**3GPP TSG-CT WG3 Meeting #123e C3-224637**

**E-Meeting, 18th – 26th August 2022 (Revision of C3-224391)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.522** | **CR** | **0691** | **rev** | **1** | **Current version:** | **17.6.0** |  |
|  | | | | | | | | |
| *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:*** | Define API resource clauses in Nnef\_MBSUserDataIngestSession API | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson, Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBS | | | | |  | ***Date:*** | | | 2022-07-26 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)  Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | TS 26.502 table 7.2-1 note describes when the MBS Application Provider (AF/AS) lies outside the trusted DN, these services shall be exposed via the NEF (N33+Nmb5) as Nnef\_MBSUserService and Nnef\_MBSUserDataIngestSession respectively. And SA4 LS reply in S4-220829 also indicates that the "NEF should expose similar (or even identical) APIs".  Therefore, the Nnef\_MBSUserDataIngestSession API needs to be defined in order to expose the corresponding Nmbsf\_MBSUserDataIngestSession API in the case of an external untrusted AF, i.e. external untrusted MBS Application Provider.  Upon SA4 LS reply C3-224544 (S4-221119) and the attached TS 26.502 CR 0007r1 (S4-221124) supporting modification to status subscription in Nmbsf\_MBSUserDataIngestSession\_StatusSubscribeMod operation, hence need to be updated in resource in Nnef\_MBSUserDataIngestSession API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Define the API resource clauses in Nnef\_MBSUserDataIngestSession API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The NEF is not enhanced to support stage 2 requirements on MBS user data ingest session for the case of external/untrusted AF (i.e. MBS Application Provider). | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.27.2(new), 5.27.2.1(new), 5.27.2.2(new), 5.27.2.2.1(new), 5.27.2.2.2(new), 5.27.2.2.3(new), 5.27.2.2.3.1(new), 5.27.2.2.3.2(new), 5.27.2.2.4(new), 5.27.2.3(new), 5.27.2.3.1(new), 5.27.2.3.2(new), 5.27.2.3.3(new), 5.27.2.3.3.1(new), 5.27.2.3.3.2(new), 5.27.2.3.3.3(new), 5.27.2.3.3.4(new), 5.27.2.3.4(new), 5.27.2.4(new), 5.27.2.4.1(new), 5.27.2.4.2(new), 5.27.2.4.3(new), 5.27.2.4.3.1(new), 5.27.2.4.3.2(new), 5.27.2.4.4(new), 5.27.2.5(new), 5.27.2.5.1(new), 5.27.2.5.2(new), 5.27.2.5.3(new), 5.27.2.5.3.1(new), 5.27.2.5.3.2(new), 5.27.2.5.3.3(new), 5.27.2.5.3.4(new), 5.27.2.5.4(new), 5.27.3(new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 26.502 CR 0007 | | |
| ***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 file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

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

### 5.27.2 Resources

#### 5.27.2.1 Overview

This clause describes the structure for the Resource URIs as shown in figure 5.27.2.1-1 and the resources and HTTP methods used for the MBSUserDataIngestSession API.



Figure 5.27.2.1-1: Resource URI structure of the MBSUserDataIngestSession API

Table 5.27.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 5.27.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI (relative path under API URI) | HTTP method or custom operation | Description  (service operation) |
| MBS User Data Ingest Sessions | /sessions | GET | Retrieve all the active MBS User Data Ingest Sessions managed by the NEF. |
| POST | Request the creation of a new MBS User Data Ingest Session. |
| Individual MBS User Data Ingest Session | /sessions/{sessionId} | GET | Retrieve an existing Individual MBS User Data Ingest Session managed by the NEF. |
| PUT | Update an existing Individual MBS User Data Ingest Session managed by the NEF. |
| PATCH | Modify an existing Individual MBS User Data Ingest Session managed by the NEF. |
| DELETE | Delete an existing Individual MBS User Data Ingest Session managed by the NEF. |
| MBS User Data Ingest Session Status Subscriptions | /status-subscriptions | GET | Retrieve all the active MBS User Data Ingest Session Status Subscriptions managed by the NEF. |
| POST | Request the creation of a new MBS User Data Ingest Session Status Subscription. |
| Individual MBS User Data Ingest Session Status Subscription | /status-subscriptions/{subscriptionId} | GET | Retrieve an existing Individual MBS User Data Ingest Session Status Subscription managed by the NEF. |
| PUT | Update an existing MBS User Data Ingest Session Status Subscription managed by the NEF. |
| PATCH | Modify an existing MBS User Data Ingest Session Status Subscription managed by the NEF. |
| DELETE | Delete an existing Individual MBS User Data Ingest Session Status Subscription managed by the NEF. |

