

# ETSI TS 132 635 V7.1.0 (2007-03)

---

*Technical Specification*

**Digital cellular telecommunications system (Phase 2+);  
Universal Mobile Telecommunications System (UMTS);  
Telecommunication management;  
Configuration Management (CM);  
Core network resources Integration Reference Point (IRP):  
Bulk CM eXtensible Markup Language (XML)  
file format definition  
(3GPP TS 32.635 version 7.1.0 Release 7)**

---



---

Reference

RTS/TSGS-0532635v710

---

Keywords

GSM, 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](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 2007.  
All rights reserved.

DECT<sup>TM</sup>, PLUGTESTS<sup>TM</sup> and UMTS<sup>TM</sup> are Trade Marks of ETSI registered for the benefit of its Members.  
TIPHON<sup>TM</sup> and the TIPHON logo are Trade Marks currently being registered by ETSI for the benefit of its Members.  
3GPP<sup>TM</sup> is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

---

## 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 .....   | 7         |
| 4 Structure and content of configuration data XML files.....  | 7         |
| <b>Annex A (normative): Configuration data file NRM-specific XML schema<br/>(file name "coreNrm.xsd") .....</b> | <b>8</b>  |
| <b>Annex B (informative): XML schema electronic files.....</b>  | <b>17</b> |
| <b>Annex C (informative): Change history .....</b>  | <b>18</b> |
| History .....   | 19        |

---

## Foreword

This Technical Specification has been produced by the 3<sup>rd</sup> 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 3<sup>rd</sup> Generation Partnership Project; Technical Specification Group Services and System Aspects; Telecommunication management; as identified below:

- 32.631: "Configuration Management (CM); Core network resources Integration Reference Point (IRP): Requirements".
- 32.632: "Configuration Management (CM); Core network resources Integration Reference Point (IRP): Network Resource Model (NRM)".
- 32.633: "Configuration Management (CM); Core network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS)".
- 32.635: "Configuration Management (CM); Core network resources Integration Reference Point (IRP): Bulk CM eXtensible Markup Language (XML) file format definition".**

---

# 1 Scope

The present document provides the NRM-specific part related to the Core Network Resources IRP NRM [1] of the XML file format definition for the Bulk Configuration Management IRP IS [2].

The main part of this XML file format definition is provided by 3GPP TS 32.615 [3].

Bulk CM XML file formats are based on XML [4], XML Schema [5] [6] [7] and XML Namespace [8] standards.

This File Format Definition specification is related to 3GPP TS 32.632 V7.1.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 32.632: "Telecommunication management; Configuration Management (CM); Core network resources Integration Reference Point (IRP): Network Resource Model (NRM)".
- [2] 3GPP TS 32.612: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP); Information Service (IS)".
- [3] 3GPP TS 32.615: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP); eXtensible Markup Language (XML) file format definition".
- [4] W3C REC-xml-20001006: "Extensible Markup Language (XML) 1.0 (Second Edition)".
- [5] W3C REC-xmlschema-0-20010502: "XML Schema Part 0: Primer".
- [6] W3C REC-xmlschema-1-20010502: "XML Schema Part 1: Structures".
- [7] W3C REC-xmlschema-2-20010502: "XML Schema Part 2: Datatypes".
- [8] W3C REC-xml-names-19990114: "Namespaces in XML".

---

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

**XML file:** file containing an XML document

**XML document:** composed of the succession of an optional XML declaration followed by a root XML element

NOTE: See [4]; in the scope of the present document.

**XML declaration:** it specifies the version of XML being used

NOTE: See [4].

**XML element:** has a type, is identified by a name, may have a set of XML attribute specifications and is either composed of the succession of an XML start-tag followed by the XML content of the XML element followed by an XML end-tag, or composed simply of an XML empty-element tag; each XML element may contain other XML elements

NOTE: See [4].

**empty XML element:** having an empty XML content; an empty XML element still possibly has a set of XML attribute specifications; an empty XML element is either composed of the succession of an XML start-tag directly followed by an XML end-tag, or composed simply of an XML empty-element tag

NOTE: See [4].

