**3GPP TSG-SA5 Meeting #134-e *S5-206247rev2***

**Online, , 16th Nov 2020 - 25th Nov 2020**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **32.240** | **CR** | **0413** | **rev** | **-** | **Current version:** | **16.1.0** |  |
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| *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:***  | Add PGW in logical ubiquitous charging architecture- service based interface  |
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| ***Source to WG:*** | China Mobile Com. Corporation |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | TEI17\_NIESGU |  | ***Date:*** | 2020-11-06 |
|  |  |  |  |  |
| ***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)* |
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| ***Reason for change:*** | For operators deploying a combined node serving as both SMF+PGW-C and PGW-C to provide network services for 2G/3G/4G/5G users, it is beneficial to use N40 interface for charging. Based on the above background, PGW should support Nchf interface and consume Nchf\_ ConvergedCharging service exposed by CHF. |
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| ***Summary of change:*** | Add PGW in logical ubiquitous charging architecture - service based interface. |
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| ***Consequences if not approved:*** | PGW cannot support Nchf interface. |
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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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| **First change** |

### 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.



Figure 4.2.3.1: Logical ubiquitous charging architecture and information flows for 5G systems – service based interface

Based on operator’s policy in interworking scenarios, PGW is a possible consumer of Nchf service exposed by CHF.

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 change** |