#### 5.27.2.2 Resource: MBS User Data Ingest Sessions

##### 5.27.2.2.1 Introduction

This resource represents the collection of MBS User Data Ingest Sessions managed by the NEF.

This resource is modelled with the Collection resource archetype (see clause C.2 of 3GPP TS 29.501 [3]).

##### 5.27.2.2.2 Resource Definition

Resource URI: **{apiRoot}/3gpp-mbs-ud-ingest/v1/sessions**

This resource shall support the resource URI variables defined in table 5.27.2.2.2-1.

Table 5.27.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 5.27.1. |

##### 5.27.2.2.3 Resource Standard Methods

###### 5.27.2.2.3.1 GET

This method allows an AF to retrieve all the active MBS User Data Ingest Sessions managed by the NEF.

This method shall support the URI query parameters specified in table 5.27.2.2.3.1-1.

Table 5.27.2.2.3.1-1: URI query parameters supported by the GET method on this resource

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

This method shall support the request data structures specified in table 5.27.2.2.3.1-2 and the response data structures and response codes specified in table 5.27.2.2.3.1-3.

Table 5.27.2.2.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 5.27.2.2.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(MBSUserDataIngSession) | M | 1..N | 200 OK | Successful case. All the active MBS User Data Ingest Sessions managed by the NEF are returned. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE: The mandatory HTTP error status code for the GET method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.2.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.2.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

###### 5.27.2.2.3.2 POST

This method enables an AF to request the creation of an MBS User Data Ingest Session at the NEF.

This method shall support the URI query parameters specified in table 5.27.2.2.3.2-1.

Table 5.27.2.2.3.2-1: URI query parameters supported by the POST method on this resource

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

This method shall support the request data structures specified in table 5.27.2.2.3.2-2 and the response data structures and response codes specified in table 5.27.2.2.3.2-3.

Table 5.27.2.2.3.2-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserDataIngSession | M | 1 | Contains the parameters to request the creation of a new MBS User Data Ingest Session at the NEF. |

Table 5.27.2.2.3.2-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  Codes | Description |
| MBSUserDataIngSession | M | 1 | 201 Created | Successful case. A new MBS User Data Ingest Session is successfully created and a representation of the created Individual MBS User Data Ingest Session resource is returned.  An HTTP "Location" header that contains the URI of the created Individual MBS User Data Ingest Session resource is also included. |
| NOTE: The mandatory HTTP error status code for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.2.3.2-4: Headers supported by the 201 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure:  {apiRoot}/3gpp-mbs-ud-ingest/v1/sessions/{sessionId} |

##### 5.27.2.2.4 Resource Custom Operations

There are no resource custom operations defined for this resource in this release of the specification.

#### 5.27.2.3 Resource: Individual MBS User Data Ingest Session

##### 5.27.2.3.1 Introduction

This resource represents an Individual MBS User Data Ingest Session resource managed by the NEF.

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

##### 5.27.2.3.2 Resource Definition

Resource URI: **{apiRoot}/3gpp-mbs-ud-ingest/v1/sessions/{sessionId}**

This resource shall support the resource URI variables defined in table 5.27.2.3.2-1.

Table 5.27.2.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 5.27.1. |
| sessionId | string | Contains the unique identifier of the Individual MBS User Data Ingest Session resource assigned by the NEF. |

##### 5.27.2.3.3 Resource Standard Methods

###### 5.27.2.3.3.1 GET

This method allows an AF to retrieve an existing "Individual MBS User Data Ingest Session" resource at the NEF.

