**3GPP TSG-SA5 Meeting #156 *S5-244553***

Maastricht, Netherlands, 19 - 23 August 2024

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **32.255** | **CR** | **0557** | **rev** | **1** | **Current version:** | **18.4.0** |  |
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| *For* [***HELP***](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:***  | Rel-18 CR 32.255 Correction Unit Count Inactivity Timer for GERAN UTRAN access |
|  |  |
| ***Source to WG:*** | Ericsson LM |
| ***Source to TSG:*** | SA5 |
|  |  |
| ***Work item code:*** | TEI17\_NIESGU |  | ***Date:*** | 2024-08-09 |
|  |  |  |  |  |
| ***Category:*** | **A** |  | ***Release:*** | Rel-18 |
|  | *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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
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| ***Reason for change:*** | The Unit Count Inactivity Timer is applicable also for GERAN/UTRAN access. |
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| ***Summary of change:*** | Unit Count Inactivity Timer as applicable also for GERAN/UTRAN. |
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| ***Consequences if not approved:*** | Inconsistency between legacy and 5G may lead till interoperability issues. |
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| ***Clauses affected:*** | C.3.2.1 |
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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:*** | Revision of S5-244153 |

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| **First change** |

C.3.2.1 Definition of 5G data connectivity charging information

The charging information defined in clause 6.2.1 is used for the SMF+PGW-C to support GERAN/UTRAN access.

The specific PDU session charging information when UE is connected to SMF+P-GW-C via GERAN/UTRAN is provided as defined in table 6.2.1.2.1, with the differences that PDU session is replaced by PDP context in fields description and other differences described under following table C.3.2.1-1:

**Table C.3.2.1-1: Structure of PDU Session Charging Information**

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| --- | --- | --- |
| **Information Element** | **Category** | **Description** |
| Charging Id | OM | Described in table 6.2.1.2.1. |
| User Information | OM | Described in table 6.2.1.2.1. |
| User Identifier | OC | Described in table 6.2.1.2.1. |
| User Equipment Info  | OC | Described in table 6.2.1.2.1. |
| unauthenticatedFlag | OC | Described in table 6.2.1.2.1. |
| Roamer In Out  | OC | Described in table 6.2.1.2.1. |
| User Location Info | OC | Described in table 6.2.1.2.1.The "User Location Information" (ULI) IE indicating CGI/SAI/RAI shall apply as described in TS 29.060 [205] clause 7.7.51. |
| User Location Time | OC | Described in table 6.2.1.2.1. |
| UE Time Zone | OC | Described in table 6.2.1.2.1. |
| PDU Session Information | OC | Described in table 6.2.1.2.1. |
| PDU Session ID | M | Described in table 6.2.1.2.1. |
| PDU Type | OM | Described in table 6.2.1.2.1. |
| PDU Address | OC | Described in table 6.2.1.2.1. |
| PDU Ipv4 Address | OC | Described in table 6.2.1.2.1. |
| PDU IPv6 Address with Prefix | OC | Described in table 6.2.1.2.1. |
| PDU Address prefix length | OC | Described in table 6.2.1.2.1. |
| IPv4 Dynamic Address Flag | OC | Described in table 6.2.1.2.1. |
| IPv6 Dynamic Address Flag | OC | Described in table 6.2.1.2.1. |
| SUPI PLMN ID | OC- | Described in table 6.2.1.2.1. |
| Serving Network Function ID  | OC | Described in table 6.2.1.2.1. |
| Serving Network Function Functionality | M | Described in table 6.2.1.2.1.This field holds “SGSN” when SMF+PGW-C serves GERAN/UTRAN access. |
| Serving Network Function Name | OC | Described in table 6.2.1.2.1. |
| Serving CN PLMN ID | OC | Described in table 6.2.1.2.1. |
| RAT Type | OC | Described in table 6.2.1.2.1. |
| Data Network Name Identifier | M | Described in table 6.2.1.2.1, with DNN replaced by APN. |
| Authorized QoS Information | OC | Described in table 6.2.1.2.1.QoS information mapped according to interaction with PCC as specified in TS 23.502 [201] clause 4.11.0a.2. |
| Subscribed QoS Information | OC | Described in table 6.2.1.2.1.QoS information mapped according to interaction with PCC as specified in TS 23.502 [201] clause 4.11.0a.2. |
| Authorized Session-AMBR | OC | Described in table 6.2.1.2.1. |
| Subscribed Session-AMBR | OC | Described in table 6.2.1.2.1. |
| PDU session start Time | OC | Described in table 6.2.1.2.1. |
| PDU session stop Time | OC | Described in table 6.2.1.2.1. |
| Diagnostics | OC | Described in table 6.2.1.2.1. |
| Enhanced Diagnostics | OC | Described in table 6.2.1.2.1. |
| Charging Characteristics | OC | Described in table 6.2.1.2.1. |
| Charging CharacteristicsSelection Mode | OC | Described in table 6.2.1.2.1. |
| 3GPP PS Data Off Status | OC | Described in table 6.2.1.2.1. |
| Unit Count Inactivity Timer | OC | Described in table 6.2.1.2.1. |

The specific PDU Container Information when UE is connected to SMF+P-GW-C via GERAN/UTRAN is provided as defined in table 6.2.1.3.1, with the differences described under following table C.3.2.1-2:

**Table C.3.2.1-2: Structure of PDU Container Information**

| **Information Element** | **Category** | **Description**  |
| --- | --- | --- |
| Time of First Usage | OC | Described in table 6.2.1.3.1. |
| Time of Last Usage | OC | Described in table 6.2.1.3.1. |
| QoS Information | OC | Described in table 6.2.1.3.1. |
| QoS Characteristics | OC | Described in table 6.2.1.3.1. |
| AF Charging Identifier | OC | Described in table 6.2.1.3.1. |
| AF Charging Id String | OC | Described in table 6.2.1.3.1. |
| User Location Information | OC | Described in table 6.2.1.3.1. |
| UE Time Zone | OC | Described in table 6.2.1.3.1. |
| Presence Reporting Area Information | OC | Described in table 6.2.1.3.1. |
| Serving Network Function ID  | OC | Described in table 6.2.1.3.1. |
| RAT Type | OC | Described in table 6.2.1.3.1. |
| Sponsor Identity | OC | Described in table 6.2.1.3.1. |
| Application Service Provider Identity | OC | Described in table 6.2.1.3.1. |
| Charging Rule Base Name | OC | Described in table 6.2.1.3.1. |
| 3GPP PS Data Off Status | OC | Described in table 6.2.1.3.1. |

The specific Roaming QBC information is described in table B.2.2.1.2-1 and QFI Container Information is described in table B.2.2.1.3-1 for when UE is connected to SMF+P-GW via GERAN/UTRAN, with the differences that PDU session is replaced by PDP context in fields description.

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| **End of changes** |