**3GPP TSG-CT WG4 Meeting #99eC4-204abc**

**E-Meeting, 18th – 28th June 2020 *was* C4-204293**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.505** | **CR** | **0297** | **rev** | **1** | **Current version:** | **16.3.0** |  |
|  | | | | | | | | |
| *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:*** | Store Broadcast Location Assistance Data | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_eLCS | | | | |  | ***Date:*** | | | 2020-08-11 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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 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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | LCS Broadcast Assistance Subscription Data need to be stored in UDR | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Define a new resource LcsBroadcastAssistanceSubscriptionData to store LCS Broadcast Assistance Subscription Data and get method is defined on this resource. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Stateless UDM feature is not complete. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.1, 5.2.xx(new), 5.4.1, 5.4.2.8, 5.4.3.4, A.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 will introduce backward compatible corrections in the OpenAPI specification file of TS29505\_Subscription\_Data OpenAPI. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev:   1. Removed the query parameter "fields" in 5.2.xx.3.1 and in yaml accrodingly. 2. Moved newly defined resource under /subscription-data/{ueId}/lcs-bca-data to under /subscription-data/{ueId}/{servingPlmnId}/provisioned data/lcs-bca-data, and clause 5.2.1, 5.2.xx and A.2 are revised accordingly. | | | | | | | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Information\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### 5.2.1 Overview



Figure 5.2.1-1: Resource URI sub-level structure for subscription data



Figure 5.2.1-2: Resource URI sub-level structure for subscription data (cont.)



Figure 5.2.1-3: Resource URI sub-level structure for subscription data (cont.)

