**3GPP TSG CT WG3 Meeting #142 *C3-253366***

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

**Source: Huawei, Nokia**

**Title: Pseudo-CR on defining the service description clauses of the Naf\_Training 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\_Training API have been defined in clauses TS 23.288.

**2. Reason for Change**

Define the service description clauses 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.

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

## 5.1 Introduction

Table 5.1-x summarizes the corresponding APIs defined for this specification.

Table 5.1-x: API Descriptions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service Name | Clause | Description | OpenAPI Specification File | apiName | Annex |
| Naf\_Training | 5.4 | Model training service | TS29530\_Naf\_Training.yaml | naf-train | A.4 |

\*\*\* Next Change \*\*\*

## 5.4 Naf\_Training Service

### 5.4.1 Service Description

The Naf\_Training service exposed by the AF enables an NF service consumer to:

- request the creation/update of a Training subscription; and

- receive Training related event(s) reporting.

### 5.4.2 Service Operations

#### 5.4.2.1 Introduction

The service operations defined for the Naf\_Training service are shown in table 5.4.2.1-1.

Table 5.4.2.1-1: Naf\_Training Service Operations

|  |  |  |
| --- | --- | --- |
| Service Operation Name | Description | Initiated by |
| Naf\_Training\_Subscribe | This service operation enables the NF service consumer to request the creation/update of a Training Subscription. | e.g., NWDAF, NEF |
| Naf\_Training\_Unsubscribe | This service operation enables the NF service consumer to request the deletion of a Training Subscription. | e.g., NWDAF, NEF |
| Naf\_Training\_Notify | This service operation enables the NF service consumer to receive Training related event(s) reporting. | AF |

#### 5.4.2.2 Naf\_Training\_Subscribe

##### 5.4.2.2.1 General

This service operation is used by an NF service consumer to request the creation/update of a Training Subscription at the AF.

The following procedures are supported by the "Naf\_Training\_Subscribe" service operation:

- Training Subscription Creation.

- Training Subscription Update.

##### 5.4.2.2.2 Training Subscription Creation

Figure 5.4.2.2.2-1 depicts a scenario where an NF service consumer sends a request to the AF to request the creation of a Training Subscription (see also clause 6.2H of 3GPP°TS°23.288°[zz]).



Figure 5.4.2.2.2-1: Procedure for Training Subscription Creation

1. In order to subscribe to Training, the NF service consumer shall send an HTTP POST request to the AF targeting the URI of the "Training Subscriptions" collection resource, with the request body including the TrainEventsSubsc data structure.

2a. Upon success, the AF shall respond with an HTTP "201 Created" status code with the response body containing a representation of the created "Individual Training Subscription" resource within the TrainEventsSubsc data structure, and an HTTP "Location" header field containing the URI of the created resource.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP POST response body, as specified in clause 6.3.7.

##### 5.4.2.2.3 Training Subscription Update

Figure 5.4.2.2.3-1 depicts a scenario where an NF service consumer sends a request to the AF to request the update of an existing Training Subscription (see also clause 6.2H of 3GPP°TS°23.288°[zz]).



Figure 5.4.2.2.3-1: Procedure for Training Subscription Update

1. In order to request the update of an existing Training Subscription, the NF service consumer shall send an HTTP PUT/PATCH request to the AF, targeting the URI of the corresponding "Individual Training Subscription" resource, with the request body including either:

- the updated representation of the resource within the TrainEventsSubsc data structure, in case the HTTP PUT method is used; or

- the requested modifications to the resource within the TrainEventsSubscPatch data structure, in case the HTTP PATCH method is used.

2a. Upon success, the AF shall update the targeted "Individual Training Subscription" resource accordingly and respond with either:

- an HTTP "200 OK" status code with the response body containing a representation of the updated "Individual Training Subscription" resource within the TrainEventsSubsc data structure; or

- an HTTP "204 No Content" status code.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP PUT/PATCH response body, as specified in clause 6.3.7.

#### 5.4.2.3 Naf\_Training\_Unsubscribe

##### 5.4.2.3.1 General

This service operation is used by an NF service consumer to request the deletion of a Training Subscription at the AF.

The following procedures are supported by the "Naf\_Training\_Unsubscribe" service operation:

- Training Subscription Deletion.

##### 5.4.2.3.2 Training Subscription Deletion

Figure 5.4.2.3.2-1 depicts a scenario where an NF service consumer sends a request to the AF to delete an existing Training Subscription (see also clause 6.2H of 3GPP°TS°23.288°[zz]).



Figure 5.4.2.3.2-1: Procedure for Training Subscription Deletion

1. In order to request the deletion of an existing Training Subscription, the NF service consumer shall send an HTTP DELETE request to the AF targeting the URI of the corresponding "Individual Training Subscription" resource.

2a. Upon success, the AF shall respond with an HTTP "204 No Content" status code.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP DELETE response body, as specified in clause 6.3.7.

#### 5.4.2.4 Naf\_Training\_Notify

##### 5.4.2.4.1 General

This service operation is used by the AF to notify a previously subscribed service consumer on:

- Training report(s).

The following procedures are supported by the "Naf\_Training\_Notify" service operation:

- Training Notification.

##### 5.4.2.4.2 Training Notification

Figure 5.4.2.4.2-1 depicts a scenario where the AF sends a request to notify a previously subscribed service consumer on Training report(s) (see also clause 6.2H of 3GPP°TS°23.288°[zz]).



Figure 5.4.2.4.2-1: Procedure for Training Notification

1. In order to notify a previously subscribed service consumer on Training report(s), the AF shall send an HTTP POST request to the NF service consumer with the request URI set to "{notifUri}", where the "notifUri" variable is set to the value received from the NF service consumer during the creation/update of the corresponding Training Subscription using the procedures defined in clauses 5.4.2.2, and the request body including the TrainEventsNotif data structure.

2a. Upon success, the NF service consumer shall respond to the AF with an HTTP "204 No Content" status code to acknowledge the reception of the notification.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP POST response body, as specified in clause 6.3.7.

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