**3GPP TSG-CT WG3 Meeting #132C3-240174**

**E-Meeting, 22nd – 24th January, 2024 (revision of C3-240093)**

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| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.549** | **CR** | **0225** | **rev** | **1** | **Current version:** | **18.4.0** |  |
|  |
| *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** |

|  |
| --- |
|  |
| ***Title:***  | Define OpenAPI of SS\_AADRF\_DataManagement API |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | ADAES |  | ***Date:*** | 2024-01-10 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | The A-ADRF related services defined in clause 9.3 of TS 23.436 need to be supported in stage 3. CT3 considers to merge these A-ADRF APIs into one general data management API in stage 3 for the following reasons:* These five APIs are all used for data retrieval from the A-ADRF which means they belong to the same overall functionality.
* If the consumer needs to retrieve several types of data from the A-ADRF simultaneously, it only needs to invoke one service instead of invoking several services.

There are a lot of duplicated information in the different subscriptions/requests and notifications/responses, and merging these APIs will make it much easier for us to maintain them in the future. |
|  |  |
| ***Summary of change:*** | Define the OpenAPI of SS\_AADRF\_DataManagement API. |
|  |  |
| ***Consequences if not approved:*** | The stage 2 requirement is not implemented. |
|  |  |
| ***Clauses affected:*** | A.15(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:*** | The CR introduces a new OpenAPI file of SS\_AADRF\_DataManagement API. |
|  |  |
| ***This CR's revision history:*** |  |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

# A.15 SS\_AADRF\_DataManagement API

openapi: 3.0.0

info:

 title: SS\_AADRF\_DataManagement

 description: |

 API for A-ADRF Data Management Service.

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 version: "1.0.0-alpha.1"

externalDocs:

 description: >

 3GPP TS 29.549 V18.5.0 Service Enabler Architecture Layer for Verticals (SEAL);

 Application Programming Interface (API) specification; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.549/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/ss-aadrf-datamanagement/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /subscriptions:

 post:

 summary: Create Individual A-ADRF Data Management Subscription.

 operationId: CreateAADRFEventSubscription

 tags:

 - A-ADRF Data Management Subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: >

 The requested Individual A-ADRF Data Management Subscription is successfully created and

 a representation of the created resource is returned in the response body.

 content:

 application/json:

 schema:

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

 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'

 callbacks:

 myNotification:

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

 post:

 summary: Notify on the requested data.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: The notification is successfully received.

 '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/{subscriptionId}:

 parameters:

 - name: subscriptionId

 in: path

 description: >

 Represents the Individual A-ADRF Data Management Subscription resource.

 required: true

 schema:

 type: string

 delete:

 summary: Remove the Individual A-ADRF Data Management Subscription.

 operationId: UnsubscribeAADRFEventSubscription

 tags:

 - Individual A-ADRF Data Management Subscription (Document).

 responses:

 '204':

 description: >

 The individual A-ADRF Data Management Subscription resource matching the subscriptionId

 is 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:

 DataManageSub:

 description: Represents the event subscriptions.

 type: object

 properties:

 eventSubscriptions:

 type: array

 items:

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

 minItems: 1

 description: Subscribed events.

 notifUri:

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

 notifCorrId:

 type: string

 description: Notification correlation identifier.

 supportedFeatures:

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

 required:

 - eventSubscriptions

 - notifUri

 EventSubscription:

 description: Represents the event subscription.

 type: object

 properties:

 event:

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

 dataCollectReq:

 type: string

 dataProducerIds:

 type: array

 items:

 type: string

 minItems: 1

 description: The list of Data Producer IDs.

 valUes:

 type: array

 items:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 minItems: 1

 description: The target VAL UE(s) identifiers.

 valServerId:

 type: string

 description: The target VAL server ID.

 valServiceId:

 type: string

 description: The VAL service ID.

 profileCriteria:

 type: string

 validConds:

 $ref: 'TS29549\_SS\_Events.yaml#/components/schemas/ValidityConditions'

 snssais:

 type: array

 items:

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

 minItems: 1

 description: Identification(s) of network slice(s) to which the subscription applies.

 edgeReq:

