**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** |

|  |
| --- |
|  |
| ***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 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-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 \* \* \* \*