**XML content (of an XML element):** empty if the XML element is simply composed of an XML empty-element tag; otherwise the part, possibly empty, of the XML element between its XML start-tag and its XML end-tag

**XML start-tag:** the beginning of a non-empty XML element is marked by an XML start-tag containing the name and the set of XML attribute specifications of the XML element

NOTE: See [4].

**XML end-tag:** the end of a non-empty XML element is marked by an XML end-tag containing the name of the XML element

NOTE: See [4].

**XML empty-element tag:** an empty XML element is composed simply of an empty-element tag containing the name and the set of XML attribute specifications of the XML element

NOTE: See [4].

**XML attribute specification:** has a name and a value

**DTD:** defines structure and content constraints to be respected by an XML document to be valid with regard to this DTD

NOTE: See [4].

**XML schema:** more powerful than a DTD, an XML schema defines structure and content constraints to be respected by an XML document to conform with this XML schema; through the use of XML namespaces several XML schemas can be used together by a single XML document; an XML schema is itself also an XML document that shall conform with the XML schema for XML schemas

NOTE: See [5], [6] and [7].

**XML namespace:** enables qualifying element and attribute names used in XML documents by associating them with namespaces identified by different XML schemas

NOTE: See [8], in the scope of the present document.

**XML complex type:** defined in an XML schema; cannot be directly used in an XML document; can be the concrete type or the derivation base type for an XML element type or for another XML complex type; ultimately defines constraints for an XML element on its XML attribute specifications and/or its XML content

NOTE: See [5], [6] and [7].

**XML element type:** declared by an XML schema; can be directly used in an XML document; as the concrete type of an XML element, directly or indirectly defines constraints on its XML attribute specifications and/or its XML content; can also be the concrete type or the derivation base type for another XML element type

NOTE: See [5], [6] and [7].

## 3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

|       |  |
|-------|--|
| CM    | Configuration Management                   |
| DTD   | Document Type Definition                   |
| EDGE  | Enhanced Data for GSM Evolution            |
| GERAN | GSM/EDGE Radio Access Network              |
| GSM   | Global System for Mobile communication     |
| IRP   | Integration Reference Point                |
| IS    | Information Service                        |
| MGW   | Media GateWay                              |
| NRM   | Network Resource Model                     |
| UMTS  | Universal Mobile Telecommunications System |
| UTRAN | Universal Terrestrial Radio Access Network |
| XML   | eXtensible Markup Language                 |

---

## 4 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 [3].

Annex A of the present document defines the NRM-specific XML schema `coreNrm.xsd` for the Core Network Resources IRP NRM defined in 3GPP TS 32.632 [1].

XML schema `coreNrm.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 [3].



