**3GPP TSG-CT WG3 Meeting #119-bis-eC3-220032**

**E-Meeting, 17th – 21st January 2022**

**Source: Nokia, Nokia Shanghai Bell, Huawei**

**Title: Pseudo-CR on the Notifications clause of the new Npcf\_MBSPolicyControl API**

**Spec: 3GPP TS 29.537 V0.0.0**

**Agenda item: 17.31 (5MBS)**

**Document for: Approval**

**1. Introduction**

TS 29.537 has been allocated under the 5MBS work item to define the MB Policy Control services. The associated TS Skeleton is provided in C3-220032. This new TS clauses need hence to be populated.

**2. Reason for Change**

The API part of the new Npcf\_MBSPolicyControl API needs to be defined. This pCR provides the notifications clause of the API part.

**3. Conclusions**

N/A.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.537 V0.0.0.

\* \* \* First Change \* \* \* \*

### 6.1.5 Notifications

#### 6.1.5.1 General

Notifications shall comply to clause 6.2 of 3GPP TS 29.500 [4] and clause 4.6.2.3 of 3GPP TS 29.501 [5].

Table 6.1.5.1-1: Notifications overview

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | Callback URI | HTTP method or custom operation | Description(service operation) |
| MBS Policy Update Notification  | {notificationUri}/update | update (POST) | MBS Policy Update Notification. |
| Request for termination of the MBS policy association | {notificationUri}/terminate | terminate (POST) | Request for termination of the MBS policy association. |

\* \* \* Next Change \* \* \* \*

#### 6.1.5.2 MBS Policy Update Notification

##### 6.1.5.2.1 Description

This notification is used by the PCF to update/provision MBS session policies to the NF service consumer (e.g. MB-SMF).

\* \* \* Next Change \* \* \* \*

##### 6.1.5.2.2 Target URI

The Callback URI **"{notificationUri}"** shall be used with the callback URI variables defined in table 6.1.5.2.2-1.

Table 6.1.5.2.2-1: Callback URI variables

|  |  |
| --- | --- |
| Name | Definition |
| notificationUri | String formatted as URI with the Callback Uri |

\* \* \* Next Change \* \* \* \*

##### 6.1.5.2.3 Standard Methods

6.1.5.2.3.1 POST

This method shall support the request data structures specified in table 6.1.5.2.3.1-1 and the response data structures and response codes specified in table 6.1.5.2.3.1-2.

Table 6.1.5.2.3.1-1: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| MbsPolicyNotif | M | 1 | Update/provision MBS policies by the PCF |

Table 6.1.5.2.3.1-2: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The MBS policies are updated successfully. |
| RedirectResponse | O | 0..1 | 307 Temporary Redirect | Temporary redirection. The response shall include a Location header field containing an alternative URI representing the end point of an alternative NF service consumer (service) instance where the notification should be sent. |
| RedirectResponse | O | 0..1 | 308 Permanent Redirect | Permanent redirection. The response shall include a Location header field containing an alternative URI representing the end point of an alternative NF service consumer (service) instance where the notification should be sent. |
| NOTE: 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. |

Table 6.1.5.2.3.1-3: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI representing the end point of an alternative NF consumer (service) instance towards which the notification should be redirected. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF (service) instance towards which the notification request is redirected |

Table 6.1.5.2.3.1-4: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI representing the end point of an alternative NF consumer (service) instance towards which the notification should be redirected. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF (service) instance towards which the notification request is redirected |

\* \* \* Next Change \* \* \* \*

#### 6.1.5.3 Request for termination of the MBS policy association

##### 6.1.5.3.1 Description

This notification is used by the PCF to request the termination of the MBS policy association.

\* \* \* Next Change \* \* \* \*

##### 6.1.5.3.2 Standard Methods

6.1.5.3.2.1 POST

This method shall support the request data structures specified in table 6.1.5.3.2.1-1 and the response data structures and response codes specified in table 6.1.5.3.2.1-2.

Table 6.1.5.3.2.1-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TerminationNotification | M | 1 | Request to terminate the MBS policy association. |

Table 6.1.5.3.2.1-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The request for MBS policy association termination was received. |
| RedirectResponse | O | 0..1 | 307 Temporary Redirect | Temporary redirection, during MBS policy termination notification. The response shall include a Location header field containing an alternative URI representing the end point of an alternative NF service consumer (service) instance where the notification should be sent. |
| RedirectResponse | O | 0..1 | 308 Permanent Redirect | Permanent redirection, during MBS policy termination notification. The response shall include a Location header field containing an alternative URI representing the end point of an alternative NF service consumer (service) instance where the notification should be sent. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] shall also apply. |

Table 6.1.5.3.2.1-3: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI representing the end point of an alternative NF consumer (service) instance towards which the notification should be redirected. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF (service) instance towards which the notification request is redirected |

Table 6.1.5.3.2.1-4: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | An alternative URI representing the end point of an alternative NF consumer (service) instance towards which the notification should be redirected. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NF (service) instance towards which the notification request is redirected |

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