Table 5.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 5.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method | Description |
| AuthenticationSubscription | /subscription-data/{ueId}/authentication-data/authentication-subscription | GET | Retrieve a UE's authentication subscription data |
| PATCH | Update a UE's authentication subscription data  Updates shall be limited to the sequenceNumber attribute. Attempts to patch any other attribute shall be rejected by the UDR. |
| AuthenticationSoR | /subscription-data/{ueId}/ue-update-confirmation-data/sor-data | PUT | Store UE's SOR acknowledgement information (SoR-XMAC-IUE) |
| GET | Retrieve UE's SoR acknowledgement information |
| AuthenticationUPU | /subscription-data/{ueId}/ue-update-confirmation-data/upu-data | PUT | Store UE Parameter Update acknowledgement information (UPU-XMAC-IUE) |
| GET | Retrieve UE Parameter Update acknowledgement information |
| SubscribedSNSSAIs | /subscription-data/{ueId}/ue-update-confirmation-data/subscribed-snssais | PUT | Store UE-acknowledgement info for change of subscribed S-NSSAIs |
| GET | Retrieve UE-acknowledgement info for change of subscribed S-NSSAIs |
| SubscribedCAG | /subscription-data/{ueId}/ue-update-confirmation-data/subscribed-cag | PUT | Store UE-acknowledgement info for change of subscribed CAG |
| GET | Retrieve UE-acknowledgement info for change of subscribed CAG |
| AuthenticationStatus | /subscription-data/{ueId}/authentication-data/authentication-status | PUT | Store a UE's authentication status |
| GET | Retrieve a UE's authentication status |
| DELETE | Delete a UE's authentication status |
| IndividualAuthenticationStatus | /subscription-data/{ueId}/authentication-data/authentication-status/{servingNetworkName} | PUT | When the feature "PerUePerSnAuthStatus" is supported, store a UE's Individual authentication status |
| GET | When the feature "PerUePerSnAuthStatus" is supported, retrieve a UE's Individual authentication status |
| DELETE | When the feature "PerUePerSnAuthStatus" is supported, delete a UE's Individual authentication status |
| ProvisionedData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data | GET | Retrieve the UE's subscribed Provisioned Data |
| AccessAndMobilitySubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/am-data | GET | Retrieve the UE's subscribed Access and Mobility Data |
| SmfSelectionSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/smf-selection-subscription-data | GET | Retrieve the UE's subscribed SMF Selection Data |
| SessionManagementSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/sm-data | GET | Retrieve the UE's subscribed SM Subscription Data |
| ContextData | /subscription-data/{ueId}/context-data | GET | Retrieve the UE's context Data |
| Amf3GppAccessRegistration | /subscription-data/{ueId}/context-data/amf-3gpp-access | PUT | Create and Update the AMF registration for 3GPP access |
| PATCH | Modify the AMF registration for 3GPP access |
| GET | Retrieve the AMF registration information for 3GPP access |
| AmfNon3GppAccessRegistration | /subscription-data/{ueId}/context-data/amf-non-3gpp-access | PUT | Update the AMF registration for non 3GPP access |
| PATCH | Modify the AMF registration for non 3GPP access |
| GET | Retrieve the AMF registration information for non 3GPP access |
| SmfRegistrations | /subscription-data/{ueId}/context-data/smf-registrations | GET | Retrieve the list of the SMF registrations |
| IndividualSmfRegistration | /subscription-data/{ueId}/context-data /smf-registrations/{pduSessionId} | PUT | Store an individual SMF registration identified by PDU Session Id |
| DELETE | Delete an individual SMF registration |
| GET | Retrieve individual SMF registration |
| OperatorSpecificData | /subscription-data/{ueId}/operator-specific-data | GET | retrieve the operator specific subscription data of a UE |
| PATCH | modify the operator specific subscription data of a UE |
| OperatorDeterminedBarringData | /subscription-data/{ueId}/operator-determined-barring-data | GET | Retrieve the UE's Operator Determined Barring |
| SMSManagementSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/sms-mng-data | GET | Retrieve the UE's subscribed SMS management subscription data. |
| Smsf3GppAccessRegistration | /subscription-data/{ueId}/context-data /smsf-3gpp-access | PUT | Create or Update the SMSF registration |
| DELETE | Delete the SMSF registration for 3GPP access |
| GET | Retrieve the SMSF registration information |
| SmsfNon3GppAccessRegistration | /subscription-data/{ueId}/context-data /smsf-non-3gpp-access | PUT | Create or Update the SMSF registration for non 3GPP access |
| DELETE | Delete the SMSF registration for non 3GPP access |
| GET | Retrieve the SMSF registration information for non 3GPP access |
| IpSmGwRegistration | /subscription-data/{ueId}/context-data/ip-sm-gw | PUT | Create or Update the IP-SM-GW registration |
| DELETE | Delete the IP-SM-GW registration |
