**3GPP TSG CT WG3 Meeting #138 *C3-246359***

**Orlando, US, 18 - 22 November, 2024** (revision of C3-246147)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.558** | **CR** | **0241** | **rev** | **1** | **Current version:** | **19.0.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | EDGEAPP – Correcting structured data types in query parameters | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung, Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NBI19 | | | | |  | ***Date:*** | | | 2024-11-11 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | During CT3#137 meeting, it was discussed to clarify the formatting of the structured data types in query parameters. The NBI APIs should be consistent in formatting of the structured data types in query parameters, i.e, should be “content”” block with “application/JSON” media type. The formatting of the following query parameters in EDGEAPP APIs need to be clarified:  Eees\_EECContextRelocation API: "sess-cntxs"  Eecs\_TargetEESDiscovery API: "ue-location" | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarify the formatting of following structured data type query parameters:  Eees\_EECContextRelocation API: "sess-cntxs"  Eecs\_TargetEESDiscovery API: "ue-location" | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Inconsistent formatting of the query parameters. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | A.8, A.12 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 proposes backward compatible correction to the following Open API specification files: Eees\_EECContextRelocation API, Eecs\_TargetEESDiscovery API | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* Start of Changes \* \* \* \*

# A.8 Eees\_EECContextRelocation API

openapi: 3.0.0

info:

title: EES EEC Context Relocation API

version: 1.2.0-alpha.1

description: |

API for EEC Context Relocation.

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externalDocs:

description: >

3GPP TS 29.558 V19.0.0 Enabling Edge Applications;

Application Programming Interface (API) specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.558/

security:

- {}

- oAuth2ClientCredentials: []

servers:

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

variables:

apiRoot:

default: https://example.com

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

paths:

/eec-contexts:

post:

summary: Push EEC Context information.

operationId: PushEecContexts

tags:

- EEC contexts (Collection)

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'200':

description: >

OK. The EEC context has been successfully pushed to the EES and related

information is returned in the response body.

content:

application/json:

schema:

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

'204':

description: No Content. The EEC context has been successfully pushed to the EES.

'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'

get:

summary: Pull EEC Context information.

operationId: PullEecContexts

tags:

- EEC contexts (Collection)

parameters:

- name: ees-id

in: query

description: Unique identifier of the requesting entity.

required: true

schema:

type: string

- name: eec-cntx-id

in: query

description: Unique identifier of the EEC context.

required: true

schema:

type: string

- name: sess-cntxs

in: query

description: List of service session context information being requested.

required: false

content:

application/json:

schema:

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

responses:

'200':

description: >

OK. The EEC context information matching the query parameters in the request

shall be returned.

content:

application/json:

schema:

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

'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:

SessionContexts:

type: object

description: Represents the list of service session contexts information.

properties:

sessCntxs:

type: array

items:

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

minItems: 1

description: List of service session contexts information.

required:

- sessCntxs

IndividualSessionContext:

type: object

description: Represents a single service session context information.

properties:

easId:

type: string

description: Identifier of the Application Server providing the application services.

endPt:

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

acId:

type: string

description: Identifier of the AC for which the service session information is provided.

acrList:

type: array

items:

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

minItems: 1

description: The list of selected ACR scenarios.

eecId:

type: string

appGrpId:

type: string

required:

- easId

- endPt

EECContextPush:

type: object

description: Represents the EEC context push request data.

properties:

eesId:

type: string

description: Identifier of the entity that is pushing the EEC context information.

eecCntx:

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

tgtEas:

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

acrScenariosSelReq:

type: boolean

description: >

Set to true if the EEC indicates to select the ACR scenarisos.

Set to false if it is not required to select the ACR scenarios.

