**3GPP TSG- Meeting # C3-225738**

**, , 14th – 18th November 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.522** | **CR** | **0766** | **rev** | **-** | **Current version:** | **16.12.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Update of info and externalDocs fields | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2022-11-18 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | During this plenary cycle (2022-Q4), there have been some Rel-16 backwards compatible corrections to the NEF APIs defined in TS 29.522. The API version of these APIs needs hence to be updated as per the guidelines defined in clause 4.3.1 of TS 29.501.  The following agreed CRs update the OpenAPI file of the **LpiParameterProvision API** for the present release:   * TS 29.522 CR#0733 introduces backwards compatible corrections   The API version needs to be updated from 1.0.1 to 1.0.2  The following agreed CRs update the OpenAPI file of the **ServiceParameter API** for the present release:   * TS 29.522 CR#0765 introduces backwards compatible corrections   The API version needs to be updated from 1.0.2 to 1.0.3  There were no CRs to the other NEF APIs. Therefore, the corresponding API version does not need to be updated.  The "externalDocs" object description field also needs to be updated to "v16.1**3**.0" and the copyright year to “2022” for the above impacted APIs. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The CR proposes the following changes:   * Update the API version of the impacted NEF APIs defined in TS 29.522 as detailed above. * Update the TS version number in the "externalDocs" object description field to "v16.1**3**.0". | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | * The OpenAPI version and the "externalDocs" object description field are not updated in the OpenAPI files impacted by the agreed CRs during Q4-2022 plenary cycle in CT3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | A.8, A.9 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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's revision history:*** | |  | | | | | | | | |

\* \* \* \* Start of changes \* \* \* \*

# A.8 LpiParameterProvision API

openapi: 3.0.0

info:

title: 3gpp-lpi-pp

version: 1.0.2

description: |

API for Location Privacy Indication Parameters Provisioning.

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externalDocs:

description: 3GPP TS 29.522 V16.13.0; 5G System; Network Exposure Function Northbound APIs.

url: 'http://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

- {}

- oAuth2ClientCredentials: []

servers:

- url: '{apiRoot}/3gpp-lpi-pp/v1'

variables:

apiRoot:

default: https://example.com

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

paths:

/{afId}/provisionedLpis:

get:

summary: read all of the active LPI Parameters Provisioning resources for the AF

tags:

- LPI Parameters Provisionings

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

responses:

'200':

description: OK (Successful get all of the active resources for the AF)

content:

application/json:

schema:

type: array

items:

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

minItems: 1

'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'

post:

summary: Creates a new LPI Parameters Provisioning resource

tags:

- LPI Parameters Provisionings

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

requestBody:

description: new resource creation

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Created (Successful creation)

content:

application/json:

schema:

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

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'

/{afId}/provisionedLpis/{provisionedLpiId}:

get:

summary: read an active LPI Parameters Provisioning resource for the AF and the provisioned LPI Id

tags:

- Individual LPI Parameters Provisioning

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

- name: provisionedLpiId

in: path

description: Identifier of the provisioned LPI parameter resource

required: true

schema:

type: string

responses:

'200':

description: OK (Successful get the active resource)

content:

application/json:

schema:

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

'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'

put:

summary: Updates/replaces an existing LPI Parameters Provisioning resource

tags:

- Individual LPI Parameters Provisioning

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

- name: provisionedLpiId

in: path

description: Identifier of the provisioned LPI parameter resource

required: true

schema:

type: string

requestBody:

description: Parameters to update/replace the existing resource

required: true

content:

application/json:

schema:

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

responses:

'200':

description: OK (Successful update of the existing resource)

content:

application/json:

schema:

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

'204':

description: Successful case. The resource has been successfully updated and no additional content is sent in the response message.

'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:

summary: Deletes an already existing LPI Parameters Provisioning resource

tags:

- Individual LPI Parameters Provisioning

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

- name: provisionedLpiId

in: path

description: Identifier of the provisioned LPI parameter resource

required: true

schema:

type: string

responses:

'204':

description: No Content (Successful deletion of the existing resource)

'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'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

LpiParametersProvision:

type: object

properties:

self:

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

exterGroupId:

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

gpsi:

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

lpi:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/Lpi'

mtcProviderId:

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

suppFeat:

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

required:

- lpi

- suppFeat

\* \* \* \* Next changes \* \* \* \*

# A.9 ServiceParameter API

openapi: 3.0.0

info:

title: 3gpp-service-parameter

version: 1.0.3

description: |

API for AF service paramter

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externalDocs:

description: 3GPP TS 29.522 V16.13.0; 5G System; Network Exposure Function Northbound APIs.

url: 'http://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

- {}

- oAuth2ClientCredentials: []

servers:

- url: '{apiRoot}/3gpp-service-parameter/v1'

variables:

apiRoot:

default: https://example.com

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

paths:

/{afId}/subscriptions:

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

get:

summary: read all of the active subscriptions for the AF

tags:

- Service Parameter Subscriptions

responses:

'200':

description: OK.

content:

application/json:

schema:

type: array

items:

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

minItems: 0

'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'

post:

summary: Creates a new subscription resource

tags:

- Service Parameter Subscriptions

requestBody:

description: Request to create a new subscription resource

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Created (Successful creation of subscription)

content:

application/json:

schema:

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

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'

/{afId}/subscriptions/{subscriptionId}:

parameters:

- name: afId

in: path

description: Identifier of the AF

required: true

schema:

type: string

- name: subscriptionId

in: path

description: Identifier of the subscription resource

required: true

schema:

type: string

get:

summary: read an active subscriptions for the SCS/AS and the subscription Id

tags:

- Individual Service Parameter Subscription

responses:

'200':

description: OK (Successful get the active subscription)

content:

application/json:

schema:

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

'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'

put:

summary: Updates/replaces an existing subscription resource

tags:

- Individual Service Parameter Subscription

requestBody:

description: Parameters to update/replace the existing subscription

required: true

content:

application/json:

schema:

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

responses:

'200':

description: OK (Successful update of the subscription)

content:

application/json:

schema:

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

'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'

patch:

summary: Updates/replaces an existing subscription resource

tags:

- Individual Service Parameter Subscription

requestBody:

required: true

content:

application/merge-patch+json:

schema:

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

responses:

'200':

description: OK. The subscription was modified successfully.

content:

application/json:

schema:

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

'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:

summary: Deletes an already existing subscription

tags:

- Individual Service Parameter Subscription

responses:

'204':

description: No Content (Successful deletion of the existing subscription)

'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'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

ServiceParameterData:

type: object

properties:

afServiceId:

type: string

description: Identifies a service on behalf of which the AF is issuing the request.

appId:

type: string

description: Identifies an application.

dnn:

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

snssai:

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

externalGroupId:

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

anyUeInd:

type: boolean

description: Identifies whether the AF request applies to any UE. This attribute shall set to "true" if applicable for any UE, otherwise, set to "false".

gpsi:

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

ueIpv4:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

ueIpv6:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

ueMac:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

self:

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

paramOverPc5:

$ref: '#/components/schemas/ParameterOverPc5'

paramOverUu:

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

mtcProviderId:

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

suppFeat:

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

ServiceParameterDataPatch:

type: object

properties:

paramOverPc5:

$ref: '#/components/schemas/ParameterOverPc5Rm'

paramOverUu:

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

ParameterOverPc5:

type: string

ParameterOverPc5Rm:

type: string

nullable: true

ParameterOverUu:

type: string

ParameterOverUuRm:

type: string

nullable: true

\* \* \* \* End of changes \* \* \* \*