| PATCH | Modify the IP-SM-GW registration |
| GET | Retrieve the IP-SM-GW registration information |
| MessageWaitingData | /subscription-data/{ueId}/context-data/mwd | PUT | Create or Update the SMS Message Waiting Data |
| DELETE | Delete the SMS Message Waiting Data |
| PATCH | Modify the SMS Message Waiting Data |
| GET | Retrieve the SMS Message Waiting Data |
| SdmSubscriptions | /subscription-data/{ueId}/context-data/sdm-subscriptions | GET | Retrieve SDM subscriptions |
| POST | Create an individual SDM subscription |
| IndividualSdmSubscription | /subscription-data/{ueId}/context-data/sdm-subscriptions/{subsId} | PUT | Update an individual SDM subscription |
| DELETE | Delete an individual SDM subscription |
| PATCH | Update an individual SDM Subscription |
| GET | Retrieve an individual SDM subscription |
| EeSubscriptions | /subscription-data/{ueId}/context-data/ee-subscriptions | GET | Retrieve EE subscriptions |
| POST | Create an EE subscription |
| IndividualEeSubscription | /subscription-data/{ueId}/context-data/ee-subscriptions/{subsId} | PUT | Update an individual EE subscription |
| DELETE | Delete an individual EE subscription |
| PATCH | Update an individual EE subscription |
| GET | Retrieve an individual EE subscription |
| AmfSubscriptionInfo | /subscription-data/{ueId}/context-data/ee-subscriptions/{subsId}/amf-subscriptions | PUT | Store information related the a received Amf-EE-Subscription response |
| DELETE | Delete the Amf-EE-subscriptions |
| GET | Retrieve AMF-subscriptions |
| PATCH | Update AMF-subscriptions |
| EeProfileData | /subscription-data/{ueId}/ee-profile-data | GET | Retrieve the UE's subscribed EE profile data. |
| ProvisionedParamenterData | /subscription-data/{ueId}/pp-data | PATCH | Update of provisioned parameters. |
| GET | Retrieves the UE's provisioned parameters. |
| SMSSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/sms-data | GET | Retrieve the UE's subscribed SMS subscription data. |
| SubscriptionDataSubscriptions | /subscription-data/subs-to-notify | GET | Retrieve existing subscriptions |
| POST | Create a subscription, i.e. subscribe a node to receive notification for change of data |
| DELETE | Deletes multiple subscriptions for a given UE. |
| IndividualSubscriptionDataSubscription | /subscription-data/subs-to-notify/{subsId} | DELETE | Delete the subscription identified by {subsId}, i.e. unsubscribe a node to receive notification for change of data |
| PATCH | Update an individual Subscription to notification |
| GET | Retrieve an individual Subscription to notification |
| EeGroupSubscriptions | /subscription-data/group-data/{ueGroupId}/ee-subscriptions | GET | Retrieve EE subscriptions for groups of UEs |
| POST | Create an EE subscription for groups of UEs |
| IndividualEeGroupSubscription | /subscription-data/group-data/{ueGroupId}/ee-subscriptions/{subsId} | PUT | Update an individual EE subscription for a group of UEs |
| DELETE | Delete an individual EE subscription for a group of UEs |
| PATCH | Update an individual EE subscription for a group of UEs |
| GET | Retrieve an individual EE subscription for a group of UEs |
| TraceData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/trace-data | GET | Retrieve the UE's trace configuration data |
| IdentityData | /subscription-data/{ueId}/identity-data | GET | Retrieve identity data that corresponds to the provided ueId |
| SharedData (Collection) | /subscription-data/shared-data | GET | Retrieve shared data |
| GroupIdentifiers | /subscription-data/group-data/group-identifiers | GET | Retrieve group identifiers and the UE identifiers belong to the group identifiers. |
| 5GVnGroups | /subscription-data/group-data/5g-vn-groups | GET | Retrieve 5G VN Groups |
| Individual5GVnGroup | /subscription-data/group-data/5g-vn-groups/{externalGroupId} | PUT | Create a 5G VN Group |
| PATCH | Update a 5G VN Group |
| DELETE | Delete a 5G VN Group |
| GET | Retrieve a 5G VN Group |
| LcsPrivacySubscriptionData | /subscription-data/{ueId}/lcs-privacy-data | GET | Retrieve the UE's subscribed LCS privacy Subscription Data |
| LcsMobileOriginatedSubscriptionData | /subscription-data/{ueId}/lcs-mo-data | GET | Retrieve the UE's subscribed LCS Mobile Originated Subscription Data |
| NiddAuthorizationData | /subscription-data/{ueId}/nidd-authorization-data | GET | Retrieve the UE's NIDD Authorization Data |
| CoverageRestrictionData | /subscription-data/{ueId}/coverage-restriction-data | GET | Retrieve the UE's subscribed enhanced Coverage Restriction Data |
| Location | /subscription-data/{ueId}/context-data/location | GET | Retrieve the UE's Location Information |
| V2xSubscriptionData | /subscription-data/{ueId}/v2x-data | GET | Retrieve the UE's subscribed V2X Data |
| LcsBroadcastAssistanceSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/lcs-bca-data | GET | Retrieve the UE's subscribed LCS Broadcast Assistance subscription data |

