**3GPP TSG-CT3 Meeting #142 *C3-253562***

**Stor-Göteborg, Sweden, 25th Aug 2025 - 29th Aug 2025 (revision of *C3-253195*)**

**Source: Nokia**

**Title: Pseudo-CR on OpenAPI annexes of AIMLES\_AssistedMLModelSelection API**

**Spec: 3GPP TS 29.482 v 1.0.0**

**Agenda item: 19.41**

**Document for: Agreement**

**1. Introduction**

There is a need to start OpenAPI annexes of AIMLES\_AssistedMLModelSelection API under the AIML\_App WI.

**2. Reason for Change**

Define the OpenAPI annexes of AIMLES\_AssistedMLModelSelection API as defined in clause 8.23 in 3GPP TS 23.482.

**3. Conclusions**

This pCR proposes to specify the Annex of AIMLES\_AssistedMLModelSelection API.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.482 V 1.0.0.

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

# A.X AIMLES\_AssistedMLModelSelection API

openapi: 3.0.0

info:

title: AIMLES\_AssistedMLModelSelection

description: |

API for AIMLE Assisted ML Model Selection Service.

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version: "1.0.0-alpha.1"

externalDocs:

description: >

3GPP TS 29.482 v1.0.0; Artificial Intelligence Machine Learning Enablement

(AIMLE) Services; Stage 3.

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

servers:

- url: '{apiRoot}/aimles-amlmsel/v1'

variables:

apiRoot:

default: https://example.com

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

security:

- {}

- oAuth2ClientCredentials: []

paths:

/subscriptions:

post:

summary: Request the creation of a AIMLE Assisted ML Model Selection Subscription resource.

operationId: CreateAimleAssistMLMdlSelSubscription

tags:

- AIMLE Assisted ML Model Selection Subscriptions (Collection)

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'201':

description: >

Successful case. The creation of an Individual AIMLE Assisted ML Model Selection

Subscription resource is confirmed and a representation of that resource is returned in

the response body.

content:

application/json:

schema:

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

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 a previously subscribed service consumer on AIML Assisted ML Model Selection related event(s).

requestBody:

required: true

content:

application/json:

schema:

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

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 identifier of an Individual AIMLE Assisted ML Model Selection Subscription

resource.

required: true

schema:

type: string

get:

summary: Retrieve an existing Individual AIMLE Assisted ML Model Selection Subscription resource.

operationId: GetAimleAssistMLMdlSelSubscription

tags:

- Individual AIMLE Assisted ML Model Selection Subscription (Document)

responses:

'200':

description: >

Successful case. The requested Individual AIMLE Assisted ML Model Selection

Subscription resource shall be returned.

content:

application/json:

schema:

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

'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 AIMLE Assisted ML Model Selection Subscription resource.

operationId: UpdateAimleAssistMLMdlSelSubscription

tags:

- Individual AIMLE Assisted ML Model Selection Subscription (Document)

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'200':

description: >

Successful case. The Individual AIMLE Assisted ML Model Selection 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/AssistMLMdlSelSubsc'

'204':

description: >

No Content. The Individual AIMLE Assisted ML Model Selection 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 AIMLE Assisted ML Model Selection Subscription resource.

operationId: ModifyAimleAssistMLMdlSelSubscription

tags:

- Individual AIMLE Assisted ML Model Selection Subscription (Document)

requestBody:

required: true

content:

application/merge-patch+json:

schema:

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

responses:

'200':

description: >

Successful case. The Individual AIMLE Assisted ML Model Selection 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/AssistMLMdlSelSubsc'

'204':

description: >

No Content. The Individual AIMLE Assisted ML Model Selection 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 AIMLE Assisted ML Model Selection Subscription resource.

operationId: UnsubscribeAimleAssistMLMdlSelSubscription

tags:

- Individual AIMLE Assisted ML Model Selection Subscription (Document).

responses:

'204':

description: >

No Content. The Individual AIMLE Assisted ML Model Selection 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:

AssistMLMdlSelSubsc:

description: Represents the AIMLE Assisted ML Model Selection subscription information.

type: object

properties:

aimlProfile:

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

notifUri:

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

repInfo:

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

suppFeat:

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

required:

- aimlProfile

AssistMLMdlSelNotif:

description: Represents the AIMLE Assisted ML Selection notification.

type: object

properties:

opStatus:

$ref: 'TS29482\_AIMLES\_DataManagement.yaml#/components/schemas/DataMgmtOp'

trainMLModel:

$ref: 'TS29482\_MLR\_MLModelManagement.yaml#/components/schemas/MLModelTrainingInfo'

elapseTime:

type: integer

timestamp:

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

required:

- opStatus

- trainMLModel

AimlProfile:

description: Represents the ML model selection operation.

type: object

properties:

candMLMdls:

type: array

items:

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

minItems: 1

mlMdlReq:

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

dataSetIds:

type: array

items:

type: string

minItems: 1

trainReq:

type: array

items:

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

minItems: 1

clientList:

type: array

items:

$ref: 'TS29482\_AIMLES\_DataManagement.yaml#/components/schemas/AimleClientId'

minItems: 1

clNumber:

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

TrainingRequirement:

description: Represents the training requirements for ML model selection.

type: object

properties:

perfReq:

type: array

items:

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

minItems: 1

trainCount:

type: integer

sampleCount:

type: integer

PerformanceRequirement:

description: Represents the performance requirements for ML model selection.

type: object

properties:

perfMetric:

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

perfTarget:

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

AssistMLMdlSelSubscPatch:

description: >

Represents the requested modifications to a AIMLE Assisted ML Selection subscription

information.

type: object

properties:

trainReq:

type: array

items:

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

minItems: 1

notifUri:

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

ReportingInformation:

description: Represents the reporting requirements for ML model selection.

type: object

properties:

immRep:

type: boolean

notifMethod:

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

jobPercentage:

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

timeWindow:

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

CandMLMdl:

description: Contains the candidate ML model selection information.

type: object

properties:

mlMdlId:

type: string

mlMdlParam:

type: string

# SIMPLE DATA TYPES

#

# ENUMERATIONS

PerformanceMetric:

anyOf:

- type: string

enum:

- ACCURACY

- PRECISION

- RECALL

- MEAN\_SQUARED\_ERROR

- MEAN\_ABSOLUTE\_ERROR

- 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: |

Represents the performance metric for training the ML model.

Possible values are:

- ACCURACY: Indicates the performance metric is accuracy.

- PRECISION: Indicates the performance metric is precision.

- RECALL: Indicates the performance metric is recall.

- MEAN\_SQUARED\_ERROR: Indicates the performance metric is mean squared error.

- MEAN\_ABSOLUTE\_ERROR: Indicates the performance metric is mean absolute error.

NotificationMethod:

anyOf:

- type: string

enum:

- PERIODIC

- ON\_JOB\_COMPLETION

- ON\_PCT\_COMPLETION

- ON\_EVENT\_DETECTION

- 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: |

Represents the notification methods that can be subscribed.

Possible values are:

- PERIODIC: The notification of the ML model status is periodically sent.

- ON\_JOB\_COMPLETION: The notification is sent only after the entire ML model selection job

is completed.

- ON\_PCT\_COMPLETION: The notification is sent after the certain job percentage completion.

- ON\_EVENT\_DETECTION: The notification is sent each time the event is detected.

\* \* \* Next Changes \* \* \*

# B.X AIMLES\_AssistedMLModelSelection API

The API versions listed in table B.X-1 are withdrawn for the AIMLES\_AssistedMLModelSelection API.

Table B.X-1: Withdrawn API versions of the AIMLES\_AssistedMLModelSelection service

|  |  |
| --- | --- |
| API version number | Remarks |
|  |  |

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