**3GPP TSG-SA5 Meeting #145-e *S5-225275***

**e-meeting, 15 - 24 August 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.291** | **CR** | **0415** | **rev** | **-** | **Current version:** | **17.3.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Correcting missing user location mapping to ASN.1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson LM | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI17 | | | | |  | ***Date:*** | | | 2022-08-04 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | How User Location Time may be mapped to the CDR is missing. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding the binding for User Location Time for the CDR. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The binding of User Location Time is undefined and may lead to interoperability issues. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

|  |
| --- |
| **First change** |

## 7.2 Bindings for 5G data connectivity

Table 7.2-1: Bindings of 5G data connectivity CDR field, Information Element and Resource Attribute

| Information Element | | | | CDR Field | | | | Resource Attribute | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | |  | | | | **ChargingDataRequest** | | | |
| Supported Features | | | | - | | | | **/**supportedFeatures | | | |
| Multiple Unit Usage | | | | List of Multiple Unit Usage | | | | /multipleUnitUsage | | | |
| UPF ID | | | | UPF ID | | | | /multipleUnitUsage/uPFID | | | |
| Multi-homed PDU address | | | | Multi-homed PDU address | | | | /multipleUnitUsage/multihomedPDUAddress | | | |
| Used Unit Container | | | | Used Unit Container | | | | /multipleUnitUsage/usedUnitContainer | | | |
| PDU Container Information | | | | PDU Container Information | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation | | | |
| Time of First Usage | | | | Time of First Usage | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/timeofFirstUsage | | | |
| Time of Last Usage | | | | Time of Last Usage | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/timeofLastUsage | | | |
| QoS Information | | | | QoS Information | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/qoSInformation | | | |
| QoS Characteristics | | | | QoS Characteristics | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/qoSCharacteristics | | | |
| AF Charging Identifier | | | | AF Charging Identifier | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/afChargingIdentifier | | | |
| AF Charging Id String | | | | AF Charging Id String | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/afChargingIdString | | | |
| User Location Information | | | | User Location Information | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/userLocationInformation | | | |
| UE Time Zone | | | | UE Time Zone | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/uetimeZone | | | |
| RAT Type | | | | RAT Type | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/rATType | | | |
| Serving Network Function ID | | | | Serving Network Function ID | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/servingNodeID | | | |
| Presence Reporting Area Information | | | | Presence Reporting Area  Information | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/ presenceReportingAreaInformation | | | |
| 3GPP PS Data Off Status | | | | 3GPP PS Data Off Status | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/3gppPSDataOffStatus | | | |
| MA PDU Steering functionality | | | | MA PDU Steering functionality | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/mAPDUSteeringFunctionality | | | |
| MA PDU Steering mode | | | | MA PDU Steering mode | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/mAPDUSteeringMode | | | |
| Sponsor Identity | | | | Sponsor Identity | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/sponsorIdentity | | | |
| Application Service Provider  Identity | | | | Application Service Provider  Identity | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/applicationserviceProviderIdentity | | | |
| Charging Rule Base Name | | | | Charging Rule Base Name | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/chargingRuleBaseName | | | |
