**3GPP TSG-CT WG4 Meeting #111-eC4-224234**

**E-Meeting, 18th – 26th August 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **81** | **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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Description of notification events in Nmbstf\_DistSession | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | | -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:*** | | 3GPP TS 26.502 clause 4.3.3.1 has defined three notification events:  The present document defines additional User Plane functionalities of the MBSTF to support MBS User Services as follows:  1. Receiving MBS Distribution Session configurations from the MBSF at reference point Nmb2.  2. Sending notification events to the MBSF, e.g. data ingest failure, session terminated, delivery started via reference point Nmb2.  The events are included for the MBS distribution session events for StatusNotify in 3GPP TS 29.581. However, neither reference nor description of the three notification events is given in TS 29.581. Therefore, a detailed description of the three events is given in this CR to provide a complete understanding. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Including the description of notification events, and align the event name defined in SA4 spec. | | | | | | | | |
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| ***Consequences if not approved:*** | | Incomplete specification can lead to misunderstandings. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.2.8.1, 6.1.6.3.7, A.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | The CR has introduced a backward compatible changes on the Nmbstf\_DistSession API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev1: Update the description of notification events, and align the event names defined in SA4 spec. | | | | | | | | |

**\*\*\*\*\*\*\***

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

##### 5.2.2.8.1 General

The StatusNotify service operation shall be used by the MBSTF to notify a subscribed NF Service Consumer (e.g. MBSF) about the events related to an MBS distribution session.

The MBSTF shall notify the NF Service Consumer (e.g. MBSF) by using the HTTP POST method to the callback URI received earlier in the subscription as shown in Figure 5.2.2.8.1-1.



Figure 5.2.2.8.1-1: MBTSMF notifications

1. The MBSTF shall send a POST request (StatusNotifyReqData) to the callback URI ({notifUri}) of the subscribed NF Service Consumer. The payload body of the POST request shall contain:

- Notification Correlation ID, if this information was provided during subscription;

- the list of MBS distribution session events to be reported:

- report a DATA\_INGEST\_FAILURE event when the MBSTF failed to ingest data from the AF/AS;

- report a SESSION\_DEACTIVATED event when the MBS distribution session is released in the MBSTF;

- report a SESSION\_ACTIVATED event when the delivery started toward the MB-UPF.

2a. On success, the MBSF shall return a "204 No Content" response.

2b. On failure, one of the HTTP status code listed in the data structures supported by the POST Response Body (see Table 6.1.5.2.3.1-2) shall be returned. The message body shall contain a ProblemDetails structure with the "cause" attribute set to one of the application error listed in the same Table 6.1.5.2.3.1-2).

2c. On redirection, "307 Temporary Redirect" or "308 Permanent Redirect" shall be returned. A RedirectResponse IE shall be included in the payload body of POST response.

\* \* \* Next Changes \* \* \* \*

##### 6.1.6.3.7 Enumeration: DistSessionEventType

The enumeration DistSessionEventType defines the status of the MBS distribution session that NF consumer wants to subscribe to. It shall comply with the values defined in table 6.1.6.3.7-1.

Table 6.1.6.3.7-1: Enumeration DistSessionEventType

|  |  |  |
| --- | --- | --- |
| Enumeration value | Description | Applicability |
| "DATA\_INGEST\_FAILURE" | MBSTF failed to ingest data from AF/AS |  |
| " SESSION\_DEACTIVATED " | Session released in MBSTF |  |
| "SESSION\_ACTIVATED" | Delivery started towards MB-UPF |  |

\* \* \* Next Changes \* \* \* \*

# A.2 Nmbstf\_DistSession API

openapi: 3.0.0

info:

title: Nmbstf-distsession

version: 1.0.0

description: |

MBSTF Distribution Session Service.

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externalDocs:

description: 3GPP TS 29.581 V17.0.0; 5G System; MBSDistribution Service.

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.581/

servers:

- url: '{apiRoot}/nmbstf-distsession/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 4.4 of 3GPP TS 29.501

security:

- {}

- oAuth2ClientCredentials:

- nmbstf-distsession

**\*\*\*\*\*\*\*skipped for clarity\*\*\*\*\*\*\***

DistSessionEventType:

description: Status Event Type

anyOf:

- type: string

enum:

- DATA\_INGEST\_FAILURE

- SESSION\_DEACTIVATED

- SESSION\_ACTIVATED

- type: string

**\*\*\*\*\*\*\*skipped for clarity\*\*\*\*\*\*\***

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