**3GPP TSG-CT3 Meeting #118-e *C3-215223***

**E-Meeting, 11th – 15th October 2021 (Revision of C3-215XXX)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.520** | **CR** | **0337** | **rev** | **-** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *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** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Support of Nnwdaf\_MLModelInfo Service | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, China Mobile Com. Corporation | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eNA\_Ph2 | | | | |  | ***Date:*** | | | 2021-09-30 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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 can be 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The Nnwdaf\_MLModelInfo service is defined in TS 23.288. However, it can be implemented by the Nnwdaf\_MLModelProvision service with one time and immediate reporting requirement. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Support of Nnwdaf\_MLModelInfo service. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Requirements from stage 2 are not implemented in stage 3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not impact the OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

## 4.1 Introduction

The Nnwdaf services are used for the NWDAF to provide specific analytics information.

Analytics information is either statistical information of past events, or predictive information.

The following services are specified for the NWDAF:

Table 4.1-1: Services provided by NWDAF

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Service Name | Description | Service Operations | Operation  Semantics | Example Consumer(s) |
| Nnwdaf\_EventsSubscription  (NOTE 1) | This service enables the NF service consumers to subscribe to/unsubscribe from notifications for different analytics information from the NWDAF. | Subscribe | Subscribe / Notify | PCF, NSSF, AMF, SMF, NEF, UDM, AF, OAM, CEF, NWDAF |
| Unsubscribe |
| Notify |
| Nnwdaf\_AnalyticsInfo | This service enables the NF service consumers to request and get specific analytics from the NWDAF. | Request | Request / Response | PCF, NSSF, AMF, SMF, NEF, UDM, AF, OAM, NWDAF |
| Nnwdaf\_DataManagement | This service enables the NF service consumers to subscribe to/unsubscribe from notifications when subscribed event(s) are detected or retrieve the subscribed data from the NWDAF. | Subscribe | Subscribe / Notify | NWDAF, DCCF, MFAF |
| Unsubscribe |  |  |
| Notify |  |  |
| Fetch | Request / Response | NWDAF, DCCF, MFAF |
| Nnwdaf\_MLModelProvision  (NOTE x) | This service enables the NF service consumers to subscribe to/unsubscribe from notifications when a ML model matching the subscription parameters becomes available. | Subscribe | Subscribe / Notify | NWDAF |
| Unsubscribe |
| Notify |
| NOTE 1: This service corresponds to the Nnwdaf\_AnalyticsSubscription service defined in 3GPP TS 23.288 [17].  NOTE x: This service implements also the Nnwdaf\_MLModelInfo service as specified in 3GPP TS 23.288 [17] by using immediate and one-time reporting requirement. | | | | |

Editor's note: Whether the Nnwdaf\_MLModelProvision service can be reused to implement the Nnwdaf\_MLModelInfo service is FFS.

Table 4.1-2 summarizes the corresponding APIs defined in this specification.

Table 4.1-2: API Descriptions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Service Name | Clause | Description | OpenAPI Specification File | apiName | Annex |
| Nnwdaf\_EventsSubscription | 5.1 | Nnwdaf Events Subscription Service. | TS29520\_Nnwdaf\_EventsSubscription.yaml | nnwdaf-eventssubscription | A.2 |
| Nnwdaf\_AnalyticsInfo | 5.2 | Nnwdaf Analytics Information Service | TS29520\_Nnwdaf\_AnalyticsInfo.yaml | nnwdaf-analyticsinfo | A.3 |
| Nnwdaf\_DataManagement | 5.3 | NWDAF Data Management Service | TS29520\_Nnwdaf\_DataManagement.yaml | nnwdaf-datamanagement | A.4 |
| Nnwdaf\_MLModelProvision | 5.4 | NWDAF ML Model Provision Service | TS29520\_Nnwdaf\_MLModelProvision.yaml | nnwdaf-mlmodelprovision | A.5 |

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