

ETSI TS 132 175 V8.1.0 (2009-07)

Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Subscription Management (SuM)
Network Resource Model (NRM) Integration Reference Point (IRP):
eXtensible Markup Language (XML) definition
(3GPP TS 32.175 version 8.1.0 Release 8)**



Reference

RTS/TSGS-0532175v810

Keywords

GSM, LTE, UMTS

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at

<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, please send your comment to one of the following services:

http://portal.etsi.org/chaicor/ETSI_support.asp

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2009.
All rights reserved.

DECTTM, **PLUGTESTS**TM, **UMTS**TM, **TIPHON**TM, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

3GPPTM is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

LTETM is a Trade Mark of ETSI currently being registered

for the benefit of its Members and of the 3GPP Organizational Partners.

GSM[®] and the GSM logo are Trade Marks registered and owned by the GSM Association.

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://webapp.etsi.org/IPR/home.asp>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under <http://webapp.etsi.org/key/queryform.asp>.

Contents

Intellectual Property Rights	2
Foreword.....	2
Foreword.....	4
Introduction	4
1 Scope	5
2 References	5
3 Definitions and abbreviations.....	5
3.1 Definitions	5
3.2 Abbreviations	5
4 Architectural features	6
5 Structure and content of configuration data XML files.....	6
Annex A (normative): Subscription Management NRM-specific XML schema (file name "sumNrm.xsd").....	7
Annex B (informative): XML schema electronic files.....	32
Annex C (informative): Change history	33
History	34

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

Introduction

The present document is part of a TS-family covering the 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Telecommunication management; as identified below:

- TS 32.140: "Subscription Management (SuM) requirements".
- TS 32.141: "Subscription Management (SuM) architecture".
- TS 32.171: "Subscription Management (SuM) Network Resource Model (NRM) Integration Reference Point (IRP): Requirements".
- TS 32.172: "Subscription Management (SuM) Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS)".
- TS 32.175: "Subscription Management (SuM) Network Resource Model (NRM) Integration Reference Point (IRP): eXtensible Markup Language (XML) definition".**

Subscription Management (SuM) is a feature that permits Service Providers, Value Added Service Providers and Mobile Operators to provision services for a specific subscriber. The feature is necessary to allow Service Providers and Operators to provision, control, monitor, and bill the configuration of services that they offer to their subscribers. SuM focuses on the OAM processes to manage subscription information. The overall SuM requirements and architecture are detailed in 3GPP TS 32.140 [2] and 3GPP TS 32.141 [3].

The Itf-N interface for Subscription Management is built up by a number of Integration Reference Points (IRPs) and a related Name Convention, which realise the functional capabilities over this interface. The basic structure of the IRPs is defined in 3GPP TS 32.150 [1]. For SuM, a number of IRPs (and the Name Convention) are defined herein, used by this as well as other technical specifications for telecom management produced by 3GPP.

1 Scope

The purpose of this *Subscription Management (SuM) Network Resource Model IRP XML definition* is to define the mapping of the IRP information model (see TS 32.172 [5]) to the protocol specific details necessary for implementation of this IRP in an XML environment.

This specification is related to 3GPP TS 32.172 V8.0.X.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 32.150: "Telecommunication management; Integration Reference Point (IRP) Concept and definitions".
- [2] 3GPP TS 32.140: "Telecommunication management; Subscription Management (SuM) requirements".
- [3] 3GPP TS 32.141: "Telecommunication management; Subscription Management (SuM) architecture".
- [4] 3GPP TS 32.171: "Telecommunication management; Subscription Management (SuM) resources Integration Reference Point (IRP); Requirements".
- [5] 3GPP TS 32.172: "Telecommunication management; Subscription Management Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS)".
- [6] 3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".
- [7] 3GPP TS 32.102: "Telecommunication management; Architecture".
- [8] 3GPP TS 32.615: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions in 3GPP TS 32.101 [6], TS 32.102 [7], TS 32.140 [2], TS 32.141 [3], TS 32.171 [4] and TS 32.172 [5] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations in 3GPP TS 32.101 [6], TS 32.102 [7], TS 32.140 [2], TS 32.141 [3], TS 32.171 [4] and TS 32.172 [5] apply.

4 Architectural features

The overall architectural feature of Subscription Management (SuM) resources is specified in 3GPP TS 32.172 [5].

5 Structure and content of configuration data XML files

The overall description of the file format of configuration data XML files is provided by 3GPP TS 32.615 [8].

Annex A of the present document defines the NRM-specific XML schema `sumNrm.xsd` for the Subscription Management IRP NRM defined in 3GPP TS 32.172 [5].

XML schema `sumNrm.xsd` explicitly declares NRM-specific XML element types for the related NRM.

The definition of those NRM-specific XML element types complies with the generic mapping rules defined in 3GPP TS 32.615 [8].

Annex A (normative): Subscription Management NRM-specific XML schema (file name "sumNrm.xsd")

The following XML schema `sumNrm.xsd` is the NRM-specific schema for the Subscription Management Network Resources IRP NRM defined in 3GPP TS 32.172 [5]:

```
<?xml version="1.0" encoding="UTF-8"?>

<!--
  3GPP TS 32.175 SuM Network Resources IRP
  SuM NRM-specific XML schema
  sumNrm.xsd
-->

<schema
  targetNamespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.175#sumNrm"
  elementFormDefault="qualified"
  xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:sn=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.175#sumNrm"
  xmlns:xn=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"
>

  <import
    namespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"
  />

  <!-- SuM Network Resources IRP NRM class associated XML elements -->

  <element
    name="ServiceProviderFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>
                  <element name="userLabel" minOccurs="0"/>
                </all>
              </complexType>
            </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="sn:SuMService"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>