This method shall support the URI query parameters specified in table 5.27.2.3.3.1-1.

Table 5.27.2.3.3.1-1: URI query parameters supported by the GET method on this resource

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

This method shall support the request data structures specified in table 5.27.2.3.3.1-2 and the response data structures and response codes specified in table 5.27.2.3.3.1-3.

Table 5.27.2.3.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 5.27.2.3.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserDataIngSession | M | 1 | 200 OK | Successful case. The requested Individual MBS User Data Ingest Session resource is successfully returned. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE: The mandatory HTTP error status code for the GET method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.3.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.3.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

###### 5.27.2.3.3.2 PUT

This method enables an AF to request the update of an existing "Individual MBS User Data Ingest Session" resource at the NEF.

This method shall support the URI query parameters specified in table 5.27.2.3.3.2-1.

Table 5.27.2.3.3.2-1: URI query parameters supported by the PUT method on this resource

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

This method shall support the request data structures specified in table 5.27.2.3.3.2-2 and the response data structures and response codes specified in table 5.27.2.3.3.2-3.

Table 5.27.2.3.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserDataIngSession | M | 1 | Contains the updated representation of the Individual MBS User Data Ingest Session resource that is to be updated. |

Table 5.27.2.3.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserDataIngSession | M | 1 | 200 OK | Successful case. The concerned Individual MBS User Data Ingest Session resource is successfully updated and a representation of the updated resource is returned in the response body. |
| n/a |  |  | 204 No Content | Successful case. The concerned Individual MBS User Data Ingest Session resource is successfully updated and no content is returned in the response body. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE: The mandatory HTTP error status code for the PUT method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.3.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.3.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

###### 5.27.2.3.3.3 PATCH

This method enables an AF to request the modification of an existing "Individual MBS User Data Ingest Session" resource at the NEF.

This method shall support the URI query parameters specified in table 5.27.2.3.3.3-1.

Table 5.27.2.3.3.3-1: URI query parameters supported by the PATCH method on this resource

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

This method shall support the request data structures specified in table 5.27.2.3.3.3-2 and the response data structures and response codes specified in table 5.27.2.3.3.3-3.

Table 5.27.2.3.3.3-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserDataIngSessionPatch | M | 1 | Contains the parameters to request the modification of the Individual MBS User Data Ingest Session resource. |

Table 5.27.2.3.3.3-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserDataIngSession | M | 1 | 200 OK | Successful case. The concerned Individual MBS User Data Ingest Session resource is successfully modified and a representation of the updated resource is returned in the response body. |
| n/a |  |  | 204 No Content | Successful response. The Individual MBS User Data Ingest Session resource is successfully modified and no content is returned in the response body. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE: The mandatory HTTP error status code for the PATCH method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.3.3.3-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.3.3.3-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

###### 5.27.2.3.3.4 DELETE

This method enables an AF to request the deletion of an existing "Individual MBS User Data Ingest Session" resource at the NEF.

This method shall support the URI query parameters specified in table 5.27.2.3.3.4-1.

Table 5.27.2.3.3.4-1: URI query parameters supported by the DELETE method on this resource

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

This method shall support the request data structures specified in table 5.27.2.3.3.4-2 and the response data structures and response codes specified in table 5.27.2.3.3.4-3.

Table 5.27.2.3.3.4-2: Data structures supported by the DELETE Request Body on this resource

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

Table 5.27.2.3.3.4-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  Codes | Description |
| n/a |  |  | 204 No Content | Successful response. The Individual MBS User Data Ingest Session resource is successfully deleted. |
|  |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
|  |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE 1: The mandatory HTTP error status code for the DELETE method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.3.3.4-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.3.3.4-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

##### 5.27.2.3.4 Resource Custom Operations

There are no resource custom operations defined for this resource in this release of the specification.

#### 5.27.2.4 Resource: MBS User Data Ingest Session Status Subscriptions

##### 5.27.2.4.1 Introduction

This resource represents the collection of MBS User Data Ingest Session Status Subscriptions managed by the NEF.

