**TSG-CT WG3 Meeting #112-e *C3-205xyz***

**E-Meeting, 4th – 13th November 2020 (Revision of C3-205263)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.122** | **CR** | **0309** | **rev** | **1** | **Current version:** | **15.8.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Payload during event notification via Websocket | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, ZTE | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NAPS-CT | | | | |  | ***Date:*** | | | 2020-10-28 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-15 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | During event notification via Websocket, the NotificationData data should be included not NiddConfigurationStatusNotification for ChargeableParty API, GMDByMb2Notification and GMDByxMBNotification should be included for GMDviaMBMSbyMB2 API and GMDviaMBMSbyxMB API respectively.  GmdNiddDownlinkDataDeliveryStatusNotification for a group of UEs is supported by Notification via HTTP POST in subclause 5.6.3.7.3.1, but not covered by Notification via Websocket.  And DNN should be corrected to DDN in subclause 4.4.2.2.2.1 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Correct the payload used in event notification via Websocket for above listed APIs. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Incorrect payload during event notification via Websocket | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.4.2.2.2.1; 5.5.3.4.3.2; 5.5.3.6.3.1; 5.6.3.6.4; 5.6.3.7.3.1; 5.6.3.7.4; 5.6.3.8.4; 5.8.2.2.6.3.2; 5.8.3.2.6.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | This CR doesn’t impact the OpenAPI file.  There is no corresponding mirror CR since Rel-16 CR #0301 restructured TS to align it with 5G SBI template.  Changes provided by this CR are covered by Rel-16 CR #0301. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

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

###### 4.4.2.2.2.1 General

The following monitoring events: Loss of connectivity, UE reachability, Location Reporting, Change of IMSI-IMEI(SV) Association, Roaming Status, Communication Failure and Availability after DDN Failure are applicable for the monitoring event configuration via HSS for an individual UE or a group of UEs.

Only one-time reporting is supported if the "reachabilityType" attribute sets to "SMS" for the event UE reachability, if the "locationType" attribute sets to "LAST\_KNOWN\_LOCATION" for the event Location Reporting in the monitoring event request.

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

###### 5.5.3.4.3.2 Notification via Websocket

If supported by both SCS/AS and SCEF and successfully negotiated, the NotificationData may alternatively be delivered through the Websocket mechanism as defined in subclause 5.2.5.4.

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

###### 5.6.3.6.3.1 Notification via HTTP POST

To report the status of the NIDD configuration to the SCS/AS, the SCEF shall use the HTTP POST method on the notification point as follows:

- the body of the message is encoded in JSON format with the data structure defined in table 5.6.2.1.6-1.

The possible response messages from the SCS/AS, depending on whether the POST request is successful or unsuccessful, are shown in Table 5.6.3.6.3.1-1.

Table 5.6.3.6.3.1-1: Data structures supported by the POST request/response by the resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Request body | Data type | Cardinality | Remarks | |
| NiddConfigurationStatusNotification | 1 | The NIDD configuration status notification. | |
| Response body | Data type | Cardinality | Response  codes | Remarks |
| Acknowledgement | 1 | 200 OK | The successful acknowledgement of the notification with a body. |
| (None) |  | 204 No Content | The successful acknowledgement of the notification without a body. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 also apply. | | | | |

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

###### 5.6.3.6.3.2 Notification via Websocket

If supported by both SCS/AS and SCEF and successfully negotiated, the NiddConfigurationStatusNotification may alternatively be delivered through the Websocket mechanism as defined in subclause 5.2.5.4.

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

###### 5.6.3.7.3.1 Notification via HTTP POST

To report the delivery status of the downlink non-IP data delivery, the SCEF shall use the HTTP POST method on the notification endpoint

with the body of the message encoded in JSON format with the data structure defined in table 5.6.2.1.5-1 for a single UE or table 5.6.2.1.8-1 for a group of UEs.

The possible response messages from the SCS/AS, depending on whether the POST request is successful or unsuccessful, are shown in Table 5.6.3.7.3.1-1 and Table 5.6.3.7.3.1-2.

Table 5.6.3.7.3.1-1: Data structures supported by the POST request/response by the resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Request body | Data type | Cardinality | Remarks | |
| NiddDownlinkDataDeliveryStatusNotification | 1 | The Down link data delivery status notification for a single UE. | |
| Response body | Data type | Cardinality | Response  codes | Remarks |
| Acknowledgement | 1 | 200 OK | The successful acknowledgement of the notification. |
| (None) |  | 204 No Content | The successful acknowledgement of the notification without a body. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 also apply. | | | | |

Table 5.6.3.7.3.1-2: Data structures supported by the POST request/response by the resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Request body | Data type | Cardinality | Remarks | |
| GmdNiddDownlinkDataDeliveryStatusNotification | 1 | The Down link data delivery status notification for a group of UEs. | |
| Response body | Data type | Cardinality | Response  codes | Remarks |
| Acknowledgement | 1 | 200 OK | The successful acknowledgement of the notification. |
| (None) |  | 204 No Content | The successful acknowledgement of the notification without a body. |
| NOTE: The mandatory HTTP error status codes for the GET method listed in table 5.2.6-1 also apply. | | | | |

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

###### 5.6.3.7.3.2 Notification via Websocket

If supported by both SCS/AS and SCEF and successfully negotiated, the NiddDownlinkDataDeliveryStatusNotification or GmdNiddDownlinkDataDeliveryStatusNotification may alternatively be delivered for a single UE or a group of UEs through the Websocket mechanism as defined in subclause 5.2.5.4.

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

###### 5.6.3.8.3.2 Notification via Websocket

If supported by both SCS/AS and SCEF and successfully negotiated, the NiddUplinkDataNotification may alternatively be delivered through the Websocket mechanism as defined in subclause 5.2.5.4.

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

5.8.2.2.6.3.2 Notification via Websocket

If supported by both SCS/AS and SCEF and successfully negotiated, the GMDByMb2Notification may alternatively be delivered through the Websocket mechanism as defined in subclause 5.2.5.4.

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

5.8.3.2.6.3.2 Notification via Websocket

If supported by both SCS/AS and SCEF and successfully negotiated, the GMDByxMBNotification may alternatively be delivered through the Websocket mechanism as defined in subclause 5.2.5.4.

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