**3GPP TSG CT WG3 Meeting #137 C3-245253**

**Hefei, CN, 14 - 18 October, 2024 (revision of C3-245abc)**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **29.552** | **CR** | **0120** | **rev** | **-** | **Current version:** | **19.0.0** |  |
|  |
| *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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Support the discovery of NWDAF for VFL |
|  |  |
| ***Source to WG:*** | Huawei, Nokia |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | AIML\_CN |  | ***Date:*** | 2024-09-25 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-19 |
|  | *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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | As agreed in S2-2409419, the VFL Server NWDAF discovers the VFL client NWDAF via the NRF. This CR proposes to update the description of the discovery and selection of NWDAF via NRF to support the discovery of NWDAF for VFL. |
|  |  |
| ***Summary of change:*** | Update the description of the discovery and selection of NWDAF via NRF to support the discovery of NWDAF for VFL. |
|  |  |
| ***Consequences if not approved:*** | The stage 2 requirement is not implemented in stage 3. |
|  |  |
| ***Clauses affected:*** | 5.8.1, 5.8.2.3 |
|  |  |
|  | **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:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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

### 5.8.1 General

The NWDAF may be deployed in multiple configuration options. Not all these configurations require the same registration, discovery and selection procedures. The discovery and selection may depend on the NWDAF deployment option and the types of analytics it supports, (i.e., whether it is related to Network Functions or to UEs) or the data that it is able to collect from NFs.

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

#### 5.8.2.3 Consumer discovery and selection of NWDAF in NRF

A consumer of analytics services may use the NRF for discovering NF involved in analytics procedures (e.g. an NWDAF containing AnLF and/or MTLF, a DCCF, ADRF and an AF with Federated Learning capabilities, and more).

If the NWDAF service consumer needs to discover NWDAF with certain features or capabilities (e.g., NWDAF containing AnLF and/or MTLF, NWDAF containing MTLF that support Federated Learning), the consumer may query NRF with the Nnrf\_NFDiscovery\_NFDiscover service operation. See 3GPP TS 29.510 [23] for details. Further requirements about NWDAF discovery and selection are provided in 3GPP TS 23.288 [2].

In the roaming architecture, a consumer in the same PLMN as the RE-NWDAF discovers the RE-NWDAF by querying for an NWDAF where the roaming exchange capability is indicated in its NRF profile. A consumer in a peer PLMN (i.e. RE-NWDAF) discovers the RE-NWDAF by querying for an NWDAF in the target PLMN that is supporting the specific services defined for roaming. A RE-NWDAF discovers the RE-NWDAF in a different PLMN (i.e. HPLMN or VPLMN) using the procedure defined in clause 4.17.5 (if delegated discovery is not used) or clause 4.17.10 (if delegated discovery is used) of TS 23.502 [3], where the detailed parameters are determined based on the analytics request or subscription from the consumer 5GC NF, operator policy, user consent and/or local configuration. See 3GPP TS 29.510 [23] for details.

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