**3GPP TSG- Meeting #C3-231208**

**, – was C3-230472**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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** |

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|  | | | | | | | | | |
| ***Title:*** | Corrections to the redirection mechanism description | | | | | | | | |
|  |  | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | |
|  |  | | | | | | | | |
| ***Work item code:*** | SBIProtoc18 | | | | |  | ***Date:*** | |  |
|  |  | | | |  | |  | |  |
| ***Category:*** |  | |  | | | | ***Release:*** | |  |
|  | *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:*** | | As described in the discussion paper in C3-230464, there are some inconsistencies (and misalignments with clause 6.10.9 of TS 29.500) in the usage of the redirection mechanism that need to be corrected. | | | | | | | |
|  | |  | | | | | | | |
| ***Summary of change:*** | | This CR proposes to:   * Correct these inconsistencies as per the proposed way forward in C3-230464. * Add the missing RedirectResponse data type in tables 6.1.6.1-2 and 6.2.6.1-2. * Apply some additional minor wording and formating corrections. | | | | | | | |
|  | |  | | | | | | | |
| ***Consequences if not approved:*** | | * The inconsistencies (and misalignments with clause 6.10.9 of TS 29.500) described in C3-230464 remain in the specification. | | | | | | | |
|  | | |  | | | | | | |
| ***Clauses affected:*** | | | 6.1.3.2.3.1, 6.1.3.2.3.2, 6.1.3.3.3.1, 6.1.3.3.3.2, 6.1.3.3.3.3, 6.1.3.3.3.4, 6.1.6.1, 6.2.3.2.3.1, 6.2.3.3.3.1, 6.2.3.3.3.2, 6.2.3.3.3.3, 6.2.3.3.3.4, 6.2.3.4.3.1, 6.2.3.4.3.2, 6.2.3.5.3.1, 6.2.3.5.3.2, 6.2.3.5.3.3, 6.2.3.5.3.4, 6.2.5.2.3.1, 6.2.6.1 | | | | | | |
|  | | |  | | | | | | |
|  | | | **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:*** | | | Rev 1 (to C3#127-e):   * Update the description text to align with the agreement reached in CT4. Only the first change below is updated, the remaining changes can be updated once we agree on a common text for the first change. | | | | | | |

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

###### 6.1.3.2.3.1 GET

The GET method allows an NF service consumer (e.g. AF, NEF) to retrieve all the active MBS User Services managed by the MBSF.

This method shall support the URI query parameters specified in table 6.1.3.2.3.1-1.

Table 6.1.3.2.3.1-1: 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 6.1.3.2.3.1-2 and the response data structures and response codes specified in table 6.1.3.2.3.1-3.

Table 6.1.3.2.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 6.1.3.2.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array*(*MBSUserService) | M | 0..N | 200 OK | Successful case. All the active MBS User Services managed by the MBSF are returned. |
| RedirectResponse | O | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | O | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP GET method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.1.3.2.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.1.3.2.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.1.3.2.3.2 POST

The POST method allows an NF service consumer (e.g. AF, NEF) to request the creation of a new MBS User Service.

This method shall support the URI query parameters specified in table 6.1.3.2.3.2-1.

Table 6.1.3.2.3.2-1: 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 6.1.3.2.3.2-2 and the response data structures and response codes specified in table 6.1.3.2.3.2-3.

Table 6.1.3.2.3.2-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserService | M | 1 | Contains the parameters to request the creation of a new MBS User Service. |

Table 6.1.3.2.3.2-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserService | M | 1 | 201 Created | Successful case. The MBS User Service is successfully created and a representation of the created Individual MBS User Service resource is returned.  An HTTP "Location" header that contains the URI of the created Individual MBS User Service resource shall also be included. |
| NOTE: The mandatory HTTP error status codes for the HTTP POST method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.1.3.2.3.2-4: 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}/nmbsf-mbs-us/<apiVersion>/mbs-user-services/{mbsUserServId} |

\* \* \* \* Next changes \* \* \* \*

###### 6.1.3.3.3.1 GET

The GET method allows an NF service consumer (e.g. AF, NEF) to retrieve an existing Individual MBS User Service resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.1.3.3.3.1-1.

Table 6.1.3.3.3.1-1: 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 6.1.3.3.3.1-2 and the response data structures and response codes specified in table 6.1.3.3.3.1-3.

Table 6.1.3.3.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 6.1.3.3.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserService | M | 1 | 200 OK | Successful case. The requested Individual MBS User Service resource is returned. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP GET method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.1.3.3.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.1.3.3.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.1.3.3.3.2 PUT

The PUT method allows an NF service consumer (e.g. AF, NEF) to request the update of an existing MBS User Service at the MBSF.

