**3GPP TSG-SA5 Meeting #143-e *S5-223281rev1***

**e-meeting, 9th – 17th May 2022** Revision of S5-20xxxx

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.291** | **CR** | **0399** | **rev** | **1** | **Current version:** | **16.11.0** |  |
|  | | | | | | | | |
| *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:*** | Correction on the Time attribute | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Deutsche Telekom | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2022-04-29 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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:*** | | In the RequestedUnit, UsedUnitContainer and GrantedUnit, the Time is definded as the Unit32. Whether the time is present as the seconds or milliseconds is not described. | | | | | | | | |
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| ***Summary of change:*** | | Clearly specify the Time is used in the seconds. | | | | | | | | |
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| ***Consequences if not approved:*** | | The data type of Time is unclear. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.1.6.2.1,9, 6.1.6.2.1,10, 6.1.6.2.1,11 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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** |

###### a6.1.6.2.1.9 Type RequestedUnit

Table 6.1.6.2.1.9-1: Definition of type RequestedUnit

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| time | Uint32 | OC | 0..1 | This field holds the amount of requested time in seconds. |  |
| totalVolume | Uint64 | OC | 0..1 | This field holds the amount of requested volume (bytes) in both uplink and downlink directions. |  |
| uplinkVolume | Uint64 | OC | 0..1 | This field holds the amount of requested volume (bytes)in uplink direction. |  |
| downlinkVolume | Uint64 | OC | 0..1 | This field holds the amount of requested volume(bytes) in downlink direction. |  |
| serviceSpecificUnits | Uint64 | OC | 0..1 | This field holds the amount of requested service specific units. |  |
| NOTE 1: f none of them is included, "RequestedUnit": {}, the category and amount are determined by CHF for online charging with centralized unit determination and rating scenario. | | | | | |

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| **Next change** |

###### 6.1.6.2.1.10 Type UsedUnitContainer

Table 6.1.6.2.1.10-1: Definition of type UsedUnitContainer

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| serviceId | ServiceId | OC | 0..1 | This field identity of the used service |  |
| quotaManagementIndicator | QuotaManagementIndicator | OC | 0..1 | an indicator on whether the reported used units are with or without quota management control. If the attribute is not present, it indicates the used unit is without quota management applied. |  |
| triggers | array (Trigger) | OC | 0..N | This field specifies the reason for usage reporting for one or more types of unit associated to the rating group. |  |
| triggerTimestamp | DateTime | Oc | 0..1 | This field holds the timestamp when the reporting trigger occur. |  |
| time | Uint32 | OC | 0..1 | This field holds the amount of used time in seconds. |  |
| totalVolume | Uint64 | OC | 0..1 | This field holds the amount of used volume(bytes) in both uplink and downlink directions. |  |
| uplinkVolume | Uint64 | OC | 0..1 | This field holds the amount of used volume(bytes) in uplink direction. |  |
| downlinkVolume | Uint64 | OC | 0..1 | This field holds the amount of used volume(bytes) in downlink direction. |  |
| serviceSpecific Units | Uint64 | OC | 0..1 | This field holds the amount of used service specific units. |  |
| eventTimeStamps | Array(DateTime) | OC | 0..N | This field holds the timestamps of the event reported in the Service Specific Units, if the reported units are event based |  |
| localSequenceNumber | integer | M | 1 | holds the Used Unit sequence number, i.e. the order when charging event occurs. It starts from 1 and increased by 1 for each Used Unit generation. |  |

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| **Next change** |

###### 6.1.6.2.1.11 Type GrantedUnit

Table 6.1.6.2.1.11-1: Definition of type GrantedUnit

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| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| tariffTimeChange | DateTime | OC | 0..1 | This field contains UTC time indicating the switch time when the tariff will be changed. |  |
| time | Uint32 | OC | 0..1 | This field holds the amount of granted time in seconds. |  |
| totalVolume | Uint64 | OC | 0..1 | This field holds the amount of granted volume(bytes) in both uplink and downlink directions. |  |
| uplinkVolume | Uint64 | OC | 0..1 | This field holds the amount of granted volume(bytes) in uplink direction. |  |
| downlinkVolume | Uint64 | OC | 0..1 | This field holds the amount of granted volume(bytes) in downlink direction. |  |
| serviceSpecificUnits | Uint64 | OC | 0..1 | This field holds the amount of granted requested service specific units. |  |

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| **End of change** |