**3GPP TSG-SA5 Meeting #133e *S5-205081r1***

**e-meeting 12th Oct-21st Oct 2020** Revision of S5-205081

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v11.4* | | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | | |
|  | | | | | | | | | |
|  | **32.291** | **CR** | **0278** | **rev** | **1** | **Current version:** | **16.5.1** |  |
|  | | | | | | | | | |
| *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:*** | Correct the InvocationSequenceNumber | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16, 5GS\_Ph1-SBI\_CH | | | | |  | ***Date:*** | | | 2020-10-14 |
|  |  | | | |  | |  | | |  |
| ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In stage 3, the default value of InvocationSequenceNumber should be added. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add the default vavule of InvocationSequenceNumber | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The default vavule of InvocationSequenceNumber is missing. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.1.6.2.1.1,6.1.6.2.1.2,6.2.5.2.1.1,6.2.5.2.1.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

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

###### 6.1.6.2.1.1 Type ChargingDataRequest

Table 6.1.6.2.1.1-1: Definition of type ChargingDataRequest

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| subscriberIdentifier | Supi | OM | 0..1 | Identifier of the subscriber that uses the requested service. |  |
| nfConsumerIdentification | NFIdentification | M | 1 | This is a grouped field which contains a set of information identifying the NF consumer of the charging service. |  |
| invocationTimeStamp | DateTime | M | 1 | The time at which the request is send |  |
| invocationSequenceNumber | Uint32 | M | 1 | This field contains the sequence number of the charging service invocation by the NF consumer, i.e. the order of charging data requests.  The sequence number in charging data request [initial] starts from 1, and increased by 1 for subsequent charging data request.  The sequence number starts from other value may be used for backwards compatibility. |  |
| retransmissionIndicator | boolean | OC | 0..1 | This field indicates, if included, this is a retransmitted request message. |  |
| oneTimeEvent | boolean | OC | 0..1 | Indicates, if included, that this is event based charging and whether this is a one-time event. If true, this is a one-time event that there will be no update or release. |  |
| oneTimeEventType | EventType | OC | 0..1 | Indicates the type of the one time event, i.e. Immediate or Post event charging. |  |
| notifyUri | Uri | OC | 0..1 | Identifies the recipient of Notifications sent by the CHF.  In case of session based charging it shall be present in create request message, and may be present in update. |  |
| supportedFeatures | SupportedFeatures | OC | 0..1 | This IE shall be present if at least one optional feature defined in clause 6.1.8 is supported. |  |
| serviceSpecificationInfo | String | OC | 0..1 | Identifies service specific document that applies to the request, e.g. the service specific document ('middle tier' TS) and 3GPP release the service specific document is based upon. |  |
| multipleUnitUsage | array(MultipleUnitUsage) | OC | 0..N | This field contains the parameters for the quota management request and/or usage reporting. |  |
| triggers | array(Trigger) | OC | 0..N | This field identifies the event(s) triggering the request. |  |

|  |
| --- |
| **Next change** |

###### 6.1.6.2.1.2 Type ChargingDataResponse

Table 6.1.6.2.1.2-1: Definition of type ChargingDataResponse

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| invocationTimestamp | DateTime | M | 1 | This field holds the timestamp of the charging service response from the CHF. |  |
| invocationResult | InvocationResult | OC | 0..1 | This field holds the result of charging service invocation by the NF consumer |  |
| invocationSequenceNumber | Uint32 | M | 1 | This field contains the sequence number of the charging service invocation by the NF consumer, which is same with the sequence number in charging data request. |  |
| sessionFailover | SessionFailover | OC | 0..1 | This field indicates whether alternative CHF is supported for ongoing charging service failover handling by NF consumer. |  |
| supportedFeatures | SupportedFeatures | OC | 0..1 | This IE shall be present if at least one optional feature defined in clause 6.1.8 is supported. |  |
| multipleUnitInformation | array(MultipleUnitInformation) | OC | 0..N | This field holds the parameters for the quota management and/or usage reporting information. It may have multiple occurrences. |  |
| triggers | array(Trigger) | OC | 0..N | This field identifies the chargeable event(s) supplied by CHF to override/activate the existing chargeable event(s) in NF consumer.  The presence of the triggers attribute without any triggerType is used by CHF to disable all the triggers except rating group level triggers. |  |

|  |
| --- |
| **Next change** |

###### 6.2.5.2.1.1 Type ChargingDataRequest

Table 6.2.5.2.1.1-1: Definition of type ChargingDataRequest

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| subscriberIdentifier | SubscriberIdentifier | OM | 0..1 | Identifier of the subscriber that uses the requested service. |  |
| nfConsumerIdentification | NFConsumerIdentification | M | 1 | This is a grouped field which contains a set of information identifying the NF consumer of the charging service. |  |
| invocationTimeStamp | DateTime | M | 1 | The time at which the request is send |  |
| invocationSequenceNumber | Uint32 | M | 1 | This field contains the sequence number of the charging service invocation by the NF consumer ,i.e. the order of charging data requests.  The sequence number in charging data request [initial] starts from 1, and increased by 1 for subsequent charging data request.  The sequence number starts from other value may be used for backwards compatibility. |  |
| service SpecificationInformation | String | OC | 0..1 | Identifies service specific document that applies to the request, e.g. the service specific document ('middle tier' TS) and 3GPP release the service specific document is based upon. |  |
| multipleUnitUsage | array(MultipleUnitUsage) | OC | 0..N | This field contains the parameters for usage reporting. |  |
| triggers | array(Trigger) | OC | 0..N | This field identifies the event(s) triggering the request. |  |

|  |
| --- |
| **Next change** |

###### 6.2.5.2.1.2 Type ChargingDataResponse

Table 6.2.5.2.1.2-1: Definition of type ChargingDataResponse

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| invocationTimestamp | DateTime | M | 1 | This field holds the timestamp of the charging service response from the CHF. |  |
| invocationResult | InvocationResult | OC | 1 | This field holds the result code in case of unsuccessful charging service invocation by the NF consumer |  |
| invocationSequenceNumber | Uint32 | M | 1 | This field contains the sequence number of the charging service invocation by the NF consumer, which is same with the sequence number in charging data request. |  |
| sessionFailover | SessionFailover | OC | 0..1 | This field indicates whether alternative CHF is supported for ongoing charging service failover handling by NF consumer. |  |
| triggers | array(Trigger) | OC | 0..N | This field identifies the chargeable event(s) supplied by CHF to override/activate the existing chargeable event(s) in NF consumer.  The presence of the triggers attribute without any triggerType is used by CHF to disable all the triggers. |  |

|  |
| --- |
| **End of change** |