This method shall support the URI query parameters specified in table 6.1.3.3.3.2-1.

Table 6.1.3.3.3.2-1: 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 6.1.3.3.3.2-2 and the response data structures and response codes specified in table 6.1.3.3.3.2-3.

Table 6.1.3.3.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserService | M | 1 | Contains the updated representation of the existing Individual MBS User Service resource that is to be updated. |

Table 6.1.3.3.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserService | M | 1 | 200 OK | Successful case. The concerned Individual MBS User Service resource is successfully updated and a representation of the updated resource is returned to the NF service consumer in the response body. |
| n/a |  |  | 204 No Content | Successful case. The concerned Individual MBS User Service resource is successfully updated and no content is returned in the response body. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP PUT method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.1.3.3.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.1.3.3.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.1.3.3.3.3 PATCH

The PATCH method allows an NF service consumer (e.g. AF, NEF) to request the modification of an existing MBS User Service at the MBSF.

This method shall support the URI query parameters specified in table 6.1.3.3.3.3-1.

Table 6.1.3.3.3.3-1: 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 6.1.3.3.3.3-2 and the response data structures and response codes specified in table 6.1.3.3.3.3-3.

Table 6.1.3.3.3.3-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserServicePatch | M | 1 | Contains the parameters to request the modification of an existing Individual MBS User Service resource. |

Table 6.1.3.3.3.3-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MBSUserService | M | 1 | 200 OK | Successful case. The concerned Individual MBS User Service resource is successfully modified and a representation of the updated resource is returned to the NF service consumer in the response body. |
| n/a |  |  | 204 No Content | Successful case. The concerned Individual MBS User Service resource is successfully modified and no content is returned in the response body. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP PATCH method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.1.3.3.3.3-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.1.3.3.3.3-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.1.3.3.3.4 DELETE

The DELETE method allows an NF service consumer (e.g. AF, NEF) to request the deletion of an existing MBS User Service at the MBSF.

This method shall support the URI query parameters specified in table 6.1.3.3.3.4-1.

Table 6.1.3.3.3.4-1: 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 6.1.3.3.3.4-2 and the response data structures and response codes specified in table 6.1.3.3.3.4-3.

Table 6.1.3.3.3.4-2: Data structures supported by the DELETE Request Body on this resource

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

Table 6.1.3.3.3.4-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case. The concerned Individual MBS User Service resource is successfully deleted. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP DELETE method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.1.3.3.3.4-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.1.3.3.3.4-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

#### 6.1.6.1 General

This clause specifies the application data model supported by the Nmbsf\_MBSUserService API.

Table 6.1.6.1-1 specifies the data types defined for the Nmbsf\_MBSUserService service based interface protocol.

Table 6.1.6.1-1: Nmbsf\_MBSUserService specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Clause defined | Description | Applicability |
| MBSUserService | 6.1.6.2.2 | Represents the parameters of an MBS User Service. |  |
| MBSUserServicePatch | 6.1.6.2.4 | Represents the requested modifications to the parameters of an MBS User Service. |  |
| ServiceAnnouncementMode | 6.1.6.3.3 | Represents a service announcement mode. |  |
| ServiceNameDescription | 6.1.6.2.3 | Represents a set of per language service Name and/or service description. |  |
| ServiceType | 6.1.6.3.4 | Represents MBS User Service distribution type. |  |

Table 6.1.6.1-2 specifies data types re-used by the Nmbsf\_MBSUserService 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 Nmbsf\_MBSUserService service based interface.

Table 6.1.6.1-2: Nmbsf\_MBSUserService re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| MbsServiceType | 3GPP TS 29.571 [17] | Indicates whether this MBS User Service is distributed via Multicast MBS Session(s) or Broadcast MBS Session(s). |  |
| NetworkAreaInfo | 3GPP TS 29.554 [16] | Contains the service areas in which this MBS User Service is to be made available. |  |
| RedirectResponse | 3GPP TS 29.571 [17] | Contains redirection related information. |  |
| SupportedFeatures | 3GPP TS 29.571 [17] | Used to negotiate the applicability of optional features. |  |
| Uri | 3GPP TS 29.571 [17] | Represents a URI. |  |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.2.3.1 GET

The GET method allows an NF service consumer (e.g. AF, NEF) to retrieve all the active MBS User Data Ingest Sessions managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.2.3.1-1.

