**3GPP TSG- Meeting # *rev2***

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| *CR-Form-v12.2* |
| **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:***  |  |
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| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** |  |  | ***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 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | Provide information on how to handle the termination action |
|  |  |
| ***Summary of change:*** | Include Final Unit Indication in Charging Data Response message |
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| ***Consequences if not approved:*** | No information for termination action |
|  |  |
| ***Clauses affected:*** |  |
|  |  |
|  | **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** |

##### 6.4.1.2.2 Charging Data Response message

Table 6.4.1.2.2.1 illustrates the basic structure of a Charging Data Response message as used for IMS converged charging.

Table 6.4.1.2.2.1: 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] |
| Final Unit Indication | OC | Described in TS 32.290 [45] |
| IMS Charging Information | OM | This field holds the IMS specific information described in clause 6.x |

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| **End of change** |

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| **Second change** |

#### 6.4.2.3 Detailed message format for converged charging

The following clause specifies per Operation Type the charging data that are sent by IMS node for IMS converged charging.

The Operation Types are listed in the following order: I (Initial)/U (Update)/T (Termination)/E (Event). Therefore, when all Operation Types are possible it is marked as IUTE. If only some Operation Types are allowed for a node, only the appropriate letters are used (i.e. IUT or E) as indicated in the table heading. The omission of an Operation Type for a particular field is marked with "-" (i.e. I-TE). Also, when an entire field is not allowed in a node the entire cell is marked as "-".

Table 6.5.3.1 defines the basic structure of the supported fields in the *Charging Data Request* message for IMS converged charging.

Table 6.4.2.3.1: Supported fields in *Charging Data Request* message

| Information Element | Node Type | IMS Node |
| --- | --- | --- |
| Supported Operation Types | IUTE |
| Session Identifier | -UTE |
| Subscriber Identifier | IUTE |
| NF Consumer Identification | IUTE |
| Invocation Timestamp | IUTE |
| Invocation Sequence Number | IUTE |
| Retransmission Indicator | IUT- |
| Notify URI | IU-- |
| Supported Features | IU-E |
| Service Specification Information | IUTE |
| Triggers | -UT- |
| Multiple Unit Usage | IUT- |
| Rating Group | IUT- |
| Requested Unit | IU-- |
| Used Unit Container | -UT- |
| Triggers | -UT- |
| IMS Charging Information | IUTE |
| Event Type | IUTE |
| IMS Node Functionality | IUTE |
| Role of Node | IUTE |
| User Information | IUTE |
| User Identifier | IUTE |
| User Equipment Info  | IUTE |
| User Location Info | IUTE |
| UE Time Zone | IUTE |
| 3GPP PS Data Off Status  | ---E |
| ISUP Cause | --TE |
| Serving Node Address | IU-- |
| VLR Number | I--E |
| MSC Address | I--E |
| User Session ID | IUTE |
| Outgoing Session ID | IUTE |
| Session Priority | I--E |
| Calling Party Address | IUTE |
| Called Party Address | IUTE |
| Number Portability routing information | I--E |
| Carrier Select routing information | I--E |
| Alternate Charged Party Address | IUTE |
| Requested Party Address  | I--E |
| Called Asserted Identity | I--E |
| Called Identity Change | -U-- |
| Called Identity Change Time Stamp | -U-- |
| Called Identity | -U-- |
| Associated URI | ---E |
| Time Stamps | IUTE |
| Application Server Information | IUTE |
| Inter Operator Identifier | IUTE |
| IMS Charging Identifier | IUTE |
| Related IMS Charging Identifier | IUTE |
| Related IMS Charging Identifier Generation Node | IUTE |
| Transit IOI List | IUTE |
| Early Media Description | I--E |
| SDP Session Description | IU-- |
| SDP Media Component | IU-- |
| Served Party IP Address | IUTE |
| Server Capabilities | IUTE |
| Trunk Group ID | IUTE |
| Bearer Service | IUTE |
| Service Id | IUT- |
| Service Specific Info | IUTE |
| Message Bodies | IUTE |
| Access Network Information | IUTE |
| Additional Access Network Information | IUTE |
| Cellular Network Information | IUTE |
| Access Transfer Information | IU-- |
| Access Network Info Change | -U-- |
| IMS Communication Service ID | -U-- |
| IMS Application Reference ID | I--E |
| Cause Code | --TE |
| Reason Header | --TE |
| Initial IMS Charging Identifier | IUTE |
| NNI Information | I-TE |
| From Address | IUTE |
| IMS Emergency Indication | IUTE |
| IMS Visited Network Identifier | IUTE |
| SIP Route header received  | I--E |
| SIP Route header transmitted  | I--E |
| TAD Identifier | I--- |
| FE Identifier List | IUTE |

Table 6.4.2.3.1 defines the basic structure of the supported fields in the *Charging Data Response* message for IMS converged charging.

Table 6.4.2.3.2: Supported fields in *Charging Data Response* message

| Information Element | Node Type | IMS Node |
| --- | --- | --- |
| Supported Operation Types | IUTE |
| Session Identifier | IUTE |
| Invocation Timestamp | IUTE |
| Invocation Result | IUTE |
| Invocation Sequence Number | IUTE |
| Session Failover | I--- |
| Triggers  | - |
| Multiple Unit information | I--E |
| Result Code | IU-E |
| Rating Group | IU-- |
| Granted Unit | IU-- |
| Validity Time | IU-- |
| Final Unit Indication | IU-- |

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| **End of change** |