

Release 13 SGW-CDR ASN.1 Format

PRINTOUT DESCRIPTION

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1 Introduction

This document presents the ASN.1 format for release 13 SGW-CDRs generated by the EPG.

For more information on CDRs, see [CDR Format for the GGSN and PGW](#) and [CDR Format for the SGW](#).





2 ASN.1 Format

SgwR13Ber DEFINITIONS IMPLICIT TAGS ::= BEGIN

GPRSRecord ::= CHOICE

```
{
    sGWRecord          [78] SGWRecord
}
```

SGWRecord ::= SET

```
{
    recordType          [0] RecordType,
    servedIMSI         [3] IMSI OPTIONAL,
    s-GWAddress        [4] GSNAddress,
    chargingID         [5] ChargingID,
    servingNodeAddress [6] SEQUENCE OF GSNAddress,
    accessPointNameNI [7] AccessPointNameNI OPTIONAL,
    pdpPDNType        [8] PDPTType OPTIONAL,
    servedPDPPDNAddress [9] PDPAddress OPTIONAL,
    listOfTrafficVolumes [12] SEQUENCE OF ChangeOfCharCondition OPTIONAL,
    recordOpeningTime  [13] TimeStamp,
    duration           [14] CallDuration,
    causeForRecClosing [15] CauseForRecClosing,
    recordSequenceNumber [17] INTEGER OPTIONAL,
    nodeID            [18] NodeID OPTIONAL,
    localSequenceNumber [20] LocalSequenceNumber,
    servedMSISDN      [22] MSISDN OPTIONAL,
    chargingCharacteristics [23] ChargingCharacteristics,
    servingNodePLMNIdentifier [27] PLMN-Id OPTIONAL,
    servedIMEISV      [29] IMEI OPTIONAL,
    rATType           [30] RATType OPTIONAL,
    mSTimeZone        [31] MSTimeZone OPTIONAL,
    sGWChange         [34] SGWChange OPTIONAL,
    servingNodeType    [35] SEQUENCE OF ServingNodeType,
    p-GWAddressUsed   [36] GSNAddress OPTIONAL,
    p-GWPLMNIdentifier [37] PLMN-Id OPTIONAL,
    pdNConnectionID   [40] ChargingID OPTIONAL,
    iMSIunauthenticatedFlag [41] NULL OPTIONAL,
    servedPDPPDNAddressExt [43] PDPAddress OPTIONAL,
    lowPriorityIndicator [44] NULL OPTIONAL,
    s-GWiPv6Address   [48] GSNAddress OPTIONAL,
    servingNodeiPv6Address [49] SEQUENCE OF GSNAddress OPTIONAL,
    p-GWiPv6AddressUsed [50] GSNAddress OPTIONAL,
    cPCIoTEPSOptimisationIndicator [59] CPCIoTEPSOptimisationIndicator OPTIONAL,
    uNIPDUcPOnlyFlag [60] UNIPDUcPOnlyFlag OPTIONAL,
    servingPLMNRateControl [61] ServingPLMNRateControl OPTIONAL,
    pdPPDNTypeExtension [62] PDPPDNTypeExtension OPTIONAL,
    mOExceptionDataCounter [63] MOExceptionDataCounter OPTIONAL
}
```



```
}

PDPDNTypeExtension ::= INTEGER
AccessPointNameNI ::= IA5String (SIZE(1..63))
AddressString ::= OCTET STRING (SIZE (1..20))
CallDuration ::= INTEGER
UNIPDUCPOnlyFlag ::= BOOLEAN
CPCIoTEPSOptimisationIndicator ::= BOOLEAN
CauseForRecClosing ::= INTEGER
{
    normalRelease (0),
    abnormalRelease (4),
    volumeLimit (16),
    timeLimit (17),
    servingNodeChange (18),
    rATChange (22),
    sGSNPLMNIDChange (24)
}
ChangeCondition ::= ENUMERATED
{
    recordClosure (2),
    servingPLMNRateControlChange (19)
}
ChangeOfCharCondition ::= SEQUENCE
{
    dataVolumeGPRSUpLink [3] DataVolumeGPRS,
    dataVolumeGPRSDownLink [4] DataVolumeGPRS,
    changeCondition [5] ChangeCondition,
    changeTime [6] TimeStamp,
    userLocationInformation [8] OCTET STRING OPTIONAL,
    ePCQoSInformation [9] EPCQoSInformation OPTIONAL
}
ChargingCharacteristics ::= OCTET STRING (SIZE (2))
ChargingID ::= INTEGER (0..4294967295)
DataVolumeGPRS ::= INTEGER
EPCQoSInformation ::= SEQUENCE
{
    qCI [1] INTEGER,
    maxRequestedBandwidthUL [2] INTEGER OPTIONAL,
    maxRequestedBandwidthDL [3] INTEGER OPTIONAL,
    guaranteedBitrateUL [4] INTEGER OPTIONAL,
    guaranteedBitrateDL [5] INTEGER OPTIONAL,
    aRP [6] INTEGER OPTIONAL
}
GSNAddress ::= IPAddress
IMEI ::= TBCD-STRING (SIZE (8))
IMSI ::= TBCD-STRING (SIZE (3..8))
IPAddress ::= CHOICE
{
    ipBinaryAddress IPBinaryAddress
}
}
```



```

IPBinaryAddress ::= CHOICE
{
    iPBinV4Address          [0] OCTET STRING (SIZE(4)),
    iPBinV6Address          [1] OCTET STRING (SIZE(16))
}
ISDN-AddressString ::= AddressString (SIZE(1..9))
LocalSequenceNumber ::= INTEGER (0..4294967295)
MSISDN ::= ISDN-AddressString
MSTimeZone ::= OCTET STRING (SIZE (2))
NodeID ::= IA5String (SIZE(1..20))
PDPAddress ::= CHOICE
{
    iPAddress                [0] IPAddress
}
PDPTType ::= OCTET STRING (SIZE(1))
PLMN-Id ::= OCTET STRING (SIZE(3))
RATType ::= INTEGER (0..255)
RecordType ::= INTEGER
{
    sGWRecord                (84)
}
ServingNodeType ::= ENUMERATED
{
    sGSN                     (0),
    mME                      (5)
}
SGWChange ::= BOOLEAN
TBCD-STRING ::= OCTET STRING
TimeStamp ::= OCTET STRING (SIZE(9))

ServingPLMNRateControl ::= SEQUENCE
{
    sPLMNDLRateControlValue [0] INTEGER,
    sPLMNULRateControlValue [1] INTEGER
}

MOExceptionDataCounter ::= SEQUENCE
{
    counterValue             [0] INTEGER,
    counterTimestamp        [1] TimeStamp
}

END

```