This resource is modelled with the Collection resource archetype (see clause C.2 of 3GPP TS 29.501 [3]).

##### 5.27.2.4.2 Resource Definition

Resource URI: **{apiRoot}/3gpp-mbs-ud-ingest/v1/status-subscriptions**

This resource shall support the resource URI variables defined in table 5.27.2.4.2-1.

Table 5.27.2.4.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 5.27.1. |

##### 5.27.2.4.3 Resource Standard Methods

###### 5.27.2.4.3.1 GET

This method allows an AF to retrieve all the active MBS User Data Ingest Session Status Subscriptions managed by the NEF.

This method shall support the URI query parameters specified in table 5.27.2.4.3.1-1.

Table 5.27.2.4.3.1-1: URI query parameters supported by the GET method on this resource

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

This method shall support the request data structures specified in table 5.27.2.4.3.1-2 and the response data structures and response codes specified in table 5.27.2.4.3.1-3.

Table 5.27.2.4.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 5.27.2.4.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array(MBSUserDataIngStatSubsc) | M | 1..N | 200 OK | Successful case. All the active MBS User Data Ingest Session Status Subscriptions managed by the NEF are returned. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE: The mandatory HTTP error status code for the GET method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.4.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.4.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

###### 5.27.2.4.3.2 POST

This method enables an AF to request the creation of a new MBS User Data Ingest Sesstion Status Subscription at the NEF.

This method shall support the URI query parameters specified in table 5.27.2.4.3.2-1.

Table 5.27.2.4.3.2-1: URI query parameters supported by the POST method on this resource

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

This method shall support the request data structures specified in table 5.27.2.4.3.2-2 and the response data structures and response codes specified in table 5.27.2.4.3.2-3.

Table 5.27.2.4.3.2-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserDataIngStatSubsc | M | 1 | Contains the parameters to request the creation of a new MBS User Data Ingest Session Status Subscription at the NEF. |

Table 5.27.2.4.3.2-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  Codes | Description |
| MBSUserDataIngStatSubsc | M | 1 | 201 Created | Successful case. A new MBS User Data Ingest Session Status Subscription is successfully created and a representation of the created Individual MBS User Data Ingest Session Status Subscription resource is returned.  An HTTP "Location" header that contains the URI of the created Individual MBS User Data Ingest Session Status Subscription resource is also included. |
| NOTE: The mandatory HTTP error status code for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.4.3.2-4: Headers supported by the 201 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure:  {apiRoot}/3gpp-mbs-ud-ingest/v1/status-subscriptions/{subscriptionId} |

##### 5.27.2.4.4 Resource Custom Operations

There are no resource custom operations defined for this resource in this release of the specification.

#### 5.27.2.5 Resource: Individual MBS User Data Ingest Session Status Subscription

##### 5.27.2.5.1 Introduction

This resource represents an Individual MBS User Data Ingest Session Status Subscription managed by the NEF.

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

##### 5.27.2.5.2 Resource Definition

Resource URI: **{apiRoot}/3gpp-mbs-ud-ingest/v1/status-subscriptions/{subscriptionId}**

This resource shall support the resource URI variables defined in table 5.27.2.5.2-1.

Table 5.27.2.5.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 5.27.1. |
| sessionId | string | Contains the unique identifier of the Individual MBS User Data Ingest Session Status Subscription resource assigned by the NEF. |

##### 5.27.2.5.3 Resource Standard Methods

###### 5.27.2.5.3.1 GET

This method allows an AF to retrieve an existing "Individual MBS User Data Ingest Session Status Subscription" resource at the NEF.

This method shall support the URI query parameters specified in table 5.27.2.5.3.1-1.

Table 5.27.2.5.3.1-1: URI query parameters supported by the GET method on this resource

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

This method shall support the request data structures specified in table 5.27.2.5.3.1-2 and the response data structures and response codes specified in table 5.27.2.5.3.1-3.