| Traffic Forwarding Way | | | | Traffic Forwarding Way | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/trafficForwardingWay | | | |
| Qos Monitoring Report | | | | Qos Monitoring Report | | | | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/qosMonitoringReport | | | |
| PDU Session Charging Information | | | | PDU Session Charging Information | | | | /pDUSessionChargingInformation | | | |
| Charging Id | | | | Charging Id | | | | /pDUSessionChargingInformation/chargingId | | | |
| Home Provided ChargingId | | | | Home Provided ChargingId | | | | /pDUSessionChargingInformation/ homeProvidedChargingId | | | |
| User Information | | | | User Information | | | | /pDUSessionChargingInformation/ userInformation | | | |
| User Identifier | | | | User Identifier | | | | /pDUSessionChargingInformation/userInformation/servedGPSI | | | |
| User Equipment Info | | | | User Equipment Info | | | | /pDUSessionChargingInformation/userInformation/ servedPEI | | | |
| Unauthenticated Flag | | | | Unauthenticated Flag | | | | /pDUSessionChargingInformation/userInformation/ unauthenticatedFlag | | | |
| Roamer In Out | | | | Roamer In Out | | | | /pDUSessionChargingInformation/userInformation/ roamerInOut | | | |
| User Location Info | | | | User Location Info | | | | /pDUSessionChargingInformation/ userLocationinfo | | | |
| User Location Time | | | |
| MA PDU Non 3GPP User Location info | | | | MA PDU Non 3GPP User Location info | | | | /pDUSessionChargingInformation/mAPDUNon3GPPUserLocationInfo | | | |
| Non 3GPP User Location Time | | | | Non 3GPP User Location Time | | | | /pDUSessionChargingInformation/non3GPPUserLocationTime | | | |
| MA PDU Non 3GPP User Location Time | | | | MA PDU Non 3GPP User Location Time | | | | /pDUSessionChargingInformation/mAPDUNon3GPPUserLocationTime | | | |
| UE Time Zone | | | | UE Time Zone | | | | /pDUSessionChargingInformation/uEtimeZone | | | |
| Presence Reporting Area  Information | | | | Presence Reporting Area  Information | | | | /pDUSessionChargingInformation/ presenceReportingAreaInformation | | | |
| PDU Session Information | | | | PDU Session Information | | | | /pDUSessionChargingInformation/pduSessionInformation | | | |
| PDU Session ID | | | | PDU Session ID | | | | /pDUSessionChargingInformation/pduSessionInformation/pduSessionID | | | |
| Network Slice Instance  Identifier | | | | Network Slice Instance Identifier | | | | /pDUSessionChargingInformation/pduSessionInformation/networkSlicingInfo | | | |
| PDU Type | | | | PDU Type | | | | /pDUSessionChargingInformation /pduSessionInformation/pduType | | | |
| PDU Address | | | | PDU Address | | | | /pDUSessionChargingInformation /pduSessionInformation/pduAddress | | | |
| PDU IPv4 Address | | | | PDU IPv4 Address | | | | /pDUSessionChargingInformation/pduSessionInformation/pduAddress/pduIPv4Address | | | |
| PDU IPv6 Address with  prefix | | | | PDU IPv6 Address with prefix | | | | /pDUSessionChargingInformation/pduSessionInformation/pduAddress/pduIPv6Addresswithprefix | | | |
| PDU Address prefix length | | | | PDU Address prefix length | | | | /pDUSessionChargingInformation /pduSessionInformation/pduAddress/pduAddressprefixlength | | | |
| IPv4 Dynamic Address  Flag | | | | IPv4 Dynamic Address Flag | | | | /pDUSessionChargingInformation /pduSessionInformation/pduAddress/ iPv4dynamicAddressFlag | | | |
| IPv6 Dynamic Address Flag | | | | IPv6 Dynamic Prefix Flag | | | | pDUSessionChargingInformation /pduSessionInformation/pduAddress/ iPv6dynamicPrefixFlag | | | |
| Additional PDU IPv6  Prefixes | | | | Additional PDU IPv6 Prefixes | | | | pDUSessionChargingInformation /pduSessionInformation/pduAddress/ addIpv6AddrPrefixes | | | |
| SSC Mode | | | | SSC Mode | | | | /pDUSessionChargingInformation /pduSessionInformation/sscMode | | | |
| MA PDU session information | | | | MA PDU session information | | | | /pDUSessionChargingInformation /pduSessionInformation/mAPDUSessionInformation | | | |
| MA PDU session indicator | | | | MA PDU session indicator | | | | /pDUSessionChargingInformation /pduSessionInformation/mAPDUSessionInformation/mAPDUSessionIndicator | | | |
