**3GPP TSG-SA5 Meeting #133e *S5-205081r2***

**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 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-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.It is allowed to start from 0 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.It is allowed to start from 0 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** |