**3GPP TSG CT WG3 Meeting #136 *C3-244137r1***

**Maastricht, NL, 19 - 23 August, 2024**

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **29.552** | **CR** | **0114** | **rev** | **1** | **Current version:** | **18.5.0** |  |
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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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:***  | Correction to procedure of ADRF Storage via Notifications |
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| ***Source to WG:*** | ZTE |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | eNetAE |  | ***Date:*** | 2024-08-12 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *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)* |
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| ***Reason for change:*** |  In 5.9.3, only resource "DCCF Analytics Subscriptions" is mentioned, resource "DCCF Data Subscriptions" is missing. |
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| ***Summary of change:*** | The procedure is updated to indicate:* the ADRF invokes Ndccf\_DataManagement\_Subscribe service operation to subscribe to the DCCF for data notifications by sending an HTTP POST request message targeting the resource "DCCF Data Subscriptions".
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| ***Consequences if not approved:*** | Incomplete procedure. |
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| ***Clauses affected:*** | 5.9.3 |
|  |  |
|  | **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:*** |  |

**Additional discussion(if needed):**

**Proposed changes:**

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

### 5.9.3 Historical Data and Analytics Storage via Notifications

The procedure is used by an NF service consumer (e.g. NWDAF, DCCF) to store received notifications in the ADRF.



Figure 5.9.3-1: Historical Data and Analytics storage/deletion procedure

1-2. Based on provisioning or based on reception of a DataManagement subscription request (e.g. see clause 5.5.3.1), the NF service consumer (e.g. DCCF or NWDAF) determines that notifications are to be stored in the ADRF.

3. The NF service consumer invokes Nadrf\_DataManagement\_StorageSubscriptionRequest service operation by sending an HTTP POST request in clause 4.2.2.3 of 3GPP TS 29.575 [16].

4. The ADRF may, based on implementation, determines whether the same data or analytics is already stored or being stored based on the information sent in step 3 by the consumer.

5. If the request is successfully processed and accepted, the ADRF sends Nadrf\_DataManagement\_StorageSubscriptionRequest Response message to the consumer with HTTP "200 OK " status code including a transaction reference identifier. If the data and/or analytics is already stored or being stored in the ADRF, the ADRF sends Nadrf\_DataManagement\_StorageSubscriptionRequest Response message to the consumer indicating that data or analytics is stored.

6a. ADRF invokes Ndccf\_DataManagement\_Subscribe service operation to subscribe to the DCCF to receive analytics notifications by sending an HTTP POST request message targeting the resource "DCCF Analytics Subscriptions", the HTTP POST message shall include notification endpoint address and a notification correlation ID as defined in clause 4.2.2.2.2 of 3GPP TS 29.574 [15].

ADRF invokes Ndccf\_DataManagement\_Subscribe service operation to subscribe to the DCCF to receive data notifications by sending an HTTP POST request message targeting the resource "DCCF Data Subscriptions", the HTTP POST message shall include notification endpoint address and a notification correlation ID as defined in clause 4.2.2.2.2 and clause 4.2.2.2.4 of 3GPP TS 29.574 [15].

6b. ADRF invokes Nnwdaf\_DataManagement\_Subscribe service operation to subscribe to the NWDAF to receive notifications by sending an HTTP POST request message targeting the resource "NWDAF Data Management Subscriptions", the HTTP POST message shall include notification endpoint address and a notification correlation ID as defined in clause 4.4.2.2 of 3GPP TS 29.520 [5].

7a If the Subscription is successfully processed and accepted, the DCCF sends Ndccf\_DataManagement\_Subscribe Response message to the consumer with HTTP "201 Created" status code with the message body containing a representation of the created subscription.

7b If the Subscription is successfully processed and accepted, the NWDAF sends Nnwdaf\_DataManagement\_Subscribe Response message to the consumer with HTTP "201 Created" status code with the message body containing a representation of the created subscription.

8. The NF service consumer (e.g. DCCF, MFAF or NWDAF) sends Analytics or Data notifications containing the notification correlation ID provided by the ADRF to ADRF notification endpoint address when the historical analytics or data are available.

 If the NWDAF is the service consumer in step 7, the NWDAF invokes Nnwdaf\_DataManagement\_Notify service operation as defined in clause 4.4.2.4 of 3GPP TS 29.520 [5]. The ADRF stores the notifications and responses to the Nnwdaf\_DataManagement\_Notify service operation with HTTP "204 No Content" status code.

 If the DCCF is used for data collection in step 7, the DCCF invokes Ndccf\_DataManagement\_Notify service operation as defined in clause 4.2.2.4 of 3GPP TS 29.574 [15]. The ADRF stores the notifications and responses to the Ndccf\_DataManagement\_Notify service operation with HTTP "204 No Content" status code.

 If the Messaging Framework is used for data collection in step 7, the procedure defined in clause 5.5.3.2 is applicable.

9. The NF service consumer determines that notifications no longer need to be stored in the ADRF.

10. In order to request the ADRF to delete the specified data or analytics subscription, the NF service consumer shall invoke the Nadrf\_DataManagement\_StorageSubscriptionRemoval service operation by sending an HTTP POST request as described in clause 4.2.2.4 of 3GPP TS 29.575 [16], including the transaction reference identifier.

11. If the deletion is successful processed, the ADRF sends Nadrf\_DataManagement\_StorageSubscriptionRemoval Response message with HTTP "204 No Content" status code to the consumer.

12a. ADRF invokes Ndccf\_DataManagement\_Unsubscribe service operation to unsubscribe from analytics notifications by sending an HTTP DELETE request message targeting the resource "Individual DCCF Analytics Subscription" as defined in clause 4.2.2.3.2 of 3GPP TS 29.574 [15].

ADRF invokes Ndccf\_DataManagement\_Unsubscribe service operation to unsubscribe from data notifications by sending an HTTP DELETE request message targeting the resource "Individual DCCF Data Subscription" as defined in clause 4.2.2.3.3 of 3GPP TS 29.574 [15].

12b. ADRF invokes Nnwdaf\_DataManagement\_Unsubscribe service operation to unsubscribe from data notifications by sending an HTTP DELETE request message targeting the resource "Individual NWDAF Data Management Subscription" as defined in clause 4.4.2.3.2 of 3GPP TS 29.520 [5].

ADRF invokes Nnwdaf\_EventsSubscription\_Unsubscribe service operation to unsubscribe from analytics notifications by sending an HTTP DELETE request message targeting the resource "Individual NWDAF Event Subscription" as defined in clause 4.2.2.3.2 of 3GPP TS 29.520 [5].

13a If the removal of the corresponding subscription is successfully processed and accepted, the DCCF sends Ndccf\_DataManagement\_Unsubscribe Response message to the consumer with HTTP "204 No Content" status code.

13b If the removal of the corresponding subscription is successfully processed and accepted, the NWDAF sends Nnwdaf\_DataManagement\_Unsubscribe Response message to the consumer with HTTP "204 No Content" status code.

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