Table 6.2.3.2.3.1-1: 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 6.2.3.2.3.1-2 and the response data structures and response codes specified in table 6.2.3.2.3.1-3.

Table 6.2.3.2.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 6.2.3.2.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array*(*MBSUserDataIngSession) | M | 0..N | 200 OK | Successful case. All the active MBS User Data Ingest Sessions managed by the MBSF are returned. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The manadatory HTTP error status codes for the HTTP GET method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.2.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.2.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.3.3.1 GET

The GET method allows an NF service consumer (e.g. AF, NEF) to retrieve an existing "Individual MBS User Data Ingest Session" resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.3.3.1-1.

Table 6.2.3.3.3.1-1: 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 6.2.3.3.3.1-2 and the response data structures and response codes specified in table 6.2.3.3.3.1-3.

Table 6.2.3.3.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 6.2.3.3.3.1-3: 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. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The manadatory HTTP error status codes for the HTTP GET method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.3.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.3.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.3.3.2 PUT

The PUT method allows an NF service consumer (e.g. AF, NEF) to update an existing "Individual MBS User Data Ingest Session" resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.3.3.2-1.

Table 6.2.3.3.3.2-1: 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 6.2.3.3.3.2-2 and the response data structures and response codes specified in table 6.2.3.3.3.2-3.

Table 6.2.3.3.3.2-2: 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 existing "Individual MBS User Data Ingest Session" resource that is to be updated. |

Table 6.2.3.3.3.2-3: 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 to the NF service consumer 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. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP PUT method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.3.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.3.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.3.3.3 PATCH

The PATCH method allows an NF service consumer (e.g. AF, NEF) to modify an existing "Individual MBS User Data Ingest Session" resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.3.3.3-1.

Table 6.2.3.3.3.3-1: 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 6.2.3.3.3.3-2 and the response data structures and response codes specified in table 6.2.3.3.3.3-3.

Table 6.2.3.3.3.3-2: 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 an existing "Individual MBS User Data Ingest Session" resource. |

Table 6.2.3.3.3.3-3: 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 to the NF service consumer in the response body. |
| n/a |  |  | 204 No Content | Successful case. The concerned "Individual MBS User Data Ingest Session" resource is successfully modified and no content is returned in the response body. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP PATCH method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.3.3.3-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.3.3.3-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.3.3.4 DELETE

The DELETE method allows an NF service consumer (e.g. AF, NEF) to delete an existing "Individual MBS User Data Ingest Session" resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.3.3.4-1.

Table 6.2.3.3.3.4-1: 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 6.2.3.3.3.4-2 and the response data structures and response codes specified in table 6.2.3.3.3.4-3.

Table 6.2.3.3.3.4-2: Data structures supported by the DELETE Request Body on this resource

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

Table 6.2.3.3.3.4-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case. The concerned "Individual MBS User Data Ingest Session" resource is successfully deleted. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP DELETE method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.3.3.4-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.3.3.4-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.4.3.1 GET

The GET method allows an NF service consumer (e.g. AF, NEF) to retrieve all the active MBS User Data Ingest Session Status Subscriptions managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.4.3.1-1.

Table 6.2.3.4.3.1-1: 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 6.2.3.4.3.1-2 and the response data structures and response codes specified in table 6.2.3.4.3.1-3.

Table 6.2.3.4.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 6.2.3.4.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| array*(*MBSUserDataIngStatSubsc) | M | 0..N | 200 OK | Successful case. All the active MBS User Data Ingest Session Status Subscriptions managed by the MBSF are returned. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The manadatory HTTP error status codes for the HTTP GET method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.4.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.4.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.4.3.2 POST

The POST method allows an NF service consumer (e.g. AF, NEF) to request the creation of a new MBS User Data Ingest Session Status Subscription at the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.4.3.2-1.

Table 6.2.3.4.3.2-1: 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 6.2.3.4.3.2-2 and the response data structures and response codes specified in table 6.2.3.4.3.2-3.

Table 6.2.3.4.3.2-2: 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. |

Table 6.2.3.4.3.2-3: 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. The 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 shall also be included. |
| NOTE: The manadatory HTTP error status codes for the HTTP POST method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply. | | | | |

Table 6.2.3.4.3.2-4: 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}/nmbsf-mbs-ud-ingest/<apiVersion>/status-subscriptions/{subscriptionId} |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.5.3.1 GET

The GET method allows an NF service consumer (e.g. AF, NEF) to retrieve an existing "Individual MBS User Data Ingest Session Status Subscription" resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.5.3.1-1.