```



```

    </sequence>
  </extension>
</complexContent>
</complexType>
</element>

<element
  name="SubscriptionFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="sn:SuMSubscriberProfile"/>
            <element ref="sn:SuMUser"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="SuMSubscriberProfile">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="suMSubscriberProfileInfo" minOccurs="0"/>
                <element name="userSubscriberRelationTheUser" type="xn:dnList" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="sn:SuMSubscribedService"/>
            <element ref="sn:MobileUserData"/>
            <element ref="sn:SuMSubscriberProfileOptionallyContainedNrmClass"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

</element>

<element name="MobileUserData">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="relatedServiceProfileTheServiceProfile" type="xn:dnList" minOccurs="0"/>
                <element name="iMSI" type="string" minOccurs="0"/>
                <element name="mSISDN" type="string" minOccurs="0"/>
                <element name="multinumberingMSISDNs" type="sn:multinumberingMSISDNList" minOccurs="0"/>
                <element name="iMEISV" type="string" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="SuMUser">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="relatedMobileUserDataTheMobileUserData" type="xn:dnList" minOccurs="0"/>
                <element name="userSubscriberRelationTheSubscriber" type="xn:dnList" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="sn:SuMServiceProfile"/>
            <element ref="sn:SuMCredentials"/>
            <element ref="sn:SuMUserOptionallyContainedNrmClass"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="SuMCredentials">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>

```

```

    <element name="attributes" minOccurs="0">
      <complexType>
        <all>
          <element name="relatedIMSPublicIdThePublicId" type="xn:dnList" minOccurs="0"/>
          <element name="relatedIMSServiceProfileTheServiceProfile" type="xn:dnList" minOccurs="0"/>
          <element name="iMSPrivateUserIdentity" type="string" minOccurs="0"/>
        </all>
      </complexType>
    </element>
    <choice minOccurs="0" maxOccurs="unbounded">
      <element ref="sn:SuMCredentialsOptionallyContainedNrmClass"/>
    </choice>
  </sequence>
</extension>
</complexContent>
</complexType>
</element>

<element name="SuMService" type="xn:NrmClass" abstract="true"/>

<element
  name="CSService"
  substitutionGroup="sn:SuMService"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="agreementContract" minOccurs="0"/>
                <element name="networkAccessMode" minOccurs="0"/>
                <element name="basicMSISDNIndicator" minOccurs="0"/>
                <element name="mSISDNAlertIndicator" minOccurs="0"/>
                <element name="subscriptionRestriction" minOccurs="0"/>
                <element name="rSZILists" minOccurs="0"/>
                <element name="lSAIdentity" minOccurs="0"/>
                <element name="lSAPriority" minOccurs="0"/>
                <element name="lSAPreferentialAccessIndicator" minOccurs="0"/>
                <element name="lSAActiveModeSupportIndicator" minOccurs="0"/>
                <element name="lSAOnlyAccessIndicator" minOccurs="0"/>
                <element name="lSAActiveModeIndicator" minOccurs="0"/>
                <element name="vPLMNIdentifier" minOccurs="0"/>
                <element name="accessRestrictionData" minOccurs="0"/>
                <element name="privacyExceptionList" minOccurs="0"/>
                <element name="gMLCNumbers" minOccurs="0"/>
                <element name="mOLRList" minOccurs="0"/>
                <element name="serviceTypes" minOccurs="0"/>
                <element name="mobileStationCategory" minOccurs="0"/>
                <element name="lMUIIdentifier" minOccurs="0"/>
                <element name="subscriberStatus" minOccurs="0"/>
                <element name="gsmSCFaddresslistForODB" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```
<element name="provisionOfBearerService" minOccurs="0"/>
<element name="provisionOfTeleservice" minOccurs="0"/>
<element name="bCAllocation" minOccurs="0"/>
<element name="barringOfOutgoingCalls" minOccurs="0"/>
<element name="barringOfIncomingCalls" minOccurs="0"/>
<element name="barringOfRoaming" minOccurs="0"/>
<element name="barringOfPremiumRateCalls" minOccurs="0"/>
<element
  name="barringOfSupplementaryServiceManagement"
  minOccurs="0"
/>
<element
  name="barringOfRegistrationOfCallForwarding"
  minOccurs="0"
/>
<element
  name="barringOfInvocationOfCallTransfer"
  minOccurs="0"
/>
<element
  name="operatorDeterminedBarringPLMNSpecificData"
  minOccurs="0"
/>
<element name="vGCGroupMembershipList" minOccurs="0"/>
<element name="vBSGroupMembershipList" minOccurs="0"/>
<element
  name="broadcastCallInitiationAllowedList"
  minOccurs="0"
/>
<element
  name="originatingCAMELSubscriptionInformationOCSE"
  minOccurs="0"
/>
<element
  name="terminatingCAMELSubscriptionInformationTCSE"
  minOccurs="0"
/>
<element
  name="vMSCTerminatingCAMELSubscriptionInformationVTCSSE"
  minOccurs="0"
/>
<element
  name="locationInformationSubscriberStateInformation"
  minOccurs="0"
/>
<element
  name="uSSDCAMELSubscriptionInformationUCSE"
  minOccurs="0"
/>
<element name="sSInvocationNotificationSSCSSE" minOccurs="0"/>
<element
  name="translationInformationFlagTIFCSSE"
  minOccurs="0"
/>
```

```

    <element
      name="dialledServiceCAMELSubscriptionInformationDCSI"
      minOccurs="0"
    />
  </element>
  <element
    name="uSSDGeneralCAMELServiceInformationUGCSI"
    minOccurs="0"
  />
  </element>
  <element
    name="shortMessageServiceCAMELSubscriptionInformationMOSMSCSI"
    minOccurs="0"
  />
  </element>
  <element
    name="shortMessageServiceCAMELSubscriptionInformationMTSMSCSI"
    minOccurs="0"
  />
  </element>
  <element
    name="mTSMSCSIVLRNegotiatedCAMELCapabilityHandling"
    minOccurs="0"
  />
  </element>
  <element name="gsmSCFAddressforCSI" minOccurs="0"/>
  <element name="iSTAlertTimer" minOccurs="0"/>
  <element name="cSAllocationRetentionpriority" minOccurs="0"/>
  <element name="sS-Code" minOccurs="0"/>
  <element name="provisioningState" minOccurs="0"/>
  <element name="activationState" minOccurs="0"/>
  <element name="registrationState" minOccurs="0"/>
  <element name="overrideCategory" minOccurs="0"/>
  <element name="cLIRestrictionOption" minOccurs="0"/>
  <element name="forwarded-toNumber" minOccurs="0"/>
  <element name="forwarded-toSubaddress" minOccurs="0"/>
  <element name="noReplyConditionTimer" minOccurs="0"/>
  <element name="maximumEntitledPriority" minOccurs="0"/>
  <element name="defaultPriority" minOccurs="0"/>
  <element name="nbrUser" minOccurs="0"/>
  <element name="nbrSB" minOccurs="0"/>
</all>
</complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
  <element ref="sn:SuMCSSupplService"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>
<element name="SuMCSSupplService">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>

