**3GPP TSG-SA4 Meeting #116e *S4-211378***

**Electronic meeting, Telco, November 10-19, 2021**

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| *CR-Form-v12.0* |
| **Pseudo CHANGE REQUEST** |
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|  | **26.532** | **CR** |  | **rev** |  | **Current version:** | **0.1.0** |  |
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| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:***  | Ndcaf DataReporting Service Procedure |
|  |  |
| ***Source to WG:*** |  Qualcomm Incorporated |
| ***Source to TSG:*** | SA4 |
|  |  |
| ***Work item code:*** | EVEX |  | ***Date:*** | 2021-11-03 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-16 |
|  | *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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | Absence of text in TS 26.532 on the provisioning and reporting procedures conducted between the Data Collection AF and various data collection clients over the R2, R3 and R4 reference points. |
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| ***Summary of change:*** | Proposed text for clauses on procedures pertaining to the Ndcaf\_DataReporting Service. |
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| ***Consequences if not approved:*** | Absence of necessary stage 3 text in TS 26.532 on data collection and reporting functionality. |
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| ***Clauses affected:*** | 4.2.4, 4.2.5, 4.2.6, 4.2.7, 4.3.2 and 4.3.3 |
|  |  |
|  | **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:*** |  |
| ***56***  |  |
| ***This CR's revision history:*** |  |

1st CHANGE: Clauses 4.2.4, 4.2.5, 4.2.6 and 4.2.7

# 4 Procedures for Data Collection and Reporting

## 4.1 General

This clause specifies the stage 3 procedures for data collection and reporting.

## 4.2 Network-side procedures

### 4.2.1 General

This clause specifies the procedures used between network-side entities for UE data collection and reporting, along with related functionality pertaining to the provisioning, management, and delivery of such data between the Data Collection AF and consumer entities.

### 4.2.2 Data Collection AF registration with NRF

This clause specifies the use of the Nnrf\_NFManagement service API as defined in TS 29.510 [7] and invoked by a Data Collection AF instance to register its profile with the NRF in order to enable the discovery of the Data Collection AF by consumer entities.

### 4.2.3 Data collection and reporting provisioning

### 4.2.4 Configuration of Indirect Data Collection Client

Indirect reporting operation involves first a UE Application instance sending domain-specific UE data to an Application Service Provider (ASP) server instance across reference point R8. That UE data is passed from to an Indirect Data Reporting Client function operated by the Application Service Provider to be subsequently sent as data reports, possibly in processed form, to a Data Collection AF instance. Operation of the latter procedure is conditioned upon the Indirect Data Collection Client having acquired its data collection and reporting configuration from the Data Collection AF by means of the Ndcaf\_DataReporting service (either directly across the reference point R3 or via an equivalent service exposed by the NEF, depending on whether the Indirect Data Collection Client and the Data Collection AF reside in the same or separate trust domains).

The Indirect Data Collection Client shall obtain its configuration by invoking the Data Collection and Reporting Configuration API associated with the Ndcaf\_DataReporting service, as described under clause 7.2.

The configuration information is contained in a generic data collection and reporting configuration envelope that shall include at minimum the baseline configuration parameters defined in clause 4.6.3 of TS 26.531 [7]. In particular, the configuration shall specify the domain-specific parameters associated with the specified Event ID(s) to be reported to the Data Collection AF.

### 4.2.5 Configuration of Application Server

An Application Server (AS) instance, as a type of data collection client, acquires its domain-specific data collection and reporting configuration from a Data Collection AF instance by means of the Ndcaf\_DataReporting service (either directly across reference point R4 or via an equivalent service exposed by the NEF, depending on whether the AS and the Data Collection AF reside in the same or separate trust domains).

Similar to clause 4.2.4, the AS shall obtain its configuration by invoking the *Data Collection and Reporting Configuration API* associated with the Ndcaf\_DataReporting service, as described under clause 7.2.

The configuration information is contained in a generic data collection and reporting configuration envelope that shall include at minimum the baseline configuration parameters defined in clause 4.6.3 of TS 26.531 [7]. The configuration shall specify the domain-specific parameters associated with the specified Event ID(s) to be reported to the Data Collection AF.

### 4.2.6 Indirect data reporting

After acquiring its data collection and configuration from the Data Collection AF, and in accordance with this configuration, the Indirect Data Collection Client shall send domain-specific data reports to the Data Collection AF by invoking the *Data Reporting API* associated with Ndcaf\_DataReporting service, either directly across reference point R3 or via an equivalent service exposed by the NEF, as described under clause 7.3. The data reports shall be supplied in a generic data report envelope that shall include at minimum the baseline information for data reporting defined in clause 4.6.4 of TS 26.531 [7].

### 4.2.7 Reporting by Application Server

After acquiring its data collection and configuration from the Data Collection AF, and in accordance with this configuration, the AS shall send domain-specific data reports to the Data Collection AF by invoking the *Data Reporting API* associated with Ndcaf\_DataReporting service either directly across reference point R4 or via an equivalent service exposed by the NEF, as described under clause 7.3. The data reports shall be supplied in a generic data report envelope that shall include at minimum the baseline information for data reporting defined in clause 4.6.4 of TS 26.531 [7].

### 4.2.8 Event subscription, management and publication

This clause specifies the event exposure service API used by the NWDAF or an Application Server Provider AF to subscribe to and receive UE data related event information from a Data Collection AF.

END OF 1st CHANGE

2nd CHANGE: Clauses 4.3.2 and 4.3.3

## 4.3 UE-to-network procedures

### 4.3.1 General

This clause specifies the procedures used between the UE and Network Functions in support of provisioning a data collection and reporting configuration in the UE’s Direct Data Collection Client, and subsequent reporting of the collected UE data to the Data Collection AF.

### 4.3.2 Configuration of Direct Data Reporting Client

A Direct Data Reporting Client instance acquires its domain-specific data collection and reporting configuration from a Data Collection AF instance by means of the Ndcaf\_DataReporting service across reference point R2.

The Direct Data Reporting Client shall obtain its configuration by invoking the *Data Collection and Reporting Configuration API* associated with the Ndcaf\_DataReporting service, as described under clause 7.2.

The configuration information is contained in a generic data collection and reporting configuration envelope that shall include at minimum the baseline configuration parameters defined in clause 4.6.3 of TS 26.531 [7]. The configuration shall specify the domain-specific parameters associated with the specified Event ID(s) to be reported to the Data Collection AF.

### 4.3.3 Direct data reporting

After acquiring its data collection and configuration from the Data Collection AF, and in accordance with this configuration, the Direct Data Collection Client shall send domain-specific data reports to the Data Collection AF by invoking the *Data Reporting API* associated with Ndcaf\_DataReporting service across reference point R2 as described under clause 7.3. The data reports shall be supplied in a generic data report envelope that includes at minimum the baseline information for data reporting as defined in clause 4.6.4 of TS 26.531 [7].