3GPP TSG SA WG5 Meeting 136-e TDoc S5-212259

electronic meeting, online, 1 - 9 March 2021

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **32.260** | **CR** | **0419** | **rev** | **1**  | **Current version:** | **17.0.0** |  |
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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:***  | Adding converged charging to principles |
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| ***Source to WG:*** | Ericsson LM |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | 5GSIMSCH |  | ***Date:*** | 2021-02-22 |
|  |  |  |  |  |
| ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | Clause 5 only mentions online and offline charging |
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| ***Summary of change:*** | Adding converged charging to clause 5 |
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| ***Consequences if not approved:*** | Service based charging for IMS is incomplete. |
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| ***Clauses affected:*** | 5.1.0, 5.1.1, 5.1.12, 5.1.14 |
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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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** | First revision S5-212259 |

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| **First change** |

### 5.1.0 Introduction

The IMS node shall maintain the integrity of all received or created charging-related information when forwarding the information to the offline, online and converged charging systems, whatever the length of the value of any particular parameter is. For example, the IMS Charging Identifier (ICID) may be generated by one IMS node (e.g. the P-CSCF) and forwarded to another IMS node (e.g. the S-CSCF). Both may generate charging information and ensure that the data integrity is maintained, in order to make possible correlation based on the ICID.

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| **Second change** |

### 5.1.1 IMS charging applicability

The IMS node may select charging method, i.e. online, offline or converged. The selection can be made based on local configuration or a combination of local configuration and received OCS/CDF addresses.

If a combination of local configuration and received OCS/CDF addresses and:

* only OCS address received, then either online charging (over Ro) or converged charging (over Nchf) may be used based on local configuration.
* only CDF address received then either offline charging (over Rf), converged charging (over Nchf) or offline only charging (over Nchf) may be used based on local configuration.
* both OCS and CDF address received then either online and offline changing (over Ro and Rf), or converged charging (over Nchf) may be used based on local configuration.
* neither OCS nor CDF address received then depending on IMS node any of the above may be used based on local configuration.

The CDF and OCS addresses transferred in SIP signalling are encoded in the P-Charging-Function-Addresses as defined in TS 24.229 [204] and RFC 7315 [406]. The P-Charging-Function-Addresses header contains the following parameters: CCF (i.e. CDF) and ECF (i.e. OCS).

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| **Third change** |

### 5.1.12 IMS support of announcements

During a charging session, the CHF/OCS may utilize the Announcement service specified in TS 32.281 [41] to request the IMS-GWF or AS to render video or audio announcements to a subscriber involved in an IMS session.

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| **Fourth change** |

### 5.1.14 Charging support of duration based charging

IMS Network Elements cannot get the volume information from the underlying network as described in TS 24.229 [204], therefore IMS charging only supports duration based charging.

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| **End of changes** |