**3GPP TSG-CT WG4 Meeting #101eC4-2050abc**

**E-Meeting, 03rd – 13th November 2020 *was* C4-205094**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.563** | **CR** | **0011** | **rev** | **1** | **Current version:** | **16.2.0** |  |
|  | | | | | | | | |
| *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:*** | Definition of SubscriptionData | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | UDICOM | | | | |  | ***Date:*** | | | 2020-10-23 |
|  |  | | | |  | |  | | |  |
| ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | SubscriptionData is used as data type of request body and response body of Nhss\_SubscriberDataManagement Subscribe service operation in the current definition of specification, but definition of data model SubscriptionData is missing in both text part and yaml part. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Defined the data model SubscriptionData | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Nhss\_SubscriberDataManagement Subscribe service operation won't be used because the definition fo data model SubscriptionData is missing . | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.2.6.1, 6.2.6.2.x(new), 6.2.6.2.y(new) A.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 will introduce backward compatible corrections in the OpenAPI specification file of TS29563\_Nhss\_SDM OpenAPI. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev1:  1.added immediate Report mechanism in subscription service operation, i.e., add immediateReport, report in data model SubscriptionData, defined new data model SubscriptionDataSets. | | | | | | | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*The start of changes\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 6.2.6.1 General

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

Table 6.2.6.1-1 specifies the data types defined for the Nhss\_SubscriberDataManagement service API.

Table 6.2.6.1-1: Nhss\_SubscriberDataManagement specific Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Clause defined | Description |
| UeContextInPgwData | 6.2.6.2.2 |  |
| SubscriptionData | 6.2.6.2.x | Subscription Data |
| SubscriptionDataSets | 6.2.6.2.y | UE Subscription Data Sets |

Table 6.2.6.1-2 specifies data types re-used by the Nhss\_SubscriberDataManagement service API from other APIs, including a reference and when needed, a short description of their use within the Nhss\_SubscriberDataManagement service API.

Table 6.2.6.1-2: Nhss\_SubscriberDataManagement re-used Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Reference | Comments |
| PgwInfo | 3GPP TS 29.503 [13] |  |
| ModificationNotification | 3GPP TS 29.503 [13] |  |
| NfInstanceId | 3GPP TS 29.571 [7] | Network Function Instance Identifier |
| Uri | 3GPP TS 29.571 [7] | Uniform Resource Identifier |
| DateTime | 3GPP TS 29.571 [7] |  |

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

##### 6.2.6.2.x Type: SubscriptionData

Table 6.2.6.2.x-1: Definition of type SubscriptionData

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| nfInstanceId | NfInstanceId | M | 1 | Identity of the NF Instance creating the subscription. |
| callbackReference | Uri | M | 1 | URI provided by the NF service consumer to receive notifications |
| monitoredResourceUris | array(Uri) | M | 1..N | A set of URIs that identify the resources for which a change triggers a notification.  The URI shall take the form of either an absolute URI or an absolute-path reference as defined in IETF RFC 3986 [31]. |
| expires | DateTime | O | 0..1 | If present in a POST request, it indicates the point in time at which the subscription expires.  Within a POST request the proposed expiry time is conveyed whereas in a POST response or PATCH response the confirmed expiry time is returned. |
| immediateReport | boolean | O | 0..1 | This IE indicates whether immediate report is needed or not.  When present, this IE shall be set as following:  - true: immediate report is required  - false (default) immediate report is not required |
| report | SubscriptionDataSets | C | 0..1 | This IE shall be present in Subscribe response, if the immediateReport attribute is set to "true" in Subscribe request.  When present, this IE shall contain the representation of subscription data sets that to be monitored, i.e. listed in monitoredResourceUris attribute. |

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

##### 6.2.6.2.y Type: SubscriptionDataSets

Table 6.2.6.2.y-1: Definition of type SusbcriptionDataSets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| ueContextInPgwData | UeContextInPgwData | O | 0..1 | UE Context in PGW Data |

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

## A.3 Nhss\_SubscriberDataManagement API

openapi: 3.0.0

info:

version: '1.0.0'

title: 'Nhss\_SDM'

description: |

HSS Subscriber Data Management.

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

# COMPLEX TYPES:

UeContextInPgwData:

type: object

properties:

pgwInfo:

type: array

items:

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

minItems: 1

emergencyFqdn:

type: string

SubscriptionData:

type: object required:

- nfInstanceId

- callbackReference

- monitoredResourceUris

properties:

nfInstanceId:

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

callbackReference:

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

monitoredResourceUris:

type: array

items:

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

minItems: 1

expires:

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

immediateReport:

type: boolean

default: false

report:

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

SubscriptionDataSets:

type: object

properties:

ueContextInPgwData:

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

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

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