| ATSSS capability | | | | ATSSS capability | | | | /pDUSessionChargingInformation /pduSessionInformation/mAPDUSessionInformation/aTSSSCapability | | | |
| SUPI PLMN ID | | | | SUPI PLMN ID | | | | /pDUSessionChargingInformation /pduSessionInformation/hPlmnId | | | |
| Serving Network Function ID | | | | Serving Network Function ID | | | | /pDUSessionChargingInformation /pduSessionInformation/ servingNetworkFunctionID | | | |
| Serving CN PLMN ID | | | | Serving CN PLMN ID | | | | /pDUSessionChargingInformation/pduSessionInformation/servingCNPlmnId | | | |
| RAT Type | | | | RAT Type | | | | /pDUSessionChargingInformation /pduSessionInformation/ratType | | | |
| MA PDU Non 3GPP RAT Type | | | | MA PDU Non 3GPP RAT Type | | | | /pDUSessionChargingInformation /pduSessionInformation/mAPDUNon3GPPRATType | | | |
| Data Network Name Identifier | | | | Data Network Name Identifier | | | | /pDUSessionChargingInformation /pduSessionInformation/dnnid | | | |
| DNN Selection Mode | | | | DNN Selection Mode | | | | /pDUSessionChargingInformation /pduSessionInformation/dNNselectionMode | | | |
| Authorized QoS information | | | | Authorized Qos Information | | | | /pDUSessionChargingInformation /pduSessionInformation/authorized qoSInformation | | | |
| Subscribed QoS Information | | | | Subscribed QoS Information | | | | /pDUSessionChargingInformation /pduSessionInformation/subscribedQoSInformation | | | |
| Authorized Session-AMBR | | | | Authorized Session-AMBR | | | | /pDUSessionChargingInformation /pduSessionInformation/authorizedSessionAMBR | | | |
| Subscribed Session-AMBR | | | | Subscribed Session-AMBR | | | | /pDUSessionChargingInformation /pduSessionInformation/subscribedSessionAMBR | | | |
| Charging Characteristics | | | | Charging Characteristics | | | | /pDUSessionChargingInformation /pduSessionInformation/ chargingCharacteristics | | | |
| Charging Characteristics  Selection Mode | | | | Charging Characteristics Selection Mode | | | | /pDUSessionChargingInformation /pduSessionInformation/chargingCharacteristicsSelectionMode | | | |
| PDU session start Time | | | | PDU session start Time | | | | /pDUSessionChargingInformation /pduSessionInformation/startTime | | | |
| PDU session stop Time | | | | PDU session stop Time | | | | /pDUSessionChargingInformation /pduSessionInformation/stopTime | | | |
| Diagnostics | | | | Diagnostics | | | | /pDUSessionChargingInformation /pduSessionInformation/diagnostics | | | |
| Enhanced Diagnostics | | | | Enhanced Diagnostics | | | | /pDUSessionChargingInformation /pduSessionInformation/enhancedDiagnostics | | | |
| 3GPP PS Data Off Status | | | | 3GPP PS Data Off Status | | | | /pDUSessionChargingInformation /pduSessionInformation/3gppPSDataOffStatus | | | |
| Session Stop Indicator | | | | Session Stop Indicator | | | | /pDUSessionChargingInformation /pduSessionInformation/sessionStopIndicator | | | |
| Redundant Transmission Type | | | | Redundant Transmission Type | | | | /pDUSessionChargingInformation /pduSessionInformation/redundantTransmissionType | | | |
| PDU Session Pair ID | | | | PDU Session Pair ID | | | | /pDUSessionChargingInformation /pduSessionInformation/pDUSessionPairID | | | |
| 5G LAN Type Service | | | | 5G LAN Type Service | | | | /pDUSessionChargingInformation /pduSessionInformation/5GLANTypeService | | | |
| Internal Group Identifier | | | | Internal Group Identifier | | | | /pDUSessionChargingInformation /pduSessionInformation/5GLANTypeService/internalGroupIdentifier | | | |
| Unit Count Inactivity Timer | | | | - | | | | /pDUSessionChargingInformation/unitCountInactivityTimer | | | |
| RAN Secondary RAT Usage Report | | | | RAN Secondary RAT Usage Report | | | | /pDUSessionChargingInformation/rANSecondaryRATUsageReport | | | |
| NG RAN Secondary RAT Type | | | | NG RAN Secondary RAT Type | | | | /pDUSessionChargingInformation/rANSecondaryRATUsageReport/rANSecondaryRATType | | | |
| Qos Flows Usage Reports | | | | Qos Flows Usage Reports | | | | /pDUSessionChargingInformation/rANSecondaryRATUsageReport/qosFlowsUsageReports | | | |
| Roaming QBC information | | | | Roaming QBC information | | | | /roamingQBCInformation | | | |
| Multiple QFI container | | | | Multiple QFI container | | | | /roamingQBCInformation/multipleQFIcontainer | | | |