The default value when omitted is false.

eecCntxs:

type: array

items:

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

minItems: 1

required:

- eesId

- eecCntx

EECContextPushRes:

type: object

description: Represents the EEC context push response data.

properties:

implReg:

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

selAcrScenariosList:

type: array

items:

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

minItems: 1

ImplicitRegDetails:

type: object

description: Represents the EEC implicit registration details.

properties:

regId:

type: string

description: Identifier of the EEC registration.

expTime:

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

required:

- regId

EECContext:

type: object

description: Represents the EEC context information.

properties:

eecId:

type: string

description: Unique idenitfier of the EEC.

cntxId:

type: string

description: Unique idenitfier assigned to the EEC context.

ueId:

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

e1Subs:

type: array

items:

type: string

minItems: 1

description: List of subscription IDs for the capability expsoure for the EEC ID.

ueLoc:

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

acProfs:

type: array

items:

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

minItems: 1

description: List AC profiles.

sessCntxs:

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

eecSrvContSupp:

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

ueMobSuppInd:

type: boolean

description: >

Set to true to indicate that UE Mobility support is required.

Set to false to indicate that UE mobility support is not required.

The default value when omitted is false.

required:

- eecId

- cntxId

EECSrvContinuitySupport:

type: object

description: Represents the EEC service continuity support details.

properties:

srvContSupp:

type: boolean

description: >

Set to true if EEC supports service continuity.

Set to false if EEC does not supports service continuity.

The default value when omitted is false.

acrScenarios:

type: array

items:

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

minItems: 1

description: The list of ACR scenarios supported by EEC.

required:

- srvContSupp

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

# A.12 Eecs\_TargetEESDiscovery API

openapi: 3.0.0

info:

title: ECS Target EES Discovery API

description: |

API for Target EES Discovery.

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version: 1.2.0-alpha.1

externalDocs:

description: >

3GPP TS 29.558 V19.0.0 Enabling Edge Applications;

Application Programming Interface (API) specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.558/

security:

- {}

- oAuth2ClientCredentials: []

servers:

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

variables:

apiRoot:

default: https://example.com

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

paths:

/ees-profiles:

get:

summary: Read all the targeted Enabler Server Profiles

operationId: GetEESProfiles

tags:

- EES Profiles (Collection)

description: Retrieve the T-EES information.

parameters:

- name: ees-id

in: query

description: Unique identifier of the source Enabler Server.

required: true

schema:

type: string

- name: eas-id

in: query

description: Unique identifier of the source Application Server.

required: true

schema:

type: string

- name: target-dnai

in: query

description: >

The DNAI information associated with the potential target Enabler Server(s)

and/or target Application Server(s).

required: false

schema:

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

- name: ue-id

in: query

description: Identifier of the UE.

required: false

schema:

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

- name: ue-location

in: query

description: The location information of the UE.

required: false

content:

application/json:

schema:

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

- name: eec-srv-cont-supp

in: query

description: >

Indicates whether the EEC supports service continuity or not and the related service

continuity support information.

required: false

schema:

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

- name: ac-svc-cont-supp

in: query

description: >

Indicates that the AC supports service continuity and contains the related service

continuity support information (i.e., supported ACR scenarios).

required: false

schema:

type: array

items:

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

minItems: 1

- name: bdl-id

in: query

description: >

Contains EAS bundle identifier.

required: false

schema:

type: string

- name: bdl-type

in: query

description: >

Contains EAS bundle type.

required: false

schema:

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

- name: ens-ind

in: query

description: indicates whether edge node sharing is requested.

required: false

schema:

type: boolean

description: >

Set to true if edge node sharing is requested.

Set to false if edge node sharing is not requested.

The default value when omitted is false.

- name: app-grp-id

in: query

description: >

Contains the application group identifier.

required: false

schema:

type: string

- name: supp-feats

in: query

description: Contains the list of supported feature(s).

required: false

schema:

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

- name: serving-mno-info

in: query

description: >

Contains the serving MNO information, i.e., the MNO that is serving the subscriber.

required: false

schema:

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

- name: pred-exp-time

in: query

description: >

Contains the prediction expiration time.

required: false

schema:

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

responses:

'200':

description: >

The EDN configuration and the Enabler Server information determined by the ECS.

content:

application/json:

schema:

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

'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: {}

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