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

### 5.2.xx Resource: LcsBroadcastAssistanceSubscriptionData

#### 5.2.xx.1 Description

This resource represents the subscribed LcsBroadcast Assistance Subscription Data for an UE for use in a serving PLMN. It is queried by the LMF via the UDM.

This resource is modelled with the Document resource archetype (see clause C.1 of 3GPP TS 29.501 [7]).

#### 5.2.xx.2 Resource Definition

Resource URI: {apiRoot}/nudr-dr/<apiVersion>/subscription-data/{ueId}/{servingPlmnId}/provisioned-data/lcs-bca-data

This resource shall support the resource URI variables defined in table 5.2.xx.2-1.

Table 5.2.xx.2-1: Resource URI variables for this resource

|  |  |
| --- | --- |
| Name | Definition |
| apiRoot | See 3GPP TS 29.504 [2] clause 6.1.1 |
| ueId | Represents the Subscription Identifier SUPI or GPSI (see 3GPP TS 23.501 [4] clause 5.9.2 and 5.9.8)  See pattern of type VarUeId in 3GPP TS 29.571 [3] |
| servingPlmnId | Represents the Serving PLMN ID (<MCC><MNC>)  pattern: "^[0-9]{5,6}$" |

#### 5.2.xx.3 Resource Standard Methods

##### 5.2.xx.3.1 GET

This method shall support the URI query parameters specified in table 5.2.xx.3.1-1.

Table 5.2.xx.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supported-features | SupportedFeatures | O | 0..1 | see 3GPP TS 29.500 [8] clause 6.6 |

This method shall support the request data structures specified in table 5.2.xx.3.1-2 and the response data structures and response codes specified in table 5.2.xx.3.1-3.

Table 5.2.xx.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 5.2.xx.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| LcsBroadcastAssistanceTypesData | M | 1 | 200 OK | Upon success, a response body containing the LCS Broadcast Assistance Data Subscription Data shall be returned. |
| NOTE: In addition common data structures as listed in table 5.5-1 are supported. | | | | |

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

### 5.4.1 General

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

Table 5.4.1-1 specifies the data types defined for the Nudr service based interface protocol.

Table 5.4.1-1: Nudr Subscriber Data specific Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Clause defined | Description |
| AuthenticationSubscription | 5.4.2.2 | A UE's authentication data |
| OperatorSpecificDataContainer | 5.4.2.3 | Container for operator specific data |
| SmfRegList | 5.4.2.4 | The list of all the SMF registrations of a UE |
| SubscriptionDataSubscriptions | 5.4.2.5 | A subscription to notifications. |
| DataChangeNotify | 5.4.2.6 | Container for data which have changed and notification was requested when changed. |
| IdentityData | 5.4.2.7 | Identity data corresponds to the provided ueId |
| ProvisionedDataSets | 5.4.2.8 |  |
| SorData | 5.4.2.9 | Used to store the status of the latest SOR data update |
| UpuData | 5.4.2.9A | Used to store the status of the latest UPU data update |
| NssaiAckData | 5.4.2.9B | Used to store the status of the latest NSSAI data update |
| CagAckData | 5.4.2.9C | Used to store the status of the latest CAG data update |
| AmfSubscriptionInfo | 5.4.2.19 | Information the UDR stores and retrieves related to active subscriptions at the AMF(s) |
| EeProfileData | 5.4.2.20 | Event Exposure Profile Data |
| ContextDataSets | 5.4.2.22 |  |
| SequenceNumber | 5.4.2.23 |  |
| MessageWaitingData | 5.4.2.24 |  |
| SmscData | 5.4.2.25 |  |
| AuthMethod | 5.4.3.3 |  |
| DataSetName | 5.4.3.4 |  |
| ContextDataSetName | 5.4.3.6 |  |
| SqnScheme | 5.4.3.7 |  |
| Sign | 5.4.3.8 |  |
| UeUpdateStatus | 5.4.3.9 |  |

Table 5.4.1-2 specifies data types re-used by the Nudr 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 Nudr service based interface.

