification Version 3.0.0. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | A.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **x** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **x** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR introduces backward compatible correction to the OpenAPI file of Eees\_EECRegistration API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

# A.2 Eees\_EECRegistration

openapi: 3.0.0

info:

title: Eees\_EECRegistration

version: "1.1.0-alpha.1"

description: |

API for EEC registration.

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externalDocs:

description: >

3GPP TS 24.558 V18.0.0 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:

operationId: CreateEECReg

tags:

- EEC Registrations (Collection)

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:

operationId: UpdateIndEECReg

tags:

- Individual EEC registration (Document)

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:

operationId: DeleteIndEECReg

tags:

- Individual EEC registration (Document)

description: Remove an existing EEC 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:

operationId: ModifyIndEECReg

tags:

- Individual EEC registration (Document)

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: AC information indicating required services and service characteristics.

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: The ACR scenarios supported by the AC for service continuity.

simInactTime:

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

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:

type: string

description: Application identifier of the EAS.

expectedSvcKPIs:

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

minimumReqSvcKPIs:

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

required:

- easId

ACServiceKPIs:

description: Describes the KPIs required by the AC in order to receive required services.

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: Describes 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.

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