```

```

    <all>
      <element name="sS-Code" minOccurs="0"/>
      <element name="provisioningState" minOccurs="0"/>
      <element name="activationState" minOccurs="0"/>
      <element name="registrationState" minOccurs="0"/>
      <element name="overrideCategory" minOccurs="0"/>
      <element name="cLIRestrictionOption" minOccurs="0"/>
      <element name="forwarded-toNumber" minOccurs="0"/>
      <element name="forwarded-toSubaddress" minOccurs="0"/>
      <element name="noReplyConditionTimer" minOccurs="0"/>
      <element name="maximumEntitledPriority" minOccurs="0"/>
      <element name="defaultPriority" minOccurs="0"/>
      <element name="nbrUser" minOccurs="0"/>
      <element name="nbrSB" minOccurs="0"/>
    </all>
  </complexType>
</element>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
  name="PSService"
  substitutionGroup="sn:SuMService"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="agreementContract" minOccurs="0"/>
                <element name="networkAccessMode" minOccurs="0"/>
                <element name="basicMSISDNIndicator" minOccurs="0"/>
                <element name="mSISDNAlertIndicator" minOccurs="0"/>
                <element name="subscriptionRestriction" minOccurs="0"/>
                <element name="rSZIlists" minOccurs="0"/>
                <element name="lSAIdentity" minOccurs="0"/>
                <element name="lSAPriority" minOccurs="0"/>
                <element name="lSAPreferentialAccessIndicator" minOccurs="0"/>
                <element name="lSAActiveModeSupportIndicator" minOccurs="0"/>
                <element name="lSAOnlyAccessIndicator" minOccurs="0"/>
                <element name="lSAActiveModeIndicator" minOccurs="0"/>
                <element name="vPLMNIdentifier" minOccurs="0"/>
                <element name="accessRestrictionData" minOccurs="0"/>
                <element name="privacyExceptionList" minOccurs="0"/>
                <element name="gMLCNumbers" minOccurs="0"/>
                <element name="mOLRList" minOccurs="0"/>
                <element name="serviceTypes" minOccurs="0"/>
                <element name="gGSNNumber" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

<element name="provisionofTeleservice" minOccurs="0"/>
<element name="transferofSMoption" minOccurs="0"/>
<element
  name="barringofPacketOrientedServices"
  minOccurs="0"
/>
<element name="pDPType" minOccurs="0"/>
<element name="pDPAddress" minOccurs="0"/>
<element name="accessPointName" minOccurs="0"/>
<element name="vPLMNAddressAllowed" minOccurs="0"/>
<element name="qualityofServiceSubscribed" minOccurs="0"/>
<element
  name="pDPContextChargingCharacteristics"
  minOccurs="0"
/>
<element
  name="gPRSCAMELSubscriptionInformationGPRSCSI"
  minOccurs="0"
/>
<element
name="mOShortMessageServiceCAMELSubscriptionInformationMOSMSCSI"
  minOccurs="0"
/>
<element
name="mTShortMessageServiceCAMELSubscriptionInformationMTSMSCSI"
  minOccurs="0"
/>
<element
  name="mOSMSCSISGSNNegotiatedCAMELCapabilityHandling"
  minOccurs="0"
/>
<element
  name="mTSMSCSISGSNNegotiatedCAMELCapabilityHandling"
  minOccurs="0"
/>
<element
  name="mobilityManagementforGPRSeventnotificationMGCSI"
  minOccurs="0"
/>
<element
  name="mgCSINegotiatedCAMELCapabilityHandling"
  minOccurs="0"
/>
<element name="gsmSCFAddressforCSI" minOccurs="0"/>
<element
  name="subscribedChargingCharacteristics"
  minOccurs="0"
/>
<element name="w-APN" minOccurs="0"/>
<element
  name="listofauthorizedvisitednetworkidentifiers"
  minOccurs="0"
/>
<element name="wLANUERemoteIPAddress" minOccurs="0"/>

```

```

    <element name="wLANAccess" minOccurs="0"/>
    <element name="wLANTunnelling" minOccurs="0"/>
    <element name="wLANDirectIPAccess" minOccurs="0"/>
    <element name="wAPNAuthorised" minOccurs="0"/>
    <element name="w-APNBarringType" minOccurs="0"/>
    <element name="w-APNChargingData" minOccurs="0"/>
    <element name="wLANUERemoteIPAddress" minOccurs="0"/>
    <element name="accessIndependenceFlag" minOccurs="0"/>
    <element name="i-WLANAccessType" minOccurs="0"/>
    <element name="chargingData" minOccurs="0"/>
    <element name="chargingCharacteristics" minOccurs="0"/>
    <element name="primaryOCSChargingFunctionName" minOccurs="0"/>
    <element
      name="secondaryOCSChargingFunctionName"
      minOccurs="0"
    />
    <element
      name="primaryChargingCollectionFunctionName"
      minOccurs="0"
    />
    <element
      name="secondaryChargingCollectionFunctionName"
      minOccurs="0"
    />
    <element name="sS-Code" minOccurs="0"/>
    <element name="provisioningState" minOccurs="0"/>
    <element name="activationState" minOccurs="0"/>
  </all>
</complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
  <element ref="sn:SuMPSSupplService"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element name="SuMPSSupplService">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="sS-Code" minOccurs="0"/>
                <element name="provisioningState" minOccurs="0"/>
                <element name="activationState" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```



