**3GPP TSG-SA5 Meeting #133e *S5-205183***

**e-meeting 12th - 21st October 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.260** | **CR** | **0405** | **rev** | **1** | **Current version:** | **16.2.0** |  |
|  | | | | | | | | |
| *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:*** | Adding data description for IMS converged charging | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GSIMSCH | | | | |  | ***Date:*** | | | 2020-10-02 |
|  |  | | | |  | |  | | |  |
| ***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 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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Data description for IMS converged charging is missing. | | | | | | | | |
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| ***Summary of change:*** | | Adding high level data description for IMS converged charging. | | | | | | | | |
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| ***Consequences if not approved:*** | | IMS cannot use converged charging. | | | | | | | | |
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| ***Clauses affected:*** | | 6.x (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Revision of S5-205183. | | | | | | | | |

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| **First change** |

## 6.x Data description for IMS converged charging

### 6.x.1 Message contents

#### 6.x.1.1 General

The Charging Data Request and Charging Data Response are specified in TS 32.290 [57] and include charging information. The Charging Data Request can be of type [Event, Initial, Update, Termination].

Table 6.2a.1.1.1 describes the use of these messages for converged charging.

Table 6.x.1.1.1: Converged charging messages reference table

|  |  |  |
| --- | --- | --- |
| **Message** | **Source** | **Destination** |
| Charging Data Request | MRFC, IMS-GWF, SIP AS | CHF |
| Charging Data Response | CHF | MRFC, IMS-GWF, SIP AS |

#### 6.x.1.2 Structure for the converged charging message formats

##### 6.x.1.2.1 Charging Data Request message

Table 6.x.1.2.1.1 illustrates the basic structure of a Charging Data Request message as used for IMS converged charging.

Table 6.x.1.2.1.1: Charging Data Request message contents

| Information Element | Category | Description |
| --- | --- | --- |
| Session Identifier | OC | Described in TS 32.290 [45] |
| Subscriber Identifier | OM | Described in TS 32.290 [45] |
| NF Consumer Identification | M | Described in TS 32.290 [45] |
| NF Functionality | M | Described in TS 32.290 [45] |
| NF Name | OC | Described in TS 32.290 [45] |
| NF Address | OC | Described in TS 32.290 [45] |
| NF PLMN ID | OC | Described in TS 32.290 [45] |
| Invocation Timestamp | M | Described in TS 32.290 [45] |
| Invocation Sequence Number | M | Described in TS 32.290 [45] |
| Retransmission Indicator | OC | Described in TS 32.290 [45] |
| One-time Event | OC | Described in TS 32.290 [45] |
| One-time Event Type | OC | Described in TS 32.290 [45] |
| Service Specification Information | OC | Described in TS 32.290 [45] |
| Supported Features | OC | Described in TS 32.290 [45] |
| Notify URI | OC | Described in TS 32.290 [45] |
| Triggers | OC | This field is described in TS 32.290 [45] and holds the IMS specific triggers described in clause 5.x |
| Multiple Unit Usage | OC | Described in TS 32.290 [45] |
| Rating Group | M | Described in TS 32.290 [45] |
| Requested Unit | OC | Described in TS 32.290 [45] |
| Used Unit Container | OC | Described in TS 32.290 [45] |
| Triggers | OC | This field is described in TS 32.290 [45] and holds the IMS specific triggers described in clause 5.x |
| IMS Charging Information | OM | This field holds the IMS specific information described in clause 6.x |

Editors Note: The full structure of the charging data request is FFS.

##### 6.x.1.2.2 Charging Data Response message

Table 6.x.1.2.2.1 illustrates the basic structure of a Charging Data Response message as used for IMS converged charging.

Table 6.x.1.2.2.1: Charging Data Response Message Contents

| **Information Element** | **Category** | **Description** |
| --- | --- | --- |
| Session Identifier | OC | Described in TS 32.290 [45] |
| Invocation Timestamp | M | Described in TS 32.290 [45] |
| Invocation Result | OC | Described in TS 32.290 [45] |
| Result code | OC | Described in TS 32.290 [45] |
| Failed parameter | OC | Described in TS 32.290 [45] |
| Failure Handling | OC | Described in TS 32.290 [45] |
| Invocation Sequence Number | M | Described in TS 32.290 [45] |
| Session Failover | OC | Described in TS 32.290 [45] |
| Triggers | OC | Described in TS 32.290 [45] |
| Multiple Unit information | OC | Described in TS 32.290 [45] |
| Result Code | OC | Described in TS 32.290 [45] |
| Rating Group | OM | Described in TS 32.290 [45] |
| Granted Unit | OC | Described in TS 32.290 [45] |
| Validity Time | OC | Described in TS 32.290 [45] |
| Announcement Information | OC | Described in TS 32.281 [41] |
| IMS Charging Information | OM | This field holds the IMS specific information described in clause 6.x |

Editors Note: The full structure of the charging data response is FFS.

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| **End of changes** |