**3GPP TSG-CT3 Meeting #135 *C3-243xxx***

**Hyderabad, India, 27th May 2024 - 31st May 2024 *(Revision of C3-243071)***

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.486** | **CR** | **0125** | **rev** | **1** | **Current version:** | **17.7.0** |  |
|  | | | | | | | | |
| *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:*** | Feature definition correction | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NBI17 | | | | |  | ***Date:*** | | | 2024-05-29 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The below functionality of sending reception report of Downlink Message Delivery was added by an NBI17 CR in this Rel-17 specification:  *When the VAE Server received the reception report from the VAE Client as defined in clause 6.5.2.2 of 3GPP TS 24.486 [28], the VAE Server shall send an HTTP POST message to the service consumer identified by the notification URI received during the message delivery subscribed if the "ReceptionReport" feature is supported. Upon receipt of the request, the SCS/AS shall acknowledge the notification with an HTTP 204 No Content response.*  The use of this feature ReceptionReport is not required in order to support the reception report which if still exists in this specification could mislead for the implementation. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Removed the feature ReceptionReport name from clause 5.2.2.4.2 and from clause 6.1.6.1. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Misleading feature support in this specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.2.4.2, 6.1.6.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | This CR does not impact the OpenAPI descriptions of the APIs defined in this specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* Start of changes \* \* \* \*

##### 5.2.2.4.2 Downlink Message Delivery



Figure 5.2.2.4.2-1: Downlink Message Delivery

When the NF service consumer (e.g. V2X application specific server) needs to send the message to the V2X UE, the NF service consumer shall send the HTTP POST method as step 1of the figure 5.2.2.4.2-1 to request to create an "Individual Downlink Message Delivery".

The NF service consumer shall include DownlinkMessageDeliveryData data structure in the payload body of the HTTP POST to request a creation of representation of the "Individual Downlink Message Delivery" resource. The "Individual Downlink Message Delivery" resource is created as described below.

The NF service consumer within the DownlinkMessageDeliveryData data structure shall include:

- Either the V2X UE ID within the "ueId" attribute or the V2X Group ID within the "groupId" attribute;

- V2X message payload carried by the V2X message within the "payload" attribute;

and may include:

- The duration within the "duration" attribute; and

- The geographical area identifier within the "geoId" attribute.

When the VAE Server receives the HTTP POST request from the NF service consumer, the VAE server shall make an authorization based on the information received from the NF service consumer. If the authorization is successful, the VAE Server shall create a new resource, which represents "Individual Downlink Message Delivery", addressed by a URI as defined in clause 6.1.3.5.2 and contains a VAE Server created resource identifier. The VAE Server shall respond to the NF service consumer with a 201 Created message, including Location header field containing the URI for the created resource.

The NF service consumer shall use the URI received in the Location header in subsequent requests to the VAE Server to refer to the "Individual Downlink Message Delivery".

If errors occur when processing the HTTP POST request, the VAE Server shall apply error handling procedures as specified in clause 6.1.7.

After the VAE Server responded to the NF service consumer, the VAE Server shall invoke the procedure defined in clause 6.5.2.4 or 6.5.2.5 of 3GPP TS 24.486 [28] to send the message to the VAE Client.

When the VAE Server received the reception report from the VAE Client as defined in clause 6.5.2.2 of 3GPP TS 24.486 [28], the VAE Server shall send an HTTP POST message to the NF service consumer identified by the notification URI received during the message delivery subscribed. Upon receipt of the request, the SCS/AS shall acknowledge the notification with an HTTP 204 No Content response.

\* \* \* \* Next change \* \* \* \*

#### 6.1.6.1 General

This clause specifies the application data model supported by the API.

Table 6.1.6.1-1 specifies the data types defined for the VAE\_MessageDelivery API.

Table 6.1.6.1-1: VAE\_MessageDelivery specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| AppServerId | 6.1.6.3.2 | Identity of the V2X application specific server. |  |
| DownlinkMessageDeliveryData | 6.1.6.2.2 | Contains the downlink V2X message delivery data |  |
| GeoId | 6.1.6.3.2 | Geographical area identifier |  |
| MessageDeliverySubscriptionData | 6.1.6.2.3 | Contains the V2X message delivery subscription data |  |
| Result | 6.1.6.3.3 | Contains the result of the downlink message delivery |  |
| UplinkMessageDeliveryData | 6.1.6.2.4 | Contains the uplink V2X message delivery data |  |
| V2xGroupId | 6.1.6.3.2 | The group ID for which the V2X message is addressed |  |
| V2xServiceID | 6.1.6.3.2 | The V2X service ID to which the V2X message belongs to |  |
| V2xUeId | 6.1.6.3.2 | Identifier of the destination V2X UE |  |
| V2xMessagePayload | 6.1.6.3.2 | V2X message payload carried by the V2X message |  |

Table 6.1.6.1-2 specifies data types re-used by the VAE\_MessageDelivery service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the VAE\_MessageDelivery service based interface.

Table 6.1.6.1-2: VAE\_MessageDelivery re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| Bytes | 3GPP TS 29.571 [11] | String with format "byte" as defined in OpenAPI Specification [6], i.e, base64-encoded characters |  |
| DateTime | 3GPP TS 29.571 [11] | String with format "date-time" as defined in OpenAPI Specification [6]. |  |
| SupportedFeatures | 3GPP TS 29.571 [11] |  |  |
| TestNotification | 3GPP TS 29.122 [22] | Represents a notification that can be sent to test whether a chosen notification mechanism works. | Notification\_test\_event |
| Uri | 3GPP TS 29.571 [11] |  |  |
| WebsockNotifConfig | 3GPP TS 29.122 [22] | Represents configuration for the delivery of notifications over Websockets. | Notification\_websocket |

\* \* \* \* End of changes \* \* \* \*