**3GPP TSG SA WG5 Meeting #155 *S5-243036***

Jeju, South Korea, 27 - 31 May 2024

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **32.282** | **CR** | **0002** | **rev** | **1** | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Rel-18 CR 32.282 Correct charging information for TSN domain charging | | | | | | | | | |
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| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18, TSN\_CH | | | | |  | ***Date:*** | | | 2024-05-30 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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 can be found in 3GPP o. | | | | | | | | *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:*** | | TR 28.286 concluded on Solution #6.10: Only Applicable Common IEs should be reflected in common part description compared to TS 32.290. | | | | | | | | |
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| ***Summary of change:*** | | Remove not applicable IEs and expand the applicable sub-fields in Table 6.1.1.2-1, Table 6.1.1.3-1, Table 6.2.3-1 and Table 6.2.3-2. | | | | | | | | |
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| ***Consequences if not approved:*** | | The presentation of common IEs in this specification does not follow the common principle, which may lead to misinterpretation of common IE applicability to this service-specific charging. | | | | | | | | |
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| ***Clauses affected:*** | | 6.1.1.2, 6.1.1.3, 6.2.3 | | | | | | | | |
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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 | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Revision of S5-242734 | | | | | | | | |

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| **First change** |

#### 6.1.1.2 Charging Data Request message

Table 6.1.1.2-1 illustrates the basic structure of a Charging Data Request message from the TSN AF or TSCTSF as used for time sensitive networking charging.

Table 6.1.1.2-1: Charging Data Request message contents

| Information Element | Converged Charging  Category | Description |
| --- | --- | --- |
| Session Identifier | OC | Described in TS 32.290 [4]. |
| Tenant Identifier | OM | Described in TS 32.290 [4] and indicates AF identifier. |
| NF Consumer Identification | M | Described in TS 32.290 [4] and holds the identifier of the TSN AF or TSCTSF. |
| NF Functionality | M | Described in TS 32.290 [4]. |
| NF Name | OC | Described in TS 32.290 [4]. |
| NF Address | OC | Described in TS 32.290 [4]. |
| NF PLMN ID | OC | Described in TS 32.290 [4]. |
| Charging Identifier | OM | Described in TS 32.290 [4]. |
| Invocation Timestamp | M | Described in TS 32.290 [4]. |
| Invocation Sequence Number | M | Described in TS 32.290 [4]. |
| Retransmission Indicator | OC | Described in TS 32.290 [4]. |
| One-time Event | OC | Described in TS 32.290 [4]. |
| One-time Event Type | OC | Described in TS 32.290 [4]. |
| Supported Features | OC | Described in TS 32.290 [4]. |
| Service Specification Information | OC | Described in TS 32.290 [4]. |
| TSN Charging Information | OM | This field holds TSN specific information described in clause 6.2.1.2. |

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| **Next change** |

#### 6.1.1.3 Charging Data Response message

Table 6.1.1.3-1 illustrates the basic structure of a Charging Data Response message from the CHF to the TSN AF or TSCTSF as used for time sensitive networking charging.

Table 6.1.1.3-1: Charging Data Response message contents

| Information Element | Category for converged charging | Description |
| --- | --- | --- |
| Session Identifier | OC | Described in TS 32.290 [4]. |
| Invocation Timestamp | M | Described in TS 32.290 [4]. |
| Invocation Result | OC | Described in TS 32.290 [4]. |
| Invocation Result | OC | Described in TS 32.290 [4]. |
| Failed parameter | OC | Described in TS 32.290 [4]. |
| Failure Handling | OC | Described in TS 32.290 [4]. |
| Invocation Sequence Number | M | Described in TS 32.290 [4]. |
| Session Failover | OC | Described in TS 32.290 [4]. |
| Supported Features | OC | Described in TS 32.290 [4]. |

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| **Next change** |

### 6.2.3 Detailed message format for converged charging

The following clause specifies per Operation Type the charging data that are sent by CEF for time sensitive networking converged charging.

The Operation Types are listed in the following order: I (Initial)/T (Termination)/E (Event). Therefore, when all Operation Types are possible it is marked as ITE. If only some Operation Types are allowed for a node, only the appropriate letters are used (i.e. IT or E) as indicated in the table heading. The omission of an Operation Type for a particular field is marked with "-" (i.e. I-E). Also, when an entire field is not allowed in a node the entire cell is marked as "-".

Table 6.2.3-1 defines the basic structure of the supported fields in the *Charging Data Request* message for TSN AF or TSCTSF converged charging.

Table 6.2.3-1: Supported fields in *Charging Data Request* message

| Information Element | Time Sensitive Networking | TSN AF | TSCTSF |
| --- | --- | --- | --- |
| Supported Operation Types | I/T/E | I/T/E |
| Session Identifier | | ITE | ITE |
| Tenant Identifier | | ITE | ITE |
| NF Consumer Identification | | ITE | ITE |
| NF Functionality | | ITE | ITE |
| NF Name | | ITE | ITE |
| NF Address | | ITE | ITE |
| NF PLMN ID | | ITE | ITE |
| Charging Identifier | | ITE | ITE |
| Invocation Timestamp | | ITE | ITE |
| Invocation Sequence Number | | ITE | ITE |
| Retransmission Indicator | | ITE | ITE |
| One-time Event | | --E | --E |
| One-time Event Type | | --E | --E |
| Supported Features | | ITE | ITE |
| Service Specification Information | | ITE | ITE |
| TSN Charging Information | | ITE | ITE |

Table 6.2.3-2 defines the basic structure of the supported fields in the *Charging Data Response* message for TSN or TSCTSF converged charging.

Table 6.2.3-2: Supported fields in *Charging Data Response* message

| Information Element | Time Sensitive Networking | TSN AF | TSCTSF |
| --- | --- | --- | --- |
| Supported Operation Types | ITE | ITE |
| Session Identifier | | ITE | ITE |
| Invocation Timestamp | | ITE | ITE |
| Invocation Result | | ITE | ITE |
| Invocation Result | | ITE | ITE |
| Failed parameter | | ITE | ITE |
| Failure Handling | | ITE | ITE |
| Invocation Sequence Number | | ITE | ITE |
| Session Failover | | ITE | ITE |
| Supported Features | | ITE | ITE |

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| **End of change** |