Table 5.4.1-2: Nudr re-used Data Types

|  |  |  |
| --- | --- | --- |
| ` | Reference | Comments |
| AccessAndMobilitySubscriptionData | 3GPP TS 29.503 [6] | Access and Mobility Subscription Data |
| SmfSelectionSubscriptionData | 3GPP TS 29.503 [6] | SMF Selection Subscription Data |
| SessionManagementSubscriptionData | 3GPP TS 29.503 [6] | Session Management Subscription Data |
| Amf3GppAccessRegistration | 3GPP TS 29.503 [6] |  |
| AmfNon3GppAccessRegistration | 3GPP TS 29.503 [6] | The complete set of information relevant to the AMF where the UE has registered via non 3GPP access. |
| SmfRegistration | 3GPP TS 29.503 [6] |  |
| SmsfRegistration | 3GPP TS 29.503 [6] |  |
| SmsManagementSubscriptionData | 3GPP TS 29.503 [6] |  |
| SupportedFeatures | 3GPP TS 29.571 [3] | Used to negotiate the applicability of the optional features |
| ProblemDetails | 3GPP TS 29.571 [3] | Detailed information about the status code. |
| PpData | 3GPP TS 29.503 [6] |  |
| SmsSubscriptionData | 3GPP TS 29.503 [6] |  |
| PatchItem | 3GPP TS 29.571 [3] | Data structure used for JSON patch. |
| SdmSubscription | 3GPP TS 29.503 [6] |  |
| EeSubscription | 3GPP TS 29.503 [6] |  |
| Uri | 3GPP TS 29.571 [3] |  |
| TraceData | 3GPP TS 29.571 [3] |  |
| Dnn | 3GPP TS 29.571 [3] | Data Network Name |
| Snssai | 3GPP TS 29.571 [3] | Single NSSAI |
| VarUeId | 3GPP TS 29.571 [3] | String represents the SUPI or GPSI. |
| NfInstanceId | 3GPP TS 29.571 [3] |  |
| NotifyItem | 3GPP TS 29.571 [3] | Common data type used for data change notification. |
| OdbData | 3GPP TS 29.571 [3] | Operator Determined Barring Data |
| EventType | 3GPP TS 29.503 [6] |  |
| ExtGroupId | 3GPP TS 29.503 [6] | External Group Identifier |
| PduSessionId | 3GPP TS 29.571 [3] |  |
| DateTime | 3GPP TS 29.571 [3] |  |
| UpuMac | 3GPP TS 29.509 [15] |  |
| 5GVnGroupConfiguration | 3GPP TS 29.503 [6] |  |
| PatchResult | 3GPP TS 29.571 [7] |  |
| SupportedFeatures | 3GPP TS 29.571 [7] |  |
| AppPortId | 3GPP TS 29.503 [6] |  |
| LcsPrivacyData | 3GPP TS 29.503 [6] | LCS Privacy Subscription Data |
| LcsMoData | 3GPP TS 29.503 [6] | LCS Mobile Originated Subscription Data |
| MtcProviderInformation | 3GPP TS 29.571 [3] |  |
| AuthorizationData | 3GPP TS 29.503 [6] |  |
| EnhancedCoverageRestrictionData | 3GPP TS 29.503 [6] |  |
| LocationInfo | 3GPP TS 29.503 [6] |  |
| V2xSubscriptionData | 3GPP TS 29.503 [6] | V2X Subscription Data |
| E164Number | 3GPP TS 29.503 [6] |  |
| NetworkNodeDiameterAddress | 3GPP TS 29.503 [6] |  |
| IpSmGwRegistration | 3GPP TS 29.503 [6] |  |
| LcsBroadcastAssistanceTypesData | 3GPP TS 29.503 [6] | LCS Broadcast Assistance Data Types |

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

### 5.4.2.8 Type: ProvisionedDataSets

Table 5.4.2.8-1: ProvisionedDataSets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| amData | AccessAndMobilitySubscriptionData | O | 0..1 | Access and Mobility Subscription Data |
| smfSelData | SmfSelectionSubscriptionData | O | 0..1 | SMF Selection Subscription Data |
| smsSubsData | SmsSubscriptionData | O | 0..1 | SMS Subscription Data |
| smData | array(SessionManagementSubscriptionData) | O | 1..N | Session Management Subscription Data |
| traceData | TraceData | O | 0..1 | Trace Data. The Null value indicates that trace is not active. |
| smsMngData | SmsManagementSubscriptionData | O | 0..1 | SMS Management Subscription Data |
| lcsPrivacyData | LcsPrivacyData | O | 0..1 | LCS Privacy Subscription Data |
| lcsMoData | LcsMoData | O | 0..1 | LCS Mobile Originated Subscription Data |
| lcsBcaData | LcsBroadcastAssistanceTypesData | O | 0..1 | LCS Broadcast Assistance Subscription Data |
| v2xData | V2xSubscriptionData | O | 0..1 | V2X Subscription Data |