```

    </extension>
  </complexContent>
</complexType>
</element>

<element
  name="IMSService"
  substitutionGroup="sn:SuMService"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="agreementContract" minOccurs="0"/>
                <element
                  name="listofauthorizedvisitednetworkidentifiers"
                  minOccurs="0"
                />
                <element name="registrationStatus" minOccurs="0"/>
                <element name="sCSCFName" minOccurs="0"/>
                <element name="serverCapabilities" minOccurs="0"/>
                <element
                  name="subscribedMediaProfileIdentifier"
                  minOccurs="0"
                />
                <element name="initialFilterCriteria" minOccurs="0"/>
                <element name="applicationServerInformation" minOccurs="0"/>
                <element name="serviceIndication" minOccurs="0"/>
                <element
                  name="primaryEventChargingFunctionName"
                  minOccurs="0"
                />
                <element
                  name="secondaryEventChargingFunctionName"
                  minOccurs="0"
                />
                <element
                  name="primaryChargingCollectionFunctionName"
                  minOccurs="0"
                />
                <element
                  name="secondaryChargingCollectionFunctionName"
                  minOccurs="0"
                />
                <element name="gsmSCFAddressforIMCSI" minOccurs="0"/>
                <element name="oIMCSI" minOccurs="0"/>
                <element name="vTIMCSI" minOccurs="0"/>
                <element name="dIMCS" minOccurs="0"/>
                <element name="gAAServiceType" minOccurs="0"/>
                <element name="gAAServiceIdentifier" minOccurs="0"/>
                <element name="gBAUserSecuritySettings" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        <element name="userSecuritySetting" minOccurs="0"/>
        <element name="userPublicIdentity" minOccurs="0"/>
        <element name="gAAAuthorizationflag" minOccurs="0"/>
        <element name="keyLifetime" minOccurs="0"/>
        <element name="uICCSecuritySetting" minOccurs="0"/>
        <element name="nAFGroupIdentity" minOccurs="0"/>
    </all>
</complexType>
</element>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element name="SuMSubscribedService" type="xn:NrmClass" abstract="true"/>

<element
  name="CSSubscribedService"
  substitutionGroup="sn:SuMSubscribedService"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="descriptionService" minOccurs="0"/>
                <element name="agreementOffer" minOccurs="0"/>
                <element name="networkAccessMode" minOccurs="0"/>
                <element name="basicMSISDNIndicator" minOccurs="0"/>
                <element name="mSISDNAlertIndicator" minOccurs="0"/>
                <element name="subscriptionRestriction" minOccurs="0"/>
                <element name="rSZIlists" minOccurs="0"/>
                <element name="LSAIdentity" minOccurs="0"/>
                <element name="LSAPriority" minOccurs="0"/>
                <element name="LSAPreferentialAccessIndicator" minOccurs="0"/>
                <element name="LSAActiveModeSupportIndicator" minOccurs="0"/>
                <element name="LSAOnlyAccessIndicator" minOccurs="0"/>
                <element name="LSAActiveModeIndicator" minOccurs="0"/>
                <element name="vPLMNIIdentifier" minOccurs="0"/>
                <element name="accessRestrictionData" minOccurs="0"/>
                <element name="privacyExceptionList" minOccurs="0"/>
                <element name="gMLCNumbers" minOccurs="0"/>
                <element name="mOLRList" minOccurs="0"/>
                <element name="serviceTypes" minOccurs="0"/>
                <element name="mobileStationCategory" minOccurs="0"/>
                <element name="lMUIIdentifier" minOccurs="0"/>
                <element name="subscriberStatus" minOccurs="0"/>
                <element name="gsmSCFAddresslistForODB" minOccurs="0"/>
                <element name="provisionOfBearerService" minOccurs="0"/>
                <element name="provisionOfTeleservice" minOccurs="0"/>
                <element name="bCAllocation" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```
<element name="barringOfOutgoingCalls" minOccurs="0"/>
<element name="barringOfIncomingCalls" minOccurs="0"/>
<element name="barringOfRoaming" minOccurs="0"/>
<element name="barringOfPremiumRateCalls" minOccurs="0"/>
<element
  name="barringOfSupplementaryServiceManagement"
  minOccurs="0"
/>
<element
  name="barringOfRegistrationOfCallForwarding"
  minOccurs="0"
/>
<element
  name="barringOfInvocationOfCallTransfer"
  minOccurs="0"
/>
<element
  name="operatorDeterminedBarringPLMNSpecificData"
  minOccurs="0"
/>
<element name="vGCSGroupMembershipList" minOccurs="0"/>
<element name="vBSGroupMembershipList" minOccurs="0"/>
<element
  name="broadcastCallInitiationAllowedList"
  minOccurs="0"
/>
<element
  name="originatingCAMELSubscriptionInformationOCSE"
  minOccurs="0"
/>
<element
  name="terminatingCAMELSubscriptionInformationTCSE"
  minOccurs="0"
/>
<element
  name="vMSCTerminatingCAMELSubscriptionInformationVTCSE"
  minOccurs="0"
/>
<element
  name="locationInformationSubscriberStateInformation"
  minOccurs="0"
/>
<element
  name="uSSDCAMELSubscriptionInformationUCSE"
  minOccurs="0"
/>
<element name="sSInvocationNotificationSSCSI" minOccurs="0"/>
<element
  name="translationInformationFlagTIFCSI"
  minOccurs="0"
/>
<element
  name="dialledServiceCAMELSubscriptionInformationDCSE"
  minOccurs="0"
/>
```

```

/>
<element
  name="uSSDGeneralCAMELServiceInformationUGCSI"
  minOccurs="0"
/>
<element
  name="shortMessageServiceCAMELSubscriptionInformationMOSMSCSI"
  minOccurs="0"
/>
<element
  name="shortMessageServiceCAMELSubscriptionInformationMTSMSCSI"
  minOccurs="0"
/>
<element
  name="mTSMSCSIVLRNegotiatedCAMELCapabilityHandling"
  minOccurs="0"
/>
<element name="gsmSCFAddressforCSI" minOccurs="0"/>
<element name="iSTAlertTimer" minOccurs="0"/>
<element name="cSAllocationRetentionpriority" minOccurs="0"/>
<element name="sS-Code" minOccurs="0"/>
<element name="provisioningState" minOccurs="0"/>
<element name="activationState" minOccurs="0"/>
<element name="registrationState" minOccurs="0"/>
<element name="overrideCategory" minOccurs="0"/>
<element name="cLIRestrictionOption" minOccurs="0"/>
<element name="forwarded-toNumber" minOccurs="0"/>
<element name="forwarded-toSubaddress" minOccurs="0"/>
<element name="noReplyConditionTimer" minOccurs="0"/>
<element name="maximumEntitledPriority" minOccurs="0"/>
<element name="defaultPriority" minOccurs="0"/>
<element name="nbrUser" minOccurs="0"/>
<element name="nbrSB" minOccurs="0"/>
</all>
</complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
  <element ref="sn:SuMCSSupplService"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
  name="PSSubscribedService"
  substitutionGroup="sn:SuMSubscribedService"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">

```