| Triggers | | | | Triggers | | | | /roamingQBCInformation/multipleQFIcontainer/triggers | | | |
| Trigger Timestamp | | | | Trigger Timestamp | | | | /roamingQBCInformation/multipleQFIcontainer/triggerTimestamp | | | |
| Time | | | | Time | | | | /roamingQBCInformation/multipleQFIcontainer/time | | | |
| Total Volume | | | | Total Volume | | | | /roamingQBCInformation/multipleQFIcontainer/totalVolume | | | |
| Uplink Volume | | | | Uplink Volume | | | | /roamingQBCInformation/multipleQFIcontainer/uplinkVolume | | | |
| Downlink Volume | | | | Downlink Volume | | | | /roamingQBCInformation/multipleQFIcontainer/downlinkVolume | | | |
| Local Sequence Number | | | | Local Sequence Number | | | | /roamingQBCInformation/multipleQFIcontainer/localSequenceNumber | | | |
| QFI Container information | | | | QFI Container information | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation | | | |
| QoS Flow Id | | | | QoS Flow Id | | | | /roamingQBCInformation/multipleQFIcontainer/ qFIContainerInformation/qFI | | | |
| Time of First Usage | | | | Time of First Usage | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/ timeofFirstUsage | | | |
| Time of Last Usage | | | | Time of Last Usage | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/timeofLastUsage | | | |
| QoS Information | | | | QoS Information | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/qoSInformation | | | |
| QoS Characteristics | | | | QoS Characteristics | | | | /roamingQBCInformation/multipleQFIcontainer/ qFIContainerInformation/qoSCharacteristics | | | |
| User Location Information | | | | User Location Information | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/ userLocationInformation | | | |
| UE Time Zone | | | | UE Time Zone | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/uetimeZone | | | |
| Presence Reporting Area Information | | | | Presence Reporting Area Information | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/presenceReportingAreaInformation | | | |
| RAT Type | | | | RAT Type | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/rATType | | | |
| Report Time | | | | Report Time | | | | /roamingQBCInformation/multipleQFIcontainer/ qFIContainerInformation/reportTime | | | |
| Serving Network Function ID | | | | Serving Network Function ID | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/ servingNetworkFunctionID | | | |
| 3GPP PS Data Off Status | | | | 3GPP PS Data Off Status | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/3gppPSDataOffStatus | | | |
| EPS bearer Charging Id | | | | EPS bearer Charging Id | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/3gppChargingId | | | |
| Diagnostics | | | | Diagnostics | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/diagnostics | | | |
| Enhanced Diagnostics | | | | Enhanced Diagnostics | | | | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/enhancedDiagnostics | | | |
| UPF ID | | | | UPF ID | | | | /roamingQBCInformation/uPFID | | | |
| Roaming Charging Profile | | | | Roaming Charging Profile | | | | /roamingQBCInformation/roamingChargingProfile | | | |
| Trigger | | | | Trigger | | | | /roamingQBCInformationroamingChargingProfile/trigger | | | |
| Partial record method | | | | Partial record method | | | | /roamingQBCInformation/roamingChargingProfile/partialRecordMethod | | | |
|  | | | |  | | | | **ChargingDataResponse** | | | |
| Supported Features | | | | - | | | | **/**supportedFeatures | | | |
| Multiple Unit information | | | | - | | | | /multipleUnitInformation | | | |
| UPF ID | | | | - | | | | /multipleUnitInformation/uPFID | | | |
| PDU Session Charging Information | | | | - | | | | /pDUSessionChargingInformation | | | |
| Presence Reporting Area  Information | | | | - | | | | /pDUSessionChargingInformation/ presenceReportingAreaInformation | | | |
| Unit Count Inactivity Timer | | | | - | | | | /pDUSessionChargingInformation/unitCountInactivityTimer | | | |
| Roaming QBC information | | | | - | | | | /roamingQBCInformation | | | |
| Roaming Charging Profile | | | | - | | | | /roamingQBCInformation/roamingChargingProfile | | | |

|  |
| --- |
| **End of changes** |