Table 6.2.3.5.3.1-1: 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 6.2.3.5.3.1-2 and the response data structures and response codes specified in table 6.2.3.5.3.1-3.

Table 6.2.3.5.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 6.2.3.5.3.1-3: 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 returned. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The manadatory HTTP error status codes for the HTTP GET method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.5.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.5.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.5.3.2 PUT

The PATCH method allows an NF service consumer (e.g. AF, NEF) to update an existing "Individual MBS User Data Ingest Session Status Subscription" resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.5.3.2-1.

Table 6.2.3.5.3.2-1: 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 6.2.3.5.3.2-2 and the response data structures and response codes specified in table 6.2.3.5.3.2-3.

Table 6.2.3.5.3.2-2: Data structures supported by the PUT Request Body on this resource

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

Table 6.2.3.5.3.2-3: 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 to the NF service consumer 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. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP PUT method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.5.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.5.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.5.3.3 PATCH

The PATCH method allows an NF service consumer (e.g. AF, NEF) to modify an existing "Individual MBS User Data Ingest Session Status Subscription" resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.5.3.3-1.

Table 6.2.3.3.3.2-1: 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 6.2.3.5.3.3-2 and the response data structures and response codes specified in table 6.2.3.5.3.3-3.

Table 6.2.3.5.3.3-2: 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 6.2.3.5.3.3-3: 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 to the NF service consumer 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. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP PATCH method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.5.3.3-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.5.3.3-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.3.5.3.4 DELETE

The DELETE method allows an NF service consumer (e.g. AF, NEF) to delete an existing "Individual MBS User Data Ingest Session Status Subscription" resource managed by the MBSF.

This method shall support the URI query parameters specified in table 6.2.3.5.3.4-1.

Table 6.2.3.5.3.4-1: 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 6.2.3.5.3.4-2 and the response data structures and response codes specified in table 6.2.3.5.3.4-3.

Table 6.2.3.5.3.4-2: Data structures supported by the DELETE Request Body on this resource

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

Table 6.2.3.5.3.4-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful case. The concerned "Individual MBS User Data Ingest Session Status Subscription" resource is successfully deleted. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the HTTP DELETE method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.3.5.3.4-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

Table 6.2.3.5.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative MBSF (service) instance towards which the request is redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target MBSF (service) instance towards which the request is redirected. |

\* \* \* \* Next changes \* \* \* \*

###### 6.2.5.2.3.1 POST

This method shall support the request data structures specified in table 6.2.5.2.3.1-1 and the response data structures and response codes specified in table 6.2.5.2.3.1-2.

Table 6.2.5.2.3.1-1: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MBSUserDataIngStatNotif | M | 1 | Represents an MBS User Data Ingest Session Status Notification. |

Table 6.2.5.2.3.1-2: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The MBS User Data Ingest Session Status Notification is successfully received. |
| RedirectResponse | C | 0..1 | 307 Temporary Redirect | Temporary redirection.  (NOTE 2) |
| RedirectResponse | C | 0..1 | 308 Permanent Redirect | Permanent redirection.  (NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the POST method listed in Table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.  NOTE 2: The RedirectResponse data structure may be provided by an SCP or SEPP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). | | | | |

Table 6.2.5.2.3.1-3: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI representing the end point of an alternative NF consumer (service) instance towards which the notification should be redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF service consumer (service) instance towards which the notification request is redirected. |

Table 6.2.5.2.3.1-4: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI representing the end point of an alternative NF consumer (service) instance towards which the notification should be redirected.  For the case where the request is redirected to the same target via a different SCP/SEPP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF service consumer (service) instance towards which the notification request is redirected. |

\* \* \* \* Next changes \* \* \* \*

#### 6.2.6.1 General

This clause specifies the application data model supported by the Nmbsf\_MBSUserDataIngestSession API.

Table 6.2.6.1-1 specifies the data types defined for the Nmbsf\_MBSUserDataIngestSession service based interface protocol.

