**3GPP TSG CT WG3 Meeting #137 *C3-245071***

**Hefei, CN, 14 - 18 October, 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **0017** | **rev** | **-** | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | SDD\_BDT OpenAPI file | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SEALDD\_Ph2 | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | SDD\_BDT API was intorduced in release 19 under SEALDD\_Ph2 WI in SA6. Thus, the SDD\_BDT API definition shall be introduced in Stage 3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | This CR introduces the OpenAPI file of the SDD\_BDT API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The Stage 2 requirements are not implemented in Stage 3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | A.7 (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 a new OpenAPI file | | | | | | | | |
| ***()*** | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

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

# A.7 SDD\_BDT API

openapi: 3.0.0

info:

title: SEALDD Background Data Transfer Service

version: 1.0.0

description: |

SEALDD Background Data Transfer Service.

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externalDocs:

description: >

3GPP TS 29.548 V19.1.0; Service Enabler Architecture Layer for Verticals (SEAL);

SEAL Data Delivery (SEALDD) Server Services; Stage 3.

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.548/

servers:

- url: '{apiRoot}/sdd-bdt/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 6.5 of 3GPP TS 29.549

security:

- {}

- oAuth2ClientCredentials: []

paths:

/subscriptions:

post:

summary: Request the creation of a BDT Subscription.

operationId: CreateBDT

tags:

- BDT Subscriptions (Collection)

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'201':

description: >

Created. The BDT Subscription is successfully created.

content:

application/json:

schema:

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

headers:

Location:

description: >

Contains the URI of the created Individual BDT Subscription 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:

BdtNotif:

'{$request.body#/notifUri}':

post:

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'204':

description: >

No Content. The BDT Notification is successfully received and 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/{subId}:

parameters:

- name: subId

in: path

description: >

Represents the identifier of the Individual BDT Subscription resource.

required: true

schema:

type: string

get:

summary: Retrieve an existing Individual Individual BDT Subscription resource.

operationId: GetBdtSubsc

tags:

- Individual BDT Subscription (Document)

responses:

'200':

description: >

OK. The requested Individual BDT Subscription resource shall be returned.

content:

application/json:

schema:

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

'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: Request the update of an existing Individual Individual BDT Subscription resource.

operationId: UpdateBdtSubsc

tags:

- Individual BDT Subscription (Document)

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'200':

description: >

OK. The Individual BDT Subscription resource is successfully updated.

content:

application/json:

schema:

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

'204':

description: >

No Content. The Individual BDT Subscription resource is

successfully updated and no content is returned in the response body.

'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: Request the modification of an existing Individual BDT Subscription resource.

operationId: ModifyBdtSubsc

tags:

- Individual BDT Subscription (Document)

requestBody:

required: true

content:

application/merge-patch+json:

schema:

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

responses:

'200':

description: >

OK. The Individual BDT Subscription resource is successfully modified.

content:

application/json:

schema:

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

'204':

description: >

No Content. The Individual BDT Subscription resource is

successfully modified and no content is returned in the response body.

'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: Request the deletion of an existing Individual BDT Subscription resource.

operationId: DeleteBdtSubsc

tags:

- Individual BDT Subscription (Document)

responses:

'204':

description: >

No Content. The Individual BDT Subscription resource is successfully 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'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

#

# STRUCTURED DATA TYPES

#

BdtSubscription:

description: >

Represents a SEALDD BDT Subscription.

type: object

properties:

valServiceId:

type: string

valUeIds:

type: array

items:

type: string

minItems: 1

valGroupId:

type: string

timeWnd:

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

area:

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

dataVolume:

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

policyGuidances:

type: array

items:

$ref: 'TS29549\_SS\_NetworkResourceAdaptation.yaml#/components/schemas/PolicyGuidance'

minItems: 1

notifUri:

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

suppFeat:

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

anyOf:

- required: [valUeIds]

- required: [valGroupId]

required:

- valSvcsId

- notifUri

- dataVolume

BdtSubscriptionPatch:

description: >

Represents the parameters to request the modification of a SEALDD BDT Subscription.

type: object

properties:

timeWnd:

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

area:

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

policyGuidances:

type: array

items:

$ref: 'TS29549\_SS\_NetworkResourceAdaptation.yaml#/components/schemas/PolicyGuidance'

minItems: 1

dataVolume:

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

notifUri:

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

BdtNotif:

description: >

Represents a SEALDD BDT Subscription notification.

type: object

properties:

reports:

type: array

items:

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

minItems: 1

required:

- reports

BdtReport:

description: >

Represents a BDT report.

type: object

properties:

subId:

type: string

valUeIds:

type: array

items:

type: string

minItems: 1

valGroupId:

type: string

timeWnd:

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

quality:

$ref: 'TS29548\_SDD\_TransmissionQualityMeasurement.yaml#/components/schemas/TransQualMeasData'

anyOf:

- required: [valUeIds]

- required: [valGroupId]

required:

- subId

#

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

# Data types describing alternative data types or combinations of data types:

#

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