```

<complexType>
  <all>
    <element name="descriptionService" minOccurs="0"/>
    <element name="agreementOffer" minOccurs="0"/>
    <element name="networkAccessMode" minOccurs="0"/>
    <element name="basicMSISDNIndicator" minOccurs="0"/>
    <element name="mSISDNAlertIndicator" minOccurs="0"/>
    <element name="subscriptionRestriction" minOccurs="0"/>
    <element name="rSZILists" minOccurs="0"/>
    <element name="LSAIdentity" minOccurs="0"/>
    <element name="LSAPriority" minOccurs="0"/>
    <element name="LSAPreferentialAccessIndicator" minOccurs="0"/>
    <element name="LSAActiveModeSupportIndicator" minOccurs="0"/>
    <element name="LSAOnlyAccessIndicator" minOccurs="0"/>
    <element name="LSAActiveModeIndicator" minOccurs="0"/>
    <element name="vPLMNIdentifier" minOccurs="0"/>
    <element name="accessRestrictionData" minOccurs="0"/>
    <element name="privacyExceptionList" minOccurs="0"/>
    <element name="gMLCNumbers" minOccurs="0"/>
    <element name="mOLRList" minOccurs="0"/>
    <element name="serviceTypes" minOccurs="0"/>
    <element name="gGSNNumber" minOccurs="0"/>
    <element name="provisionofTeleservice" minOccurs="0"/>
    <element name="transferofSMoption" minOccurs="0"/>
    <element
      name="barringofPacketOrientedServices"
      minOccurs="0"
    />
    <element name="pDPTType" minOccurs="0"/>
    <element name="pDPAddress" minOccurs="0"/>
    <element name="accessPointName" minOccurs="0"/>
    <element name="vPLMNAddressAllowed" minOccurs="0"/>
    <element name="qualityofServiceSubscribed" minOccurs="0"/>
    <element
      name="pDPContextChargingCharacteristics"
      minOccurs="0"
    />
    <element
      name="gPRSCAMELSubscriptionInformationGPRSCSI"
      minOccurs="0"
    />
    <element
      name="mOShortMessageServiceCAMELSubscriptionInformationMOSMSCSI"
      minOccurs="0"
    />
    <element
      name="mTShortMessageServiceCAMELSubscriptionInformationMTSMSCSI"
      minOccurs="0"
    />
    <element
      name="mOSMSCSISGSNNegotiatedCAMELCapabilityHandling"
      minOccurs="0"
    />
  </element>

```

```

        name="mTSMSCSISGSNNegotiatedCAMELCapabilityHandling"
        minOccurs="0"
    />
<element
    name="mobilityManagementforGPRSeventnotificationMGCSI"
    minOccurs="0"
/>
<element
    name="mGC SINegotiatedCAMELCapabilityHandling"
    minOccurs="0"
/>
<element name="gsmSCFAddressforCSI" minOccurs="0"/>
<element
    name="subscribedChargingCharacteristics"
    minOccurs="0"
/>
<element name="w-APN" minOccurs="0"/>
<element
    name="listofauthorizedvisitednetworkidentifiers"
    minOccurs="0"
/>
<element name="wLANUERemoteIPAddress" minOccurs="0"/>
<element name="wLANAccess" minOccurs="0"/>
<element name="wLANTunnelling" minOccurs="0"/>
<element name="wLANDirectIPAccess" minOccurs="0"/>
<element name="wAPNAuthorised" minOccurs="0"/>
<element name="w-APNBarringType" minOccurs="0"/>
<element name="w-APNChargingData" minOccurs="0"/>
<element name="wLANUERemoteIPAddress" minOccurs="0"/>
<element name="accessIndependenceFlag" minOccurs="0"/>
<element name="i-WLANAccessType" minOccurs="0"/>
<element name="chargingData" minOccurs="0"/>
<element name="chargingCharacteristics" minOccurs="0"/>
<element name="primaryOCSChargingFunctionName" minOccurs="0"/>
<element
    name="secondaryOCSChargingFunctionName"
    minOccurs="0"
/>
<element
    name="primaryChargingCollectionFunctionName"
    minOccurs="0"
/>
<element
    name="secondaryChargingCollectionFunctionName"
    minOccurs="0"
/>
<element name="sS-Code" minOccurs="0"/>
<element name="provisioningState" minOccurs="0"/>
<element name="activationState" minOccurs="0"/>
</all>
</complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
    <element ref="sn:SuMPSSupplService"/>

```

```

    </choice>
  </sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
  name="IMSSubscribedService"
  substitutionGroup="sn:SuMSubscribedService"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="descriptionService" minOccurs="0"/>
                <element name="agreementOffer" minOccurs="0"/>
                <element
                  name="listofauthorizedvisitednetworkidentifiers"
                  minOccurs="0"
                />
                <element name="registrationStatus" minOccurs="0"/>
                <element name="sCSCFName" minOccurs="0"/>
                <element name="serverCapabilities" minOccurs="0"/>
                <element
                  name="subscribedMediaProfileIdentifier"
                  minOccurs="0"
                />
                <element name="initialFilterCriteria" minOccurs="0"/>
                <element name="applicationServerInformation" minOccurs="0"/>
                <element name="serviceIndication" minOccurs="0"/>
                <element
                  name="primaryEventChargingFunctionName"
                  minOccurs="0"
                />
                <element
                  name="secondaryEventChargingFunctionName"
                  minOccurs="0"
                />
                <element
                  name="primaryChargingCollectionFunctionName"
                  minOccurs="0"
                />
                <element
                  name="secondaryChargingCollectionFunctionName"
                  minOccurs="0"
                />
                <element name="gsmSCFAddressforIMCSI" minOccurs="0"/>
                <element name="oIMCSI" minOccurs="0"/>
                <element name="vTIMCSI" minOccurs="0"/>
                <element name="dIMCS" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        <element name="gAAServiceType" minOccurs="0"/>
        <element name="gAAServiceIdentifier" minOccurs="0"/>
        <element name="gBAUserSecuritySettings" minOccurs="0"/>
        <element name="userSecuritySetting" minOccurs="0"/>
        <element name="userPublicIdentity" minOccurs="0"/>
        <element name="gAAAuthorizationflag" minOccurs="0"/>
        <element name="keyLifetime" minOccurs="0"/>
        <element name="uICCSecuritySetting" minOccurs="0"/>
        <element name="nAFGroupIdentity" minOccurs="0"/>
    </all>
</complexType>
</element>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element name="SuMServiceProfile" type="xn:NrmClass" abstract="true"/>

