**3GPP TSG-SA5 Meeting #141e *S5-222769d1***

**17 - 26 January 2022, E-meeting**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **32.240** | **CR** | **?** | **rev** | **-** | **Current version:** | **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:***  | Enhance charging architecture for Edge Computing |
|  |  |
| ***Source to WG:*** | Intel |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | EDGE\_CH |  | ***Date:*** | 2022-03-24 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-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 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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)**Rel-17 (Release 17)* |
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| ***Reason for change:*** | The common charging architecture for converged charging applies to Edge Computing charging too, however it is not reflected in the specification. |
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| ***Summary of change:*** | Extend the common charging architecture for converged charging to support Edge Computing charging. |
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| ***Consequences if not approved:*** | The Edge Computing charging cannot be supported by the common charging architecture for converged charging. |
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| ***Clauses affected:*** | 4.2.3 |
|  |  |
|  | **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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| **1st modified section** |

### 4.2.3 Common architecture – service based interface

Figure 4.2.3.1 provides an overview of the logical ubiquitous charging architecture and the information flows for converged offline and online charging in service based interface variant for 5G systems and Edge Computing enabling sub-systems.



Figure 4.2.3.1: Logical ubiquitous charging architecture and information flows for – service based interface

For the sake of simplicity, the SMF+PGW-C is not explicitly added in Figure 4.2.3.1 and is represented by the SMF.The SMF+PGW-C uses Nchf for 5GS and EPC interworking as well as when enhanced to support GERAN/UTRAN.

The Nchf\_SpendingLimitControl service exposed by CHF and consumed by the PCF is specified in TS 23.502 [214].

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| **End of modified sections** |