**3GPP TSG-SA5 Meeting #140-e *S5-216149***

**e-meeting, 15 - 24 November 2021** Revision of S5-20xxxx

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **32.290** | **CR** | **0171** | **rev** | **1** | **Current version:** | **16.9.0** |  |
|  |
| *For* [***HELP***](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:***  | Addition of the Threshold based re-authorization triggers |
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| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | TEI16 |  | ***Date:*** | 2021-11-22 |
|  |  |  |  |  |
| ***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 canbe 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)* |
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| ***Reason for change:*** | In the case of threshold based re-authorization triggers is indicated, the NF Service Consumer seeks re-authorization for the quota when the quota contents fall below the supplied threshold. The continued service processing about whether the service is allowed or not during the re-authorization progress and how to report the usage when the new quota is granted and the remaining quota is used up are unclear.  |
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| ***Summary of change:*** | Add the continued service processing after the NF Service Consumer seek the re-authorizatino. |
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| ***Consequences if not approved:*** | The threshold based re-authorization triggers mechanism is incomplete. |
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| ***Clauses affected:*** | 5.2.4 |
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|  | **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's revision history:*** |  |

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| **First change** |

### 5.4.2 Threshold based re-authorization triggers

The CHF (NF Service Producer) may optionally include an indication to the NF Service Consumer of the remaining quota threshold that shall trigger a quota re-authorization.

If received quota threshold based re-authorization triggers (i.e. timeQuotaThreshold, volumeQuotaThreshold, unitQuotaThreshold), the NF Service Consumer shall seek re-authorization for the quota when the quota contents fall below the supplied threshold. The NF Service Consumer allows the service to continue whilst the re-authorization is progress, until the remaining part had been used up.

If the threshold triggers were included along with the quota granted, the Credit-Control client, then, shall seek re-authorization from the server for the quota when the quota contents fall below the supplied threshold. The client shall allow service to continue whilst the re-authorization is progress, until the original quota had been consumed.

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| **End of change** |