<element
  name="CSServiceProfile"
  substitutionGroup="sn:SuMServiceProfile"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="descriptionSpecification" minOccurs="0"/>
                <element name="networkAccessMode" minOccurs="0"/>
                <element name="basicMSISDNIndicator" minOccurs="0"/>
                <element name="mSISDNAlertIndicator" minOccurs="0"/>
                <element name="vLRNumber" minOccurs="0"/>
                <element name="mSCNumber" minOccurs="0"/>
                <element name="subscriptionRestriction" minOccurs="0"/>
                <element name="rSZIlists" minOccurs="0"/>
                <element name="mSCAreaRestrictedFlag" minOccurs="0"/>
                <element name="oDBinducedBarringData" minOccurs="0"/>
                <element
                  name="roamingRestrictionDueToUnsupportedFeature"
                  minOccurs="0"
                />
              </all>
            </complexType>
          </element>
          <element name="LSAIdentity" minOccurs="0"/>
          <element name="LSAPriority" minOccurs="0"/>
          <element name="LSAPreferentialAccessIndicator" minOccurs="0"/>
          <element name="LSAActiveModeSupportIndicator" minOccurs="0"/>
          <element name="LSAOnlyAccessIndicator" minOccurs="0"/>
          <element name="LSAActiveModeIndicator" minOccurs="0"/>
          <element name="vPLMNIdentifier" minOccurs="0"/>
          <element name="accessRestrictionData" minOccurs="0"/>
          <element name="privacyExceptionList" minOccurs="0"/>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```



```
<element name="gMLCNumbers" minOccurs="0"/>
<element name="mOLRList" minOccurs="0"/>
<element name="serviceTypes" minOccurs="0"/>
<element name="ageIndicator" minOccurs="0"/>
<element name="lMSI" minOccurs="0"/>
<element name="mobileStationCategory" minOccurs="0"/>
<element name="lMUIIdentifier" minOccurs="0"/>
<element name="mNRR" minOccurs="0"/>
<element name="subscriberStatus" minOccurs="0"/>
<element name="notificationToCSEFlagForODB" minOccurs="0"/>
<element name="gsmSCFAddresslistForODB" minOccurs="0"/>
<element name="messagesWaitingData" minOccurs="0"/>
<element name="mobileStationNotReachableFlag" minOccurs="0"/>
<element name="memoryCapacityExceededFlag" minOccurs="0"/>
<element name="traceReference" minOccurs="0"/>
<element name="traceType" minOccurs="0"/>
<element name="operationsSystemsIdentity" minOccurs="0"/>
<element name="hLRTraceType" minOccurs="0"/>
<element name="mAPErrorOnTrace" minOccurs="0"/>
<element name="traceActivatedInVLR" minOccurs="0"/>
<element name="provisionOfBearerService" minOccurs="0"/>
<element name="provisionOfTeleservice" minOccurs="0"/>
<element name="bAllocation" minOccurs="0"/>
<element name="checkSSIndicator" minOccurs="0"/>
<element name="mSPurgedForNonGPRSFlag" minOccurs="0"/>
<element name="barringOfOutgoingCalls" minOccurs="0"/>
<element name="barringOfIncomingCalls" minOccurs="0"/>
<element name="barringOfRoaming" minOccurs="0"/>
<element name="barringOfPremiumRateCalls" minOccurs="0"/>
<element
  name="barringOfSupplementaryServiceManagement"
  minOccurs="0"
/>
<element
  name="barringOfRegistrationOfCallForwarding"
  minOccurs="0"
/>
<element
  name="barringOfInvocationOfCallTransfer"
  minOccurs="0"
/>
<element
  name="operatorDeterminedBarringPLMNspecificData"
  minOccurs="0"
/>
<element name="vGCSGroupMembershipList" minOccurs="0"/>
<element name="vBSGroupMembershipList" minOccurs="0"/>
<element
  name="broadcastCallInitiationAllowedList"
  minOccurs="0"
/>
<element
  name="originatingCAMELSubscriptionInformationOCSE"
  minOccurs="0"
/>
```

```
</>
<element
  name="terminatingCAMELSubscriptionInformationTCISI"
  minOccurs="0"
/>
<element
  name="vMSTerminatingCAMELSubscriptionInformationVTCSI"
  minOccurs="0"
/>
<element
  name="locationInformationSubscriberStateInformation"
  minOccurs="0"
/>
<element
  name="uSSDCAMELSubscriptionInformationUCSI"
  minOccurs="0"
/>
<element name="sSInvocationNotificationSSCSI" minOccurs="0"/>
<element
  name="translationInformationFlagTIFCSI"
  minOccurs="0"
/>
<element
  name="dialledServiceCAMELSubscriptionInformationDCSI"
  minOccurs="0"
/>
<element
  name="uSSDGeneralCAMELServiceInformationUGCSI"
  minOccurs="0"
/>
<element
  name="oCSINegotiatedCAMELCapabilityHandling"
  minOccurs="0"
/>
<element
  name="sSCSINegotiatedCAMELCapabilityHandling"
  minOccurs="0"
/>
<element
  name="vTCSINegotiatedCAMELCapabilityHandling"
  minOccurs="0"
/>
<element
  name="shortMessageServiceCAMELSubscriptionInformationMOSMSCSI"
  minOccurs="0"
/>
<element
  name="shortMessageServiceCAMELSubscriptionInformationMTSMSCSI"
  minOccurs="0"
/>
<element
  name="mOSMSCSIVLRNegotiatedCAMELCapabilityHandling"
  minOccurs="0"
/>
```

```

    <element
      name="mTSMSCSIVLRNegotiatedCAMELCapabilityHandling"
      minOccurs="0"
    />
  </element>
  <element
    name="mCSINegotiatedCAMELCapabilityHandling"
    minOccurs="0"
  />
  </element>
  <element name="vLRSupportedCAMELPhases" minOccurs="0"/>
  <element name="gsmSCFAddressforCSI" minOccurs="0"/>
  <element name="vLROfferedCAMEL4CSIs" minOccurs="0"/>
  <element name="iSTAlertTimer" minOccurs="0"/>
  <element name="cSAllocationRetentionpriority" minOccurs="0"/>
  <element name="traceReference2" minOccurs="0"/>
  <element name="TraceDepth" minOccurs="0"/>
  <element name="ListofNeTypestoTrace" minOccurs="0"/>
  <element name="TriggeringEvents" minOccurs="0"/>
  <element name="ListofInterfacestoTrace" minOccurs="0"/>
  <element name="sS-Code" minOccurs="0"/>
  <element name="provisioningState" minOccurs="0"/>
  <element name="activationState" minOccurs="0"/>
  <element name="registrationState" minOccurs="0"/>
  <element name="overrideCategory" minOccurs="0"/>
  <element name="cLIRestrictionOption" minOccurs="0"/>
  <element name="forwarded-toNumber" minOccurs="0"/>
  <element name="forwarded-toSubaddress" minOccurs="0"/>
  <element name="noReplyConditionTimer" minOccurs="0"/>
  <element name="maximumEntitledPriority" minOccurs="0"/>
  <element name="defaultPriority" minOccurs="0"/>
  <element name="nbrUser" minOccurs="0"/>
  <element name="nbrSB" minOccurs="0"/>
  </all>
</complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
  <element ref="sn:SuMCSupplService"/>
</choice>
</sequence>
</extension>
</complexType>
</element>
<element
  name="PSServiceProfile"
  substitutionGroup="sn:SuMServiceProfile"
  >
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>

