**3GPP TSG-SA5 Meeting #155 *S5-243022***

**Jeju, South Korea, 27 - 31 May 2024**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.279** | **CR** | **0008** | **rev** | **3** | **Current version:** | **18.0.0** |  |
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| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <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 32.279 Correcting message contents for MB-SMF | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson LM, Huawei, China Mobile | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5MBS\_CH | | | | |  | ***Date:*** | | | 2024-05-28 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Missing information elements like supported feature, charging identifier, requested units.  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:*** | | Adding missing information elements to support the requirements.  Remove not applicable IEs from Table 6.1.1.2-1,Table 6.1.1.3-1, Table 6.2.2-1 and Table 6.2.2-2.  Expand the sub-fields in 6.2.2 tables. | | | | | | | | |
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| ***Consequences if not approved:*** | | Inconsistent definition of MBS session charging information may lead to interoperability issues. | | | | | | | | |
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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:*** | | Revision of S5-241750.  Revision of S5-241840.  Revision of S5-242704. | | | | | | | | |

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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 MB-SMF as used for 5G MBS session converged 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 | OC | Described in TS 32.290 [4], and can hold the identifier of the AF application identifier. |
| NF Consumer Identification | M | Described in TS 32.290 [4] |
| 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] |
| Notify URI | 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] |
| Multiple Unit Usage | OC | Described in TS 32.290 [4] |
| Rating Group | M | Described in TS 32.290 [4] |
| Requested Unit | OC | Described in TS 32.290 [4] |
| Time | OC | Described in TS 32.290 [4] |
| Used Unit Container | OC | Described in TS 32.290 [4] |
| Quota management Indicator | OC | Described in TS 32.290 [4] |
| Triggers | OC | This field is described in TS 32.290 [4] and holds the MBS session specific triggers described in clause 5.2.1. |
| Trigger Timestamp | OC | Described in TS 32.290 [4] |
| Time | OC | Described in TS 32.290 [4] |
| Downlink Volume | OC | Described in TS 32.290 [4] |
| Local Sequence Number | OM | Described in TS 32.290 [4] |
| MBS Container Information | OC | This field holds the MBS session container specific information described in clause 6.2.1.3. |
| MB-UPF ID | OC | This field holds the MB-UPF identifier used to identify the MB-UPF.  This field shall only be included when used units are reported per MB-UPF. |
| MBS Session Charging Information | OM | This field holds the MBS session specific information described in clause 6.2.1.2. |



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| **Second 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 MB-SMF as used for 5G MBS session converged charging.

Table 6.1.1.3-1: Charging Data Response message contents

| **Information Element** | **Converged Charging Category** | **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 Code | 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] |
| Supported Features | OC | Described in TS 32.290 [4] |
| Triggers | OC | This field is described in TS 32.290 [4] and holds the MBS session specific triggers described in clause 5.2.1. |
| Multiple Unit Information | OC | Described in TS 32.290 [4] |
| Result Code | OC | Described in TS 32.290 [4] |
| Rating Group | OM | Described in TS 32.290 [4] |
| Granted Unit | OC | Described in TS 32.290 [4] |
| Time | OC | Described in TS 32.290 [4] |
| Validity Time | OC | Described in TS 32.290 [4] |
| Final Unit Indication | OC | Described in TS 32.290 [4] |
| Time Quota Threshold | OC | Described in TS 32.290 [4] |
| Quota Holding Time | OC | Described in TS 32.290 [4] |



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| **Third change** |

### 6.2.2 Detailed message format for converged charging

The following clause specifies per Operation Type the charging data that are sent by MB-SMF for 5G data connectivity 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 5G MBS session converged charging in MB-SMF.

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

| Information Element | Functionality of MB-SMF | MBS session charging |
| --- | --- | --- |
| Supported Operation Types | I/U/T/E |
| Session Identifier | | -UT- |
| Tenant Identifier | | IUT- |
| NF Consumer Identification | | IUT- |
| NF Functionality | | IUT- |
| NF Name | | IUT- |
| NF Address | | IUT- |
| NF PLMN ID | | IUT- |
| Charging Identifier | | IUT- |
| Invocation Timestamp | | IUT- |
| Invocation Sequence Number | | IUT- |
| Retransmission Indicator | | IUT- |
| Notify URI | | IUT- |
| Supported Features | | IUT- |
| Service Specification Information | | IUT- |
| Multiple Unit Usage | | IUT- |
| Rating Group | | IUT- |
| Requested Unit | | IU-- |
| Time | | IU-- |
| Used Unit Container | | -UT- |
| Quota management Indicator | | -UT- |
| Triggers | | -UT- |
| Trigger Timestamp | | -UT- |
| Time | | -UT- |
| Downlink Volume | | -UT- |
| Local Sequence Number | | -UT- |
| MBS Container Information | | -UT- |
| MB-UPF ID | | IUT- |
| MBS Session Charging Information | | IUT- |
| MBS Service Type | | IUT- |
| MBS Service Area | | IUT- |
| MBS Session Start Time | | I--- |
| MBS Session Stop Time | | --T- |
| MBS Session Activity Status | | -UT- |
| Serving Network Function ID | | IUT- |



Table 6.2.2-2 defines the basic structure of the supported fields in the *Charging Data* Response message for 5G MBS session converged charging in MB-SMF.

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

| Information Element | Functionality of MB-SMF | MBS session charging |
| --- | --- | --- |
| Supported Operation Types | I/U/T/E |
| Session Identifier | | I--- |
| Invocation Timestamp | | IUT- |
| Invocation Result | | IUT- |
| Invocation Result Code | | IUT- |
| Failed Parameter | | IUT- |
| Failure Handling | | IUT- |
| Invocation Sequence Number | | IUT- |
| Supported Features | | IU-- |
| Triggers | | IU-- |
| Multiple Unit Information | | IU-- |
| Result Code | | IU-- |
| Rating Group | | IU-- |
| Granted Unit | | IU-- |
| Time | | IU-- |
| Validity Time | | IU-- |
| Final Unit Indication | | IU-- |
| Time Quota Threshold | | IU-- |
| Quota Holding Time | | IU-- |



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| **End of changes** |