**3GPP TSG-SA5 Meeting #154 *S5-241848***

**Changsha, CHINA, 15 Apr - 19 Apr 2024**  Revision of S5-241627

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.204** | **CR** | **0002** | **rev** | **1** | **Current version:** | **18.0.1** |  |
|  | | | | | | | | |
| *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:*** | Rel-18 CR 28204 Correction on trigger for NSSAA message content | | | | | | | | | |
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| ***Source to WG:*** | Huawei, Matrixx Software | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NSSAA\_CH | | | | |  | ***Date:*** | | | 2024-04-17 |
|  |  | | | |  | |  | | |  |
| ***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 [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)* | |
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| Reason for change: | | Based on the conclusion of triggers mechanism (S5-237838 and S5-241623), the triggers for IEC, PEC and ECUR which can be linked and stated in the service special charging information are not required to be reported to CHF.  For the IEC and PEC, the Session Identifier is not applicable in the Charging Data Request, but can be included in the Charging Data Response.  For the ECUR, the Session Identifier is not applicable in the Charging Data Request [Initial], but can be included in the Charging Data Response and Charging Data Request [Termination].  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:*** | | Clarify the triggers in NSSAA message content.  Correct the Session Identifier in the NSSAA message content.  Remove not applicable IEs and Expand the sub-fields in the message content. | | | | | | | | |
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| ***Consequences if not approved:*** | | The triggers for NSSAA charging is unclear. | | | | | | | | |
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| ***Clauses affected:*** | | 6.1.1.2,6.1.1.3,6.2.2 | | | | | | | | |
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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:*** | |  | | | | | | | | |

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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 NSSAAF and AMF, as used for network slice-specific authentication and authorization.

Table 6.1.1.2-1: Charging Data Request message contents

| Information Element | Converged Charging  Category | Description |
| --- | --- | --- |
| Session Identifier | OC | Described in 3GPP TS 32.290 [6] |
| Subscriber Identifier | OM | This field contains the identification of the individual subscriber in the PLMN i.e. SUPI. |
| NF Consumer Identification | M | Described in 3GPP TS 32.290 [6] and holds the identifier of the NSACF |
| NF Functionality | M | Described in 3GPP TS 32.290 [6]. |
| NF Name | OC | Described in 3GPP TS 32.290 [6]. |
| NF Address | OC | Described in 3GPP TS 32.290 [6]. |
| NF PLMN ID | OC | Described in 3GPP TS 32.290 [6]. |
| Charging Identifier | OM | Described in 3GPP TS 32.290 [6]. |
| Invocation Timestamp | M | Described in 3GPP TS 32.290 [6]. |
| Invocation Sequence Number | M | Described in 3GPP TS 32.290 [6]. |
| One-time Event | OC | Described in 3GPP TS 32.290 [6]. |
| One-time Event Type | OC | Described in 3GPP TS 32.290 [6]. |
| Supported Features | OC | Described in 3GPP TS 32.290 [6]. |
| Service Specification Information | OC | Described in 3GPP TS 32.290 [6]. |
| Multiple Unit Usage | OM | Described in 3GPP TS 32.290 [6]. |
| Rating Group | M | Described in 3GPP TS 32.290 [6]. |
| Requested Unit | OC | Described in 3GPP TS 32.290 [6]. |
| NSSAA Charging Information | C | This field holds NSSAA 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 NSSAAF and AMF as used for network slice-specific authentication and authorization.

Table 6.1.1.3-1: Charging Data Response message contents

| Information Element | Converged Charging  Category | Description |
| --- | --- | --- |
| Session Identifier | OC | Described in 3GPP TS 32.290 [6]. |
| Invocation Timestamp | M | Described in 3GPP TS 32.290 [6]. |
| Invocation Result | OC | Described in 3GPP TS 32.290 [6]. |
| Invocation Sequence Number | OM | Described in 3GPP TS 32.290 [6]. |
| Session Failover | OC | Described in 3GPP TS 32.290 [6]. |
| Supported Features | OC | Described in 3GPP TS 32.290 [6]. |
| Multiple Unit Information | OC | Described in 3GPP TS 32.290 [6]. |
| Result Code | OC | Described in 3GPP TS 32.290 [6]. |
| Rating Group | OM | Described in 3GPP TS 32.290 [6]. |
| Granted Unit | OC | Described in 3GPP TS 32.290 [6]. |
| Validity Time | OC | Described in 3GPP TS 32.290 [6]. |

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| **Next change** |

### 6.2.2 Detailed message format for converged charging

The following clause specifies per Operation Type the charging data that are sent by NSSAAF and AMF for Network slice-specific authentication and authorization converged charging.

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

Table 6.2.2-1 defines the basic structure of the supported fields in the *Charging Data Request* message for Network slice-specific authentication and authorization converged charging.

Table 6.2.2-1: Supported fields in Charging Data Request message

| Information Element | NSSAA NF | NSSAAF | AMF |
| --- | --- | --- | --- |
| Supported Operation Types | I/T/E | E |
| Session Identifier | | -T- | - |
| Subscriber Identifier | | ITE | E |
| NF Consumer Identification | | ITE | E |
| Charging Identifier | | ITE | E |
| Invocation Timestamp | | ITE | E |
| Invocation Sequence Number | | ITE | E |
| One-time Event | | --E | E |
| One-time Event Type | | --E | E |
| Supported Features | | ITE | E |
| Service Specification Information | | ITE | E |
| Multiple Unit Usage | | ITE | - |
| Rating Group | | I-E | E |
| Requested Unit | | I-E | E |
| NSSAA Charging Information | | | |
| NSSAA message type | | ITE | E |
| User identification | | ITE | E |
| S NSSAI | | ITE | E |
| AAA P Address | | ITE | E |
| AAA S Address | | ITE | E |
| EAP ID Response | | ITE | E |
| EAP auth status | | ITE | E |
| AMF Identifier | | - | E |

Table 6.2.2-2 defines the basic structure of the supported fields in the *Charging Data Response* message for Network slice-specific authentication and authorization converged charging.

Table 6.2.2-2: Supported fields in Charging Data Response message

| Information Element | NSSAA NF | NSSAAF | AMF |
| --- | --- | --- | --- |
| Supported Operation Types | I/T/E | E |
| Session Identifier | | ITE | E |
| Invocation Timestamp | | ITE | E |
| Invocation Result | | ITE | E |
| Invocation Sequence Number | | ITE | E |
| Session Failover | | I-- | - |
| Supported Features | | I-E | E |
| Multiple Unit Information | | I-E | E |
| Result Code | | I-E | E |
| Rating Group | | I-E | E |
| Granted Unit | | I-E | E |
| Validity Time | | I-E | E |

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| **End of change** |