```

```

<element name="descriptionSpecification" minOccurs="0"/>
<element name="networkAccessMode" minOccurs="0"/>
<element name="basicMSISDNIndicator" minOccurs="0"/>
<element name="mSISDNAlertIndicator" minOccurs="0"/>
<element name="vLRNNumber" minOccurs="0"/>
<element name="mSCNumber" minOccurs="0"/>
<element name="subscriptionRestriction" minOccurs="0"/>
<element name="rSZIlists" minOccurs="0"/>
<element name="mSCAreaRestrictedFlag" minOccurs="0"/>
<element name="oDBinducedBarringData" minOccurs="0"/>
<element
  name="roamingRestrictionDueToUnsupportedFeature"
  minOccurs="0"
/>
<element name="LSAIdentity" minOccurs="0"/>
<element name="LSAPriority" minOccurs="0"/>
<element name="LSAPreferentialAccessIndicator" minOccurs="0"/>
<element name="LSAActiveModeSupportIndicator" minOccurs="0"/>
<element name="LSAOnlyAccessIndicator" minOccurs="0"/>
<element name="LSAActiveModeIndicator" minOccurs="0"/>
<element name="vPLMNIIdentifier" minOccurs="0"/>
<element name="accessRestrictionData" minOccurs="0"/>
<element name="privacyExceptionList" minOccurs="0"/>
<element name="gMLCNumbers" minOccurs="0"/>
<element name="mOLRLList" minOccurs="0"/>
<element name="serviceTypes" minOccurs="0"/>
<element name="ageIndicator" minOccurs="0"/>
<element name="sGSNNumber" minOccurs="0"/>
<element name="gGSNNumber" minOccurs="0"/>
<element name="sGSNarearestrictedflag" minOccurs="0"/>
<element
  name="roamingRestrictedintheSGSNduetounsupportedfeature"
  minOccurs="0"
/>
<element name="mNRG" minOccurs="0"/>
<element name="traceActivatedinSGSN" minOccurs="0"/>
<element name="provisionofTeleservice" minOccurs="0"/>
<element name="transferofSMoption" minOccurs="0"/>
<element name="mSpurgedforGPRSflag" minOccurs="0"/>
<element
  name="barringofPacketOrientedServices"
  minOccurs="0"
/>
<element name="pDPType" minOccurs="0"/>
<element name="pDPAddress" minOccurs="0"/>
<element name="accessPointName" minOccurs="0"/>
<element name="vPLMNAddressAllowed" minOccurs="0"/>
<element name="gGSNlist" minOccurs="0"/>
<element name="qualityofServiceSubscribed" minOccurs="0"/>
<element name="pDPContextIdentifier" minOccurs="0"/>
<element
  name="pDPContextChargingCharacteristics"
  minOccurs="0"
/>

```

```

    <element
      name="gPRSCAMELSubscriptionInformationGPRSCSI"
      minOccurs="0"
    />
  <element
name="mOShortMessageServiceCAMELSubscriptionInformationMOSMSCSI"
      minOccurs="0"
    />
  <element
name="mTShortMessageServiceCAMELSubscriptionInformationMTSMSCSI"
      minOccurs="0"
    />
  <element
      name="mOSMSCSISGSNNegotiatedCAMELCapabilityHandling"
      minOccurs="0"
    />
  <element
      name="mTSMSCSISGSNNegotiatedCAMELCapabilityHandling"
      minOccurs="0"
    />
  <element
      name="mobilityManagementforGPRSeventnotificationMGCSI"
      minOccurs="0"
    />
  <element
      name="mGCSINegotiatedCAMELCapabilityHandling"
      minOccurs="0"
    />
  <element
      name="gPRSCSINegotiatedCAMELCapabilityHandling"
      minOccurs="0"
    />
  <element name="sGSNSupportedCAMELPhases" minOccurs="0"/>
  <element name="sGSNOfferedCAMEL4CSIs" minOccurs="0"/>
  <element name="gsmSCFAddressforCSI" minOccurs="0"/>
  <element
      name="subscribedChargingCharacteristics"
      minOccurs="0"
    />
  <element name="w-APN" minOccurs="0"/>
  <element
      name="listofauthorizedvisitednetworkidentifiers"
      minOccurs="0"
    />
  <element name="wLANUERemoteIPAddress" minOccurs="0"/>
  <element name="wLANAccess" minOccurs="0"/>
  <element name="wLANTunnelling" minOccurs="0"/>
  <element name="wLANDirectIPAccess" minOccurs="0"/>
  <element name="wAPNAuthorised" minOccurs="0"/>
  <element name="w-APNBarringType" minOccurs="0"/>
  <element name="w-APNChargingData" minOccurs="0"/>
  <element name="wLANUERemoteIPAddress" minOccurs="0"/>
  <element name="accessIndependenceFlag" minOccurs="0"/>
  <element name="i-WLANAccessType" minOccurs="0"/>

