3GPP TSG SA WG5 Meeting 137-e TDoc S5-213337

electronic meeting, online, 10 - 19 May 2021

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **32.260** | **CR** | **0423** | **rev** | **1** | **Current version:** | **17.1.0** |  |
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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:*** | Correcting capturing of missing location information | | | | | | | | | |
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| ***Source to WG:*** | Ericsson LM | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI17 | | | | |  | ***Date:*** | | | 2021-05-14 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | How to retrieve location information if it’s missing is not described | | | | | | | | |
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| ***Summary of change:*** | | Adding statement on how location information can be captured if not included in the SIP message. | | | | | | | | |
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| ***Consequences if not approved:*** | | The location information cannot in some circumstances be captured correctly, leading to incorrect charging. | | | | | | | | |
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| ***Clauses affected:*** | | 5.1.4 | | | | | | | | |
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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:*** | | Revision of S5-213337. | | | | | | | | |

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| **First change** |

### 5.1.4 Trigger conditions

This clause contains the details for trigger conditions listed in table 5.2.1.1 for offline charging messages (Charging Data Request and Charging Data Response) and table 5.3.1.1 for online charging messages (Debit / Reserve Units Request and Debit / Reserve Response) triggered by SIP methods or ISUP messages for all IMS nodes except for MRFC and AS.

The I-CSCF and BGCF, which need not be present in the signalling path for subsequent requests after the first SIP INVITE, do not support session-based charging using Charging Data Request [Start, Interim, and Stop]. In these (and only in these) IMS Network Elements, successful session set-up completion triggers Charging Data Request [Event]. Use of session-based charging when the I-CSCF or the BGCF is call stateful is not described in this release.

The initial registration, user-initiated re-registration, and user-initiated de-registration chargeable events relate to SIP REGISTER to trigger Charging Data Request [Event] / Debit / Reserve Units Requests, while network-initiated deregistration event relates to SIP NOTIFY to trigger Charging Data Request [Event] / Debit / Reserve Units Requests provided that subscription to registration events has been applied (see TS 24.229 [204]).

If at the time when the SIP 200 OK is received only the SDP offer is available, the CTF may trigger Charging Data Request[Start] immediately (subsequent SIP ACK containing the SDP answer triggers Charging Data Request[Interim]) or may trigger Charging Data Request[Start] once the SIP ACK has been received. The precise behaviour shall depend on operator policy.

If capturing the last user location information and/or UE Time Zone of one specific party (originating or terminating) at session release is required by operator (e.g. for legal purpose), and such information is not available at the time the SIP BYE is received, the CTF shall delay the Charging Data Request [Stop] until the reception of SIP 200 OK acknowledging the SIP BYE. Otherwise, the CTF shall trigger Charging Data Request [Stop] once the SIP BYE request has been received.

If capturing the last user location information and/or UE Time Zone of one specific party (originating or terminating) at session release is required by operator (e.g. for legal purpose), and such information is not available at the time the SIP BYE is received, the CTF shall delay the Debit / Reserve Units Request [Terminate] until the reception of SIP 200 OK acknowledging the SIP BYE. Otherwise, the CTF shall trigger Debit / Reserve Units Request [Terminate] once the SIP BYE request has been received. In any case, the granted quota shall not be used once the SIP BYE is received.

If capturing a user location change during a session is required by operator (e.g. for legal or statistics purposes) and no SIP request has been received to convey such information, a P-CSCF may initiate a SIP request towards an AS and populate the SIP request with appropriate location information, before the CTF may trigger Charging Data Request or Debit / Reserve Units Request.

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| **End of changes** |