**3GPP TSG-CT WG3 Meeting #117eC3-214153**

**E-Meeting, 18th – 27th August 2021**

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

**Title: Notifications of Ntsctsf\_TimeSynchronization Service**

**Spec: 3GPP TS 29.abc**

**Agenda item: 17.16**

**Document for: Decision**

**1. Introduction**

<Introduction part (optional)>

**2. Reason for Change**

Notifications need to be specified.

**3. Conclusions**

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.abc.

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

#### 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) |
| Time Synchronization Capability Notification | {subsNotifUri} | POST | Time Synchronization Capability Notification for a list of UEs. |
| Time Synchronization Configuration Notification | {configNotifUri} | POST | Current state of Time Synchronization Service configuration Notification. |

#### 6.1.5.2 Time Synchronization Capability Notification

##### 6.1.5.2.1 Description

The Time Synchronization Capability Notification is used by the NF service producer to report the capability of the time synchronization service for a list of UEs to a NF service consumer that has subscribed to such Notifications.

##### 6.1.5.2.2 Target URI

The Callback URI **"{subsNotifUri}"** 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 |
| subsNotifUri | String formatted as URI with the Callback Uri.  The Callback Uri is assigned within the Time Synchronization Capability Notification and described within the TimeSyncExposureSubsc type (see table 5.6.2.x1-1). |

##### 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 6.1.5.2.3.1-1.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TimeSyncExposureSubsNotif | M | 1 | Provides the time synchronization capabilities of a list of UEs by the TSCTSF to the NF service consumer. |

Table 6.1.5.2.3.1-3: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The event notification is received successfully. |
| 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. | | | | |

Editor's Note: Error/redirection responses are FFS.

#### 6.1.5.3 Time Synchronization Configuration Notification

##### 6.1.5.3.1 Description

The Time Synchronization Configuration Notification is used by the NF service producer to report the current state of configuration of the time synchronization service.

##### 6.1.5.3.2 Target URI

The Callback URI **"{configNotifUri}"** shall be used with the callback URI variables defined in table 6.1.5.3.2-1.

Table 6.1.5.3.2-1: Callback URI variables

|  |  |
| --- | --- |
| Name | Definition |
| configNotifUri | String formatted as URI with the Callback Uri.  The Callback Uri is assigned within the Time Synchronization Configuration Notification and described within the TimeSyncExposureConfig type (see table 5.6.2.x2-1). |

##### 6.1.5.3.3 Standard Methods

6.1.5.3.3.1 POST

This method shall support the request data structures specified in table 6.1.5.3.3.1-1 and the response data structures and response codes specified in table 6.1.5.3.3.1-1.

Table 6.1.5.3.3.1-2: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TimeSyncExposureConfigNotif | M | 1 | Provides the current state of time synchronization configuration by the TSCTSF to the NF service consumer. |

Table 6.1.5.3.3.1-3: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The event notification is received successfully. |
| 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. | | | | |

Editor's Note: Error/redirection responses are FFS.

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