3GPP TSG SA WG5 Meeting 135-e TDoc S5-211298

electronic meeting, online, 25 January - 3 February 2021

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
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| *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:*** | Introduce Post Event Charging (PEC) | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
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| ***Work item code:*** | 5GSIMSCH | | | | |  | ***Date:*** | | |  |
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| ***Category:*** | **B** |  | | | | | ***Release:*** | | |  |
|  | *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)* | |
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| ***Reason for change:*** | | The Post Event Charging (PEC) mode is applicable and needs to be introduced.  The current flows for OIP/OIR cover the PEC mode and they can be replaced by existing flows on offline charging for the simplification. | | | | | | | | |
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| ***Summary of change:*** | | Introduce PEC and replace the OIP/OIR flows by referring to existing flows for offline. | | | | | | | | |
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| ***Consequences if not approved:*** | | Unclear how the PEC mode is achieved | | | | | | | | |
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| ***Clauses affected:*** | | 5.4.1.1, 5.4.2.2, 5.4.2.3, 5.4.2.x (New), 5.4.2.y(New) | | | | | | | | |
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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** |

#### 5.4.1.1 General

Converged charging may be performed by the MMTel AS interacting with CHF using Nchf specified in TS 32.290 [57] and TS 32.291 [58]. To provide the data required for the management activities outlined in TS 32.240 [1] (Credit-Control, accounting, billing, statistics etc.), the MMTel AS shall be able to perform converged charging for each of the MMTel supplementary service.

The CTFs implementing the MMTel converged charging functionality may apply:

- Immediate Event Charging (IEC) with Charging Data Request [Event] generated, or

- Session based charging SCUR, with Charging Data Request [Initial, Update, Termination], ot

- Post Event Charging (PEC) with Charging Data Request [Event].

The circumstances on which IEC, SCUR or PEC are applicable, depend on the MMTel supplementary service and/or operator's policy.

Editor's note: The use of ECUR is FFS.

Converged charging uses centralized or decentralized unit determination and centralized rating scenarios for event based convergent charging specified in TS 32.290 [57].

The contents and purpose of each charging event that triggers interaction with CHF, as well as the chargeable events that trigger them, are described in the following clauses.

A detailed formal description of the converged charging parameters defined in the present document is to be found in TS 32.291 [58].

A detailed formal description of the CDR parameters defined in the present document is to be found in TS 32.298 [51].

The selection of the CHF can be configured in the MMTel AS.

Editor's note: The CHF selection mechanism using other means, e.g. SIP and user profile, is FFS.

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| **Next change** |

#### 5.4.2.2 Originating Identification Presentation (OIP) charging

The following figure 5.4.2.2.1 describes PEC mode for Originating Identification Presentation (OIP) converged charging based on steps in figure 5.2.2.1.1.1 with MMTel AS interacting with the CHF.



Figure 5.4.2.2.1: Originating Identification Presentation (OIP) service – PEC

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| **Next change** |

#### 5.4.2.3 Originating Identification Restriction (OIR) charging

The following figure 5.4.2.3.1 describes PEC mode for Originating Identification Restriction (OIR) converged charging based on steps in figure 5.2.2.1.2.1 with MMTel AS interacting with the CHF.



Figure 5.4.2.3.1: Originating Identification Restriction (OIR) service - PEC

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| **Next change** |

#### 5.4.2.x Terminating Identification Restriction (TIR) charging

The following figure 5.4.2.x.1 describes PEC mode for Terminating Identification Presentation (TIP) converged charging based on steps in figure 5.2.2.1.3.1 with MMTel AS interacting with the CHF.



Figure 5.4.2.x.1: Terminating Identification Presentation (TIP) service – PEC

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| **Next change** |

#### 5.4.2.y Terminating Identification Restriction (TIR) charging

The following figure 5.4.2.y.1 describes PEC mode for Terminating Identification Restriction (TIR) converged charging based on steps in figure 5.2.2.1.4.1 with MMTel AS interacting with the CHF.



Figure 5.4.2.y.1: Terminating Identification Restriction (TIR) service – PEC

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| **End of changes** |