**3GPP TSG-CT WG3 Meeting #114e C3-211513**

**E-Meeting, 24th February – 05th March 2021 (Revision of C3-21xxxx)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.514** | **CR** | **0288** | **rev** | **-** | **Current version:** | **16.7.0** |  |
|  | | | | | | | | |
| *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:*** | Usage threshold update | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson, Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eNAPIs | | | | |  | ***Date:*** | | | 2021-03-01 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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:*** | | Subclause 4.2.3.2 describes the AF may modify the application session context information at any time invoke the Npcf\_PolicyAuthorization\_Update service operation by sending the HTTP PATCH request message.  Operators also have needs from AF to update usage threshold before PCF reporting the accumulated usage upon the threshold is reached.  While in the NOTE of subclause 4.2.5.6, only describes AF can provide a new usage threshold to the PCF after the PCF reports the accumulated usage to the AF. | | | | | | | | |
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| ***Summary of change:*** | | Updates the NOTE of subclause 4.2.5.6, removing the sentence that describes the AF can provide new usage threshold to the PCF after the PCF reports the accumulated usage to the AF. | | | | | | | | |
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| ***Consequences if not approved:*** | | Unclear whether the API can meet operators’ requirements to update threshold before PCF reporting the accumulated usage upon the threshold is reached. | | | | | | | | |
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| ***Clauses affected:*** | | 4.2.5.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

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

#### 4.2.5.6 Reporting usage for sponsored data connectivity

When "SponsoredConnectivity" is supported, the AF indicated to enable sponsored data connectivity and the AF provided usage thresholds for such sponsor to the PCF, the PCF shall report accumulated usage to the AF using the Npcf\_PolicyAuthorization\_Notify service operation when:

- the PCF detects that the usage threshold provided by the AF has been reached; or

- the AF disables the sponsored data connectivity.

The PCF shall notify the AF of the accumulated usage by including the "EventsNotification" data type in the body of the HTTP POST request as described in subclause 4.2.5.2.

The PCF shall include:

- an event of the "AfEventNotification" data type in the "evNotifs" attribute with the matched event "USAGE\_REPORT" in the "event" attribute; and

- the accumulated usage, corresponding to the usage since the last report to the AF, encoded in the "usgRep" attribute.

When the AF receives the HTTP POST request, it shall acknowledge the request by sending a "204 No Content" response to the PCF. The AF may terminate the AF session sending an HTTP POST as described in subclause 4.2.4.2 or update the AF application session context information by providing a new usage threshold sending an HTTP PATCH request to the PCF as described in subclause 4.2.3.5 or an HTTP PUT request to the PCF as described in subclause 4.2.6.4.

NOTE: Once the accumulated usage is reported by the PCF to the AF, the monitoring will not start until the PCF receives the new threshold from the AF and provides it to the SMF.

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