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

#### 5.4.3.4 Enumeration: DataSetName

Table 5.4.3.4-1: Enumeration DataSetName

|  |  |
| --- | --- |
| Enumeration value | Description |
| "AM" | Access and Mobility Subscription Data |
| "SMF\_SEL" | SMF Selection Subscription Data |
| "SMS\_SUB" | SMS Subscription Data |
| "SM" | Session Management Subscription Data |
| "TRACE" | Trace Data |
| "SMS\_MNG" | SMS Management Subscription Data |
| "LCS\_PRIVACY" | LCS Privacy Subscription Data |
| "LCS\_MO" | LCS Mobile Originated Subscription Data |
| "LCS\_BCA" | LCS Broadcast Assistance Subscription Data |
| "V2X" | V2X Subscription Data |

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

## A.2 Nudr\_DataRepository API for Subscription Data

For the purpose of referencing entities in the Open API file defined in this Annex, it shall be assumed that this Open API file is contained in a physical file named "TS29505\_Subscription\_Data.yaml".

openapi: 3.0.0

***(… text not shown for clarity …)***

/subscription-data/{ueId}/lcs-privacy-data:

get:

summary: Retrieves the LCS Privacy subscription data of a UE

operationId: QueryLcsPrivacyData

tags:

- LCS Privacy Subscription Data

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: fields

in: query

description: attributes to be retrieved

required: false

schema:

type: array

items:

type: string

minItems: 1

style: form

explode: false

- name: supported-features

in: query

description: Supported Features

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

- name: If-None-Match

in: header

description: Validator for conditional requests, as described in RFC 7232, 3.2

schema:

type: string

- name: If-Modified-Since

in: header

description: Validator for conditional requests, as described in RFC 7232, 3.3

schema:

type: string

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/LcsPrivacyData'

minItems: 1

headers:

Cache-Control:

description: Cache-Control containing max-age, as described in RFC 7234, 5.2

schema:

type: string

ETag:

description: Entity Tag, containing a strong validator, as described in RFC 7232, 2.3

schema:

type: string

Last-Modified:

description: Timestamp for last modification of the resource, as described in RFC 7232, 2.2

schema:

type: string

default:

description: Unexpected error

content:

application/problem+json:

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

/subscription-data/{ueId}/lcs-mo-data:

get:

summary: Retrieves the LCS Mobile Originated subscription data of a UE

operationId: QueryLcsMoData

tags:

- LCS Mobile Originated Subscription Data

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: fields

in: query

description: attributes to be retrieved

required: false

schema:

type: array

items:

type: string

minItems: 1

style: form

explode: false

- name: supported-features

in: query

description: Supported Features

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

- name: If-None-Match

in: header

description: Validator for conditional requests, as described in RFC 7232, 3.2

schema:

type: string

- name: If-Modified-Since

in: header

description: Validator for conditional requests, as described in RFC 7232, 3.3

schema:

type: string

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

type: array

items:

$ref: '#/components/schemas/LcsMoData'

minItems: 1

headers:

Cache-Control:

description: Cache-Control containing max-age, as described in RFC 7234, 5.2

schema:

type: string

ETag:

description: Entity Tag, containing a strong validator, as described in RFC 7232, 2.3

schema:

type: string

Last-Modified:

description: Timestamp for last modification of the resource, as described in RFC 7232, 2.2

schema:

type: string

default:

description: Unexpected error

content:

application/problem+json:

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

/subscription-data/{ueId}/{servingPlmnId}/provisioned-data/lcs-bca-data:

get:

summary: Retrieves the LCS Broadcast Assistance subscription data of a UE

operationId: QueryLcsBcaData

tags:

- LCS Broadcast Assistance Subscription Data

parameters:

- name: ueId

in: path

description: UE id

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: servingPlmnId

in: path

description: PLMN ID

required: true

schema:

$ref: '#/components/schemas/VarPlmnId'

- name: supported-features

in: query

description: Supported Features

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

- name: If-None-Match

in: header

description: Validator for conditional requests, as described in RFC 7232, 3.2

schema:

type: string

- name: If-Modified-Since

in: header

description: Validator for conditional requests, as described in RFC 7232, 3.3

schema:

type: string

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

$ref: '#/components/schemas/LcsBroadcastAssistanceTypesData'

headers:

Cache-Control:

description: Cache-Control containing max-age, as described in RFC 7234, 5.2

schema:

type: string

ETag:

description: Entity Tag, containing a strong validator, as described in RFC 7232, 2.3

schema:

type: string

Last-Modified:

description: Timestamp for last modification of the resource, as described in RFC 7232, 2.2

schema:

type: string

default:

description: Unexpected error

content:

application/problem+json:

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

***(… text not shown for clarity …)***

DatasetNames:

type: array

items:

$ref: '#/components/schemas/DataSetName'

minItems: 1

uniqueItems: true

DataSetName:

anyOf:

- type: string

enum:

- AM

- SMF\_SEL

- SMS\_SUB

- SM

- TRACE

- SMS\_MNG

- LCS\_PRIVACY

- LCS\_MO

- LCS\_BCA

- V2X

- type: string

ProvisionedDataSets:

type: object

properties:

amData:

$ref: '#/components/schemas/AccessAndMobilitySubscriptionData'

smfSelData:

$ref: '#/components/schemas/SmfSelectionSubscriptionData'

smsSubsData:

$ref: '#/components/schemas/SmsSubscriptionData'

smData:

type: array

items:

$ref: '#/components/schemas/SessionManagementSubscriptionData'

traceData:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/TraceData'

smsMngData:

$ref: '#/components/schemas/SmsManagementSubscriptionData'

lcsPrivacyData:

$ref: '#/components/schemas/LcsPrivacyData'

lcsMoData:

$ref: '#/components/schemas/LcsMoData'

lcsBcaData:

$ref: '#/components/schemas/LcsBroadcastAssistanceTypesData'

v2xData:

$ref: '#/components/schemas/V2xSubscriptionData'

AccessAndMobilitySubscriptionData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/AccessAndMobilitySubscriptionData'

SmfSelectionSubscriptionData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/SmfSelectionSubscriptionData'

VarSnssai:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

Dnn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Dnn'

SessionManagementSubscriptionData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/SessionManagementSubscriptionData'

Amf3GppAccessRegistration:

$ref: 'TS29503\_Nudm\_UECM.yaml#/components/schemas/Amf3GppAccessRegistration'

AmfNon3GppAccessRegistration:

$ref: 'TS29503\_Nudm\_UECM.yaml#/components/schemas/AmfNon3GppAccessRegistration'

SmfRegistration:

$ref: 'TS29503\_Nudm\_UECM.yaml#/components/schemas/SmfRegistration'

SmsfRegistration:

$ref: 'TS29503\_Nudm\_UECM.yaml#/components/schemas/SmsfRegistration'

LocationInfo:

$ref: 'TS29503\_Nudm\_UECM.yaml#/components/schemas/LocationInfo'

SmsManagementSubscriptionData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/SmsManagementSubscriptionData'

SmsSubscriptionData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/SmsSubscriptionData'

LcsPrivacyData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/LcsPrivacyData'

LcsMoData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/LcsMoData'

AuthorizationData:

$ref: 'TS29503\_Nudm\_NIDDAU.yaml#/components/schemas/AuthorizationData'

EnhancedCoverageRestrictionData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/EnhancedCoverageRestrictionData'

V2xSubscriptionData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/V2xSubscriptionData'

LcsBroadcastAssistanceTypesData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/LcsBroadcastAssistanceTypesData'

***(… text not shown for clarity …)***

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*The end of changes\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*