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

 apiLogReq:

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

 required:

 - event

 EdgeReq:

 description: Represents the EDGE data request requirement.

 type: object

 properties:

 dnais:

 type: array

 items:

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

 minItems: 1

 description: Identifiers the DN Access Identifier.

 dnns:

 type: array

 items:

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

 minItems: 1

 description: Identifiers the DN Access Identifier.

 destEasId:

 type: string

 description: Identifier for the destination EAS.

 destEesId:

 type: string

 description: Identifier for the destination EES.

 anyOf:

 - required: [dnais]

 - required: [dnns]

 - required: [destEasId]

 - required: [destEesId]

 ApiLogReq:

 description: Represents the API log request requirement.

 type: object

 properties:

 apiRequestorInfo:

 type: string

 apiId:

 type: string

 description: String identifying the API invoked.

 apiName:

 type: string

 description: Name of the API which was invoked.

 apiVersion:

 type: string

 description: Version of the API which was invoked.

 inputParameters:

 type: array

 items: {}

 minItems: 1

 description: List of input parameters.

 result:

 type: string

 description: For HTTP protocol, it contains HTTP status code of the invocation.

 apiInvokerId:

 type: string

 description: Identity of the API invoker which invoked the service API.

 exposureLvl:

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

 apiAggreInfo:

 type: string

 required:

 - apiRequestorInfo

 DataManageNotification:

 description: Represents the notification to the consumer.

 type: object

 properties:

 event:

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

 notifCorrId:

 type: string

 description: Notification correlation identifier.

 valServerId:

 type: string

 description: The target VAL server ID.

 valServiceId:

 type: string

 description: The VAL service ID.

 valUeIds:

 type: array

 items:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 minItems: 1

 description: The target VAL UE(s) identifiers.

 locAccuracy:

 type: string

 validConds:

 $ref: 'TS29549\_SS\_Events.yaml#/components/schemas/ValidityConditions'

 apiLog:

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

 rttDeviation:

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

 snssais:

 type: array

 items:

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

 minItems: 1

 description: Identification(s) of network slice(s) to which the subscription applies.

 edgeInfo:

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

 required:

 - event

 ApiLogInfo:

 description: Represents the API log data.

 type: object

 properties:

 apiId:

 type: string

 description: String identifying the API invoked.

 apiName:

 type: string

 description: Name of the API which was invoked.

 failNum:

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

 apiAvailableInd:

 type: boolean

 description: Indicates the API availability.

 apiVerChgNum:

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

 apiLocChg:

 type: boolean

 description: Indicates the API location changes for the target API.

 apiThrottlingEvents:

 type: string

 invokeNum:

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

 apiVersion:

 type: string

 description: Version of the API which was invoked.

 required:

 - apiId

 EdgeInfo:

 description: Represents the EDGE related data.

 type: object

 properties:

 edgeReq:

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

 output:

 type: string

# Simple data types and Enumerations

 AadrfEvent:

 anyOf:

 - type: string

 enum:

 - HISTORICAL\_SERVICEAPI

 - NETWORK\_SLICE

 - EDGE\_DATA

 - LOCATION\_ACCURACY

 - type: string

 description: >

 This string provides forward-compatibility with future extensions to the enumeration and

 is not used to encode content defined in the present version of this API.

 description: |

 Indicates the subscribed events.

 Possible values are:

 - HISTORICAL\_SERVICEAPI: The event for historical service API logs.

 - NETWORK\_SLICE: The event for the network slice data.

 - EDGE\_DATA: The event for the EDGE related data.

 - LOCATION\_ACCURACY: The event for the location accuracy data.

 ExposureLevel:

 anyOf:

 - type: string

 enum:

 - READ

 - WRITE

 - DELETE

 - type: string

 description: >

 This string provides forward-compatibility with future extensions to the enumeration and

 is not used to encode content defined in the present version of this API.

 description: |

 Indicates the exposure level.

 Possible values are:

 - READ: The exposure level for the logs to be exposed is read.

 - WRITE: The exposure level for the logs to be exposed is write.

 - DELETE: The exposure level for the logs to be exposed is delete.

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