**3GPP TSG CT WG3 Meeting #142 *C3-253370***

**Goteborg, SE, 25th – 29th August, 2025**

**Source: Huawei, Nokia**

**Title: Pseudo-CR on defining the OpenAPI description of the Naf\_VFLTraining API**

**Spec: 3GPP TS 29.530**

**Agenda item: 19.39 (AIML\_CN)**

**Document for: Agreement**

**1. Introduction**

The stage 2 requirements for the new Naf\_VFLTraining API have been defined in clauses TS 23.288.

**2. Reason for Change**

Define the OpenAPI description of this new API in the corresponding new AI/ML related AF Services TS.

**3. Conclusions**

N/A

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.530 V 0.0.0.

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

# A.2 Naf\_VFLTraining API

openapi: 3.0.0

info:

 title: Naf\_VFLTraining Service API

 version: 1.0.0-alpha.1

 description: |

 AF VFL Training Service.

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externalDocs:

 description: >

 3GPP TS 29.530 V1.0.0; 5G System; Application Function Artificial Intelligence/Machine Learning

 (AI/ML) Services.

 url: http://www.3gpp.org/ftp/Specs/archive/29\_series/29.530/

servers:

 - url: '{apiRoot}/naf-vfl-train/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 4.4 of 3GPP TS 29.501.

security:

 - {}

 - oAuth2ClientCredentials:

 - naf-vfl-train

paths:

 /subscriptions:

 post:

 summary: Request the creation of a VFL Training Subscription.

 operationId: CreateVflTrainSubsc

 tags:

 - VFL Training Subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: >

 Created. The VFL Training Subscription is successfully created and a representation of

 the created Individual VFL Training Subscription resource shall be returned.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

 Contains the URI of the created Individual VFL Training Subscription resource.

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 callbacks:

 myNotification:

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

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: 'TS29520\_Nnwdaf\_VFLTraining.yaml#/components/schemas/VflTrainingNotify'

 responses:

 '204':

 description: >

 No Content. The VFL Training Notification is successfully received

 and acknowledged.

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 /subscriptions/{subscriptionId}:

 parameters:

 - name: subscriptionId

 in: path

 description: >

 Represents the identifier of the Individual VFL Training Subscription

 resource.

 required: true

 schema:

 type: string

 get:

 summary: Retrieve an existing Individual VFL Training Subscription resource.

 operationId: GetIndVflTrainSubsc

 tags:

 - Individual VFL Training Subscription (Document)

 responses:

 '200':

 description: >

 OK. The requested Individual VFL Training Subscription resource is returned.

 content:

 application/json:

 schema:

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

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 put:

 summary: Request the update of an existing Individual VFL Training Subscription resource.

 operationId: UpdateIndVflTrainSubsc

 tags:

 - Individual VFL Training Subscription (Document)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: >

 OK. The Individual VFL Training Subscription resource is successfully updated and a

 representation of the updated resource shall be returned in the response body.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. The Individual VFL Training Subscription resource is successfully updated

 and no content is returned in the response body.

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 patch:

 summary: Request the modification of an existing Individual VFL Training Subscription resource.

 operationId: ModifyIndVflTrainSubsc

 tags:

 - Individual VFL Training Subscription (Document)

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 OK. The Individual VFL Training Subscription resource is successfully modified and a

 representation of the updated resource shall be returned in the response body.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. The Individual VFL Training Subscription resource is successfully modified

 and no content is returned in the response body.

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 delete:

 summary: Request the deletion of an existing Individual VFL Training Subscription resource.

 operationId: DeleteIndVflTrainSubsc

 tags:

 - Individual VFL Training Subscription (Document)

 responses:

 '204':

 description: >

 No Content. The Individual VFL Training Subscription resource is successfully deleted.

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{nrfApiRoot}/oauth2/token'

 scopes:

 naf-vfl-train: >

 Enables to access all the resources and custom operations of the Naf\_VFLTraining API.

 schemas:

#

# STRUCTURED DATA TYPES

#

 VflTrainingSubs:

 description: >

 Represents a VFL Training Subscription.

 type: object

 properties:

 vflTrainSubs:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_VFLTraining.yaml#/components/schemas/VflTrainingSub'

 minItems: 1

 notifUri:

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

 notifCorrId:

 type: string

 reportingReqs:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 trainReports:

 $ref: 'TS29520\_Nnwdaf\_VFLTraining.yaml#/components/schemas/VflTrainReport'

 suppFeat:

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

 required:

 - vflTrainSubs

 - notifUri

 - notifCorrId

 VflTrainingSubsPatch:

 description: >

 Represents the requested modifications to a VFL Training Subscription.

 type: object

 properties:

 vflTrainSubs:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_VFLTraining.yaml#/components/schemas/VflTrainingSub'

 minItems: 1

 notifUri:

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

 notifCorrId:

 type: string

 reportingReqs:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

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

#

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