

Release 9 CDR ASN.1 Format

PRINTOUT DESCRIPTION

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1 Introduction

This document presents the ASN.1 format for release 9 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

SgwR9Ber 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,
  s-GWiPv6Address   [48] GSNAddress OPTIONAL,
  servingNodeiPv6Address [49] SEQUENCE OF GSNAddress OPTIONAL,
  p-GWiPv6AddressUsed [50] GSNAddress OPTIONAL
}
```

AccessPointNameNI ::= IA5String (SIZE(1..63))

AddressString ::= OCTET STRING (SIZE (1..20))

CallDuration ::= INTEGER

CauseForRecClosing ::= INTEGER



```
{
    normalRelease                (0),
    abnormalRelease              (4),
    volumeLimit                  (16),
    timeLimit                    (17),
    servingNodeChange            (18),
    rATChange                    (22),
    sGSNPLMNIDChange            (24)
}
ChangeCondition ::= ENUMERATED
{
    recordClosure                (2)
}
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))
END
```