Table 6.2.6.1-1: Nmbsf\_MBSUserDataIngestSession specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Clause defined | Description | Applicability |
| AddFecParams | 6.2.6.2.15 | Represents additional scheme-specific parameters for AL-FEC configuration. |  |
| DistributionMethod | 6.2.6.3.3 | Represents the MBS Distribution method. |  |
| Event | 6.2.6.3.4 | Represents MBS User Data Ingest Session Status events. |  |
| EventNotification | 6.2.6.2.10 | Represents an MBS User Data Ingest Session Status event notification related information. |  |
| FECConfig | 6.2.6.2.14 | Represents FEC configuration information. |  |
| MBSDistSessionAnmt | 6.2.6.2.12 | Represents the set of MBS Distribution Session Announcements currently associated with this MBS User Service Announcement. |  |
| MBSDistributionSessionInfo | 6.2.6.2.3 | Represents MBS Distribution Session information. |  |
| MBSUserDataIngSession | 6.2.6.2.2 | Represents MBS User Data Ingest Session information. |  |
| MBSUserDataIngSessionPatch | 6.2.6.2.4 | Represents the requested modification to an MBS User Data Ingest Session. |  |
| MBSUserDataIngStatNotif | 6.2.6.2.9 | Represents an MBS User Data Ingest Session Status Notification. |  |
| MBSUserDataIngStatSubsc | 6.2.6.2.7 | Represents an MBS User Data Ingest Session Status Subscription. |  |
| MBSUserDataIngStatSubscPatch | 6.2.6.2.16 | Represents the requested modifications to an MBS User Data Ingest Session Status Subscription. |  |
| MBSUserServAnmt | 6.2.6.2.11 | Represents the MBS User Service Announcement currently associated with the MBS User Data Ingest Session. |  |
| ObjectDistMethAnmtInfo | 6.2.6.2.13 | Represents MBS Distribution Session Announcement parameters for Object Distribution Method. |  |
| ObjectDistrMethInfo | 6.2.6.2.5 | Represents additional MBS Distribution Session parameters for Object Distribution Method. |  |
| PacketDistrMethInfo | 6.2.6.2.6 | Represents additional MBS Distribution Session parameters for Packet Distribution Method. |  |
| SubscribedEvent | 6.2.6.2.8 | Represents a subscribed MBS User Data Ingest Session Status event and the related information. |  |

Table 6.2.6.1-2 specifies data types re-used by the Nmbsf\_MBSUserDataIngestSession 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 Nmbsf\_MBSUserDataIngestSession service based interface.

Table 6.2.6.1-2: Nmbsf\_MBSUserDataIngestSession re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| BitRate | 3GPP TS 29.571 [17] | Represents Bit Rate. |  |
| MbsServiceInfo | 3GPP TS 29.571 [17] | Represents MBS Service Information. |  |
| ExternalMbsServiceArea | 3GPP TS 29.571 [17] | Represents an external MBS Service Area. |  |
| DateTime | 3GPP TS 29.122 [18] | Represents an absolute date time with the format "date-time", as defined in OpenAPI Specification [6]. |  |
| DistSessionState | 3GPP TS 29.581 [19] | Represents state of an MBS Distribution Session. |  |
| MbsFsaId | 3GPP TS 29.571 [17] | Represents an MBS Frequency Selection Area ID, for a broadcast MBS session. |  |
| MbsServiceArea | 3GPP TS 29.571 [17] | Represents an MBS service area. |  |
| MbsServiceInfo | 3GPP TS 29.571 [17] | Represents the MBS Service Information. |  |
| MbsSessionId | 3GPP TS 29.571 [17] | Represents an MBS Session Identifier. |  |
| MbStfIngestAddr | 3GPP TS 29.581 [19] | Represents MBSTF ingest endpoint addresses. |  |
| ObjAcquisitionMethod | 3GPP TS 29.581 [19] | Represents the Object Acquisition Method. |  |
| ObjDistributionOperatingMode | 3GPP TS 29.581 [19] | Represents the operation mode for an Object distribution method. |  |
| PacketDelBudget | 3GPP TS 29.571 [17] | Represents Unsigned integer indicating Packet Delay Budget expressed in milliseconds. |  |
| RedirectResponse | 3GPP TS 29.571 [17] | Contains redirection related information. |  |
| ServiceNameDescription | Clause 6.1.6.2.3 | Represents a set of per language service Name and/or service description. |  |
| PktDistributionOperatingMode | 3GPP TS 29.581 [19] | Represents the operation mode for a Packet distribution method. |  |
| PktIngestMethod | 3GPP TS 29.581 [19] | Represents packets ingest method. |  |
| TimeWindow | 3GPP TS 29.122 [18] | Represents a Time Window. |  |
| Tmgi | 3GPP TS 29.571 [17] | Represents Temporary Mobile Group Identity. |  |
| Uri | 3GPP TS 29.571 [17] | Represents Uniform Resource Identifier. |  |
| SupportedFeatures | 3GPP TS 29.571 [17] | Used to negotiate the applicability of optional features. |  |

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