Table 5.27.2.5.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 5.27.2.5.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserDataIngStatSubsc | M | 1 | 200 OK | Successful case. The requested Individual MBS User Data Ingest Session Status Subscription resource is successfully returned. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE: The mandatory HTTP error status code for the GET method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.5.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.5.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

###### 5.27.2.5.3.2 PUT

The PATCH method allows an AF to update an existing "Individual MBS User Data Ingest Session Status Subscription" resource managed by the NEF.

This method shall support the URI query parameters specified in table 5.27.2.5.3.2-1.

Table 5.27.2.5.3.2-1: URI query parameters supported by the PUT method on this resource

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

This method shall support the request data structures specified in table 5.27.2.5.3.2-2 and the response data structures and response codes specified in table 5.27.2.5.3.2-3.

Table 5.27.2.5.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserDataIngStatSubsc | M | 1 | Contains the parameters to request the modification of an existing "Individual MBS User Data Ingest Session Status Subscription" resource. |

Table 5.27.2.5.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserDataIngStatSubsc | M | 1 | 200 OK | Successful case. The concerned "Individual MBS User Data Ingest Session Status Subscription" resource is successfully updated and a representation of the updated resource is returned in the response body. |
| n/a |  |  | 204 No Content | Successful case. The concerned "Individual MBS User Data Ingest Session Status Subscription" resource is successfully updated, and no content is returned in the response body. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE: The mandatory HTTP error status code for the PUT method listed in Table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.5.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.5.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

###### 5.27.2.5.3.3 PATCH

The PATCH method allows an AF to modify an existing "Individual MBS User Data Ingest Session Status Subscription" resource managed by the NEF.

This method shall support the URI query parameters specified in table 5.27.2.5.3.3-1.

Table 5.27.2.5.3.3-1: URI query parameters supported by the PATCH method on this resource

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

This method shall support the request data structures specified in table 5.27.2.5.3.3-2 and the response data structures and response codes specified in table 5.27.2.5.3.3-3.

Table 5.27.2.5.3.3-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserDataIngStatSubscPatch | M | 1 | Contains the parameters to request the modification of an existing "Individual MBS User Data Ingest Session Status Subscription" resource. |

Table 5.27.2.5.3.3-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserDataIngStatSubsc | M | 1 | 200 OK | Successful case. The concerned "Individual MBS User Data Ingest Session Status Subscription" resource is successfully modified, and a representation of the updated resource is returned in the response body. |
| n/a |  |  | 204 No Content | Successful case. The concerned "Individual MBS User Data Ingest Session Status Subscription" resource is successfully modified and no content is returned in the response body. |
| n//a |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI of the resource located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE: The mandatory HTTP error status code for the PATCH method listed in Table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.5.3.3-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.5.3.3-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

###### 5.27.2.5.3.4 DELETE

This method enables an AF to request the deletion of an existing Individual MBS User Data Ingest Session Status Subscription resource at the NEF.

This method shall support the URI query parameters specified in table 5.27.2.5.3.4-1.

Table 5.27.2.5.3.4-1: URI query parameters supported by the DELETE method on this resource

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

This method shall support the request data structures specified in table 5.27.2.5.3.4-2 and the response data structures and response codes specified in table 5.27.2.5.3.4-3.

Table 5.27.2.5.3.4-2: Data structures supported by the DELETE Request Body on this resource

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

Table 5.27.2.5.3.4-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  Codes | Description |
| n/a |  |  | 204 No Content | Successful response. The Individual MBS User Data Ingest Session Status Subscription resource is successfully deleted. |
|  |  |  | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
|  |  |  | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative target URI located in an alternative NEF.  Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [4]. |
| NOTE 1: The mandatory HTTP error status code for the DELETE method listed in table 5.2.6-1 of 3GPP TS 29.122 [4] also apply. | | | | |

Table 5.27.2.5.3.4-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

Table 5.27.2.5.3.4-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI of the resource located in an alternative NEF. |

##### 5.27.2.5.4 Resource Custom Operations

There are no resource custom operations defined for this resource in this release of the specification.

\*\*\* 2nd Change \*\*\*

### 5.27.3 Custom Operations without associated resources

There are no custom operations without associated resources defined for this API in this release of the specification.

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