```

```

    <element name="chargingData" minOccurs="0"/>
    <element name="chargingCharacteristics" minOccurs="0"/>
    <element name="primaryOCSSChargingFunctionName" minOccurs="0"/>
    <element
      name="secondaryOCSSChargingFunctionName"
      minOccurs="0"
    />
    <element name="traceReference2" minOccurs="0"/>
    <element name="TraceDepth" minOccurs="0"/>
    <element name="ListOfNeTypestoTrace" minOccurs="0"/>
    <element name="TriggeringEvents" minOccurs="0"/>
    <element name="ListOfInterfacestoTrace" minOccurs="0"/>
    <element
      name="primaryChargingCollectionFunctionName"
      minOccurs="0"
    />
    <element
      name="secondaryChargingCollectionFunctionName"
      minOccurs="0"
    />
    <element name="sS-Code" minOccurs="0"/>
    <element name="provisioningState" minOccurs="0"/>
    <element name="activationState" minOccurs="0"/>
  </all>
</complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
  <element ref="sn:SuMPSSupplService"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
  name="IMSServiceProfile"
  substitutionGroup="sn:SuMServiceProfile"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="descriptionSpecification" minOccurs="0"/>
                <element
                  name="listofauthorizedvisitednetworkidentifiers"
                  minOccurs="0"
                />
                <element name="registrationStatus" minOccurs="0"/>
                <element name="sCSCFName" minOccurs="0"/>
                <element name="diameterClientAddressofSCSCF" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>

```

```

    <element name="serverCapabilities" minOccurs="0"/>
    <element
      name="subscribedMediaProfileIdentifier"
      minOccurs="0"
    />
    <element name="initialFilterCriteria" minOccurs="0"/>
    <element name="applicationServerInformation" minOccurs="0"/>
    <element name="serviceIndication" minOccurs="0"/>
    <element
      name="primaryEventChargingFunctionName"
      minOccurs="0"
    />
    <element
      name="secondaryEventChargingFunctionName"
      minOccurs="0"
    />
    <element
      name="primaryChargingCollectionFunctionName"
      minOccurs="0"
    />
    <element
      name="secondaryChargingCollectionFunctionName"
      minOccurs="0"
    />
    <element name="gsmSCFAddressforIMCSI" minOccurs="0"/>
    <element name="iMSSFAddressforIMCSI" minOccurs="0"/>
    <element name="oIMCSI" minOccurs="0"/>
    <element name="vTIMCSI" minOccurs="0"/>
    <element name="dIMCS" minOccurs="0"/>
    <element name="gAAServiceType" minOccurs="0"/>
    <element name="gAAServiceIdentifier" minOccurs="0"/>
    <element name="gBAUserSecuritySettings" minOccurs="0"/>
    <element name="userSecuritySetting" minOccurs="0"/>
    <element name="userPublicIdentity" minOccurs="0"/>
    <element name="gAAAAuthorizationflag" minOccurs="0"/>
    <element name="keyLifetime" minOccurs="0"/>
    <element name="uICCSecuritySetting" minOccurs="0"/>
    <element name="nAFGroupIdentity" minOccurs="0"/>
  </all>
</complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
  <element ref="sn:IMSPublicIdentification"/>
  <element ref="sn:IMSServiceProfileOptionallyContainedNrmClass"/>
</choice>
</sequence>
</extension>
</complexType>
</complexType>
</element>

<element name="IMSPublicIdentification">
  <complexType>

```

```
<complexContent>
  <extension base="xn:NrmClass">
    <sequence>
      <element name="attributes" minOccurs="0">
        <complexType>
          <all>
            <element name="publicUserIdentity" type="string" minOccurs="0"/>
            <element name="barringIndication" type="sn:binEnum" minOccurs="0"/>
          </all>
        </complexType>
      </element>
    </sequence>
  </extension>
</complexContent>
</complexType>
</element>

<simpleType name="binEnum">
  <restriction base="string">
    <enumeration value="FALSE"/>
    <enumeration value="TRUE"/>
  </restriction>
</simpleType>

<simpleType name="multinumberingMSISDNIndicator">
  <restriction base="string">
    <enumeration value="BASIC"/>
    <enumeration value="ALERT"/>
  </restriction>
</simpleType>

<complexType name="multinumberingMSISDNList">
  <sequence minOccurs="0" maxOccurs="unbounded">
    <element name="mSISDN" type="string"/>
    <element name="indicator" type="sn:multinumberingMSISDNIndicator"/>
  </sequence>
</complexType>

<element name="IMSServiceProfileOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
<element name="SuMCredentialsOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
<element name="SuMSubscriberProfileOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>
<element name="SuMUserOptionallyContainedNrmClass" type="xn:NrmClass" abstract="true"/>

</schema>
```

Annex B (informative): XML schema electronic files

The electronic files corresponding to the normative XML schemas defined in the present document are available in native form in the following archive:

http://www.3gpp.org/ftp/specs/archive/32_series/32.175/schema/32175-810-XMLSchema.zip

Annex C (informative): Change history

Change history								
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Cat	Old	New
Mar 2005	SA_27	SP-050025	--	--	Submitted to TSG SA#27 for Approval	--	1.0.0	6.0.0
Jun 2005	SA_28	SP-050269	0001	--	Add Rel-6 trace parameters to SuM - - align with CT4's TS 23.008 (Organisation of subscriber data)	F	6.0.0	6.1.0
Mar 2006	SA_31	SP-060092	0002	--	Remove duplicate attributes in XML Schema	F	6.1.0	6.2.0
Jun 2007	SA_36	--	--	--	Automatic upgrade to Rel-7 (no CR) at freeze of Rel-7. Added in the "Scope" the SS-IS relationship text.	--	6.2.0	7.0.0
Sep 2007	SA_37	SP-070614	0003	--	XSD updates based on changed IS - Align with 32.172	C	7.0.0	8.0.0

History

Document history		
V8.0.0	February 2009	Publication
V8.1.0	July 2009	Publication