**3GPP TSG-SA5 Meeting #154 *S5-241733rev1***

Changsha, China, 15 - 19 April 2024

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **32.279** | **CR** | **0005** | **rev** | **-** | **Current version:** | **18.0.0** |  |
|  |
| *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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Rel-18 CR 32.279 Correction on 5G MBS message content |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | 5MBS\_CH |  | ***Date:*** | 2024-04-07 |
|  |  |  |  |  |
| ***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 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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | Some common information elements are missing in Charging Data Request message and Charging Data Response message. MBS Session Charging Information is not needed in Charging Data Response message. Because quota management should not be considered, MB-UPF ID is also not needed in Charging Data Response message.Offline only charging is not supported for MBS charging. |
|  |  |
| ***Summary of change:*** | Add missing common information elements in Charging Data Request message and Charging Data Response message.Delete MBS Session Charging Information and MB-UPF ID in Charging Data Response message.Fix some errors in Operation Types.Remove offline charging from 6.2.2. |
|  |  |
| ***Consequences if not approved:*** | Errors still exist and affect implementation.  |
|  |  |
| ***Clauses affected:*** | 6.1.1.2, 6.1.1.3, 6.2.2 |
|  |  |
|  | **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:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

|  |
| --- |
| **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 converged charging for MBS session.

Table 6.1.1.2-1: Charging Data Request message contents

| **Information Element** | **Category for converged charging** | **Category for offline only charging** | **Description** |
| --- | --- | --- | --- |
| Session Identifier | OC | - | Described in TS 32.290 [4] |
| Subscriber Identifier | - | - | This field is not applicable. |
| 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] |
| 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] |
| Service Specification Information | OC | - | Described in TS 32.290 [4] |
| Supported Features | OC | - | This field indicates the features supported by the NF consumer. |
| Triggers | OC | - | This field is described in TS 32.290 [4] and holds the 5G data connectivity specific triggers described in clause 5.2.1. |
| Multiple Unit Usage  | OC | - | Described in TS 32.290 [4]This field is not applicable to QBC. |
| Rating Group | M | - | Described in TS 32.290 [4] |
| Requested Unit | - | - | This field is not applicable. |
| Used Unit Container | OC | - | Described in TS 32.290 [4] |
| Service Identifier | 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 5G data connectivity 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] |
| Total Volume | OC | - | Described in TS 32.290 [4] |
| Uplink Volume | - | - | This field is not applicable. |
| 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 5G 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.This field is applicable to FBC. |

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

Table 6.1.1.3-1: Charging Data Response message contents

| **Information Element** | **Category for converged charging** | **Category for offline only 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 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] |
| Session Failover | OC | - | Described in TS 32.290 [4] |
| Supported Features | OC | - | This field indicates the features supported by the NF consumer. |
| Multiple Unit Information | OC | - | Described in TS 32.290 [4]This field is not applicable to QBC. |
| Result Code | OC | - | Described in TS 32.290 [4] |
| Rating Group | M | - | Described in TS 32.290 [4] |
|  |  |  |  |
| Granted Unit | - | - | This field is not applicable. |
| Validity Time | - | - | This field is not applicable. |
| Final Unit Indication | - | - | This field is not applicable. |
| Volume Quota Threshold  | - | - | This field is not applicable. |
| Unit Quota Threshold  | - | - | This field is not applicable. |
| Quota Holding Time | - | - | This field is not applicable. |
| Time Quota Threshold  | - | - | This field is not applicable. |
| Triggers | OC | - | This field is described in TS 32.290 [4] and holds the 5G data connectivity specific triggers described in clause 5.2.1. |
| Triggers  | OC | - | This field is described in TS 32.290 [4] and holds the 5G data connectivity specific triggers described in clause 5.2.1. |
|  |  |  |  |

|  |
| --- |
| **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 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 data connectivity converged charging for MB-SMF to support 5G MBS charging.

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

| Information Element | Functionality of MB-SMF | FBC |
| --- | --- | --- |
| Charging Service | Converged Charging |
| Supported Operation Types | I/U/T/E |
| Session Identifier | -UT- |
| Subscriber Identifier | - |
| NF Consumer Identification | IUT- |
| Invocation Timestamp | IUT- |
| Invocation Sequence Number | IUT- |
| Retransmission Indicator | IUT- |
| Notify URI | IU-- |
| Service Specification Information | IUT- |
| Supported Features | IU-- |
| Triggers | -UT- |
| Multiple Unit Usage | IUT- |
| Rating Group | IUT- |
| Requested Unit | - |
| Used Unit Container | -UT- |
| Service Identifier | -UT- |
| Quota management Indicator | -UT- |
| Triggers | -UT- |
| Trigger Timestamp | -UT- |
| Time | -UT- |
| Total Volume | -UT- |
| Uplink Volume | - |
| 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- |
| 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 data connectivity converged charging for MB-SMF to support 5G MBS charging.

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

| Information Element | Functionality of MB-SMF | FBC |
| --- | --- | --- |
| Charging Service | Converged Charging |
| Supported Operation Types | I/U/T/E |
| Session Identifier | I--- |
| Invocation Timestamp | IUT- |
| Invocation Result | IUT- |
| Invocation Sequence Number | IUT- |
| Session Failover | IU-- |
| Supported Features | IU-- |
| Triggers | IU-- |
| Multiple Unit Information  | IU-- |
| Result Code | IU-- |
| Rating Group | IU-- |
|  |  |
| Granted Unit | - |
| Validity Time | - |
| Final Unit Indication | - |
| Volume Quota Threshold  | - |
| Unit Quota Threshold  | - |
| Quota Holding Time | - |
| Time Quota Threshold  | - |
| Triggers | IU-- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

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