## Annex A (normative): Configuration data file NRM-specific XML schema (file name "coreNrm.xsd")

The following XML schema coreNrm.xsd is the NRM-specific schema for the Core Network Resources IRP NRM defined in 3GPP TS 32.632 [1]:

```
<?xml version="1.0" encoding="UTF-8"?>
<!--
 3GPP TS 32.635 Core Network Resources IRP
 Bulk CM Configuration data file NRM-specific XML schema
 coreNrm.xsd
-->
<schema
 targetNamespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.635#coreNrm"
 elementFormDefault="qualified"
 attributeFormDefault="unqualified"
 xmlns="http://www.w3.org/2001/XMLSchema"
 xmlns:xn="http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"
 xmlns:cn="http://www.3gpp.org/ftp/specs/archive/32_series/32.635#coreNrm"
>
  <import namespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"/>
  <!-- Core Network Resources IRP NRM class associated XML elements -->
  <element
    name="MscServerFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>
                  <element name="userLabel" minOccurs="0"/>
                  <element name="mccList" minOccurs="0"/>
                  <element name="mncList" minOccurs="0"/>
                  <element name="lacList" minOccurs="0"/>
                  <element name="sacList" minOccurs="0"/>
                  <element name="gcaList" minOccurs="0"/>
                  <element name="mscId" minOccurs="0"/>
                  <element name="mscServerFunctionGsmCell" type="xn:dnList" minOccurs="0"/>
                  <element name="mscServerFunctionExternalGsmCell" type="xn:dnList" minOccurs="0"/>
                  <element name="mscServerFunctionCsMgwFunction" type="xn:dnList" minOccurs="0"/>
                </all>
              </complexType>
            </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="xn:VsDataContainer"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>
  <element
    name="HlrFunction"
    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="xn:VsDataContainer"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>
</schema>
```

```

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

<element
  name="VlrFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="AucFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="EirFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="SmsIwmscFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        </complexType>
      </element>
      <choice minOccurs="0" maxOccurs="unbounded">
        <element ref="xn:VsDataContainer" />
      </choice>
    </sequence>
  </extension>
</complexContent>
</complexType>
</element>

<element
  name="SmsGsmcFunction"
  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="xn:VsDataContainer" />
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="GsmcFunction"
  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="xn:VsDataContainer" />
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="SgsnFunction"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
>
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0" />
                <element name="mccList" minOccurs="0" />
                <element name="mncList" minOccurs="0" />
                <element name="lacList" minOccurs="0" />
                <element name="racList" minOccurs="0" />
                <element name="sacList" minOccurs="0" />
                <element name="sgsnId" minOccurs="0" />
                <element name="sgsnFunctionGsmCell" type="xn:dnList" minOccurs="0" />
                <element name="sgsnFunctionExternalGsmCell" type="xn:dnList" minOccurs="0" />
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer" />
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

</element>

<element
  name="GgsnFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="BgFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="SmlcFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="GmlcFunction"
  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>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        <choice minOccurs="0" maxOccurs="unbounded">
          <element ref="xn:VsDataContainer"/>
        </choice>
      </sequence>
    </extension>
  </complexContent>
</complexType>
</element>

<element
  name="ScfFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="IucsLink">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="connectedRnc" minOccurs="0"/>
                <element name="connectedBss" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="IupsLink">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="connectedRnc" minOccurs="0"/>
                <element name="connectedBss" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="IubcLink">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="connectedRnc" minOccurs="0"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        </all>
      </complexType>
    </element>
    <choice minOccurs="0" maxOccurs="unbounded">
      <element ref="xn:VsDataContainer"/>
    </choice>
  </sequence>
</extension>
</complexContent>
</complexType>
</element>

<element name="ALink">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="connectedBss" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element name="GbLink">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="userLabel" minOccurs="0"/>
                <element name="connectedBss" minOccurs="0"/>
              </all>
            </complexType>
          </element>
          <choice minOccurs="0" maxOccurs="unbounded">
            <element ref="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="SrfFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="CbcFunction"
  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="xn:VsDataContainer" />
    </choice>
  </sequence>
</extension>
</complexContent>
</complexType>
</element>

<element
  name="CgfFunction"
  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="xn:VsDataContainer" />
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="GmscServerFunction"
  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="xn:VsDataContainer" />
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="IwfFunction"
  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="xn:VsDataContainer" />
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="MnpSrfFunction"

```

```

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="xn:VsDataContainer"/>
        </choice>
      </sequence>
    </extension>
  </complexContent>
</complexType>
</element>

<element
  name="NpdbFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="SgwFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

<element
  name="SsfFunction"
  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="xn:VsDataContainer"/>
          </choice>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```



```

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

  <element
    name="BsFunction"
    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="xn:VsDataContainer"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>

  <element
    name="CsMgwFunction"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>
                  <element name="userLabel" minOccurs="0"/>
                  <element name="csMgwFunctionMscServerFunction" minOccurs="0"/>
                  <element name="csMgwFunctionIucsLink" type="xn:dnList" minOccurs="0"/>
                  <element name="csMgwFunctionALink" type="xn:dnList" minOccurs="0"/>
                </all>
              </complexType>
            </element>
            <choice minOccurs="0" maxOccurs="unbounded">
              <element ref="xn:VsDataContainer"/>
            </choice>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>
</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/32.635/schema/32635-710-XMLSchema.zip](http://www.3gpp.org/ftp/specs/archive/32_series/32.635/schema/32635-710-XMLSchema.zip)

## Annex C (informative): Change history

| Change history |       |           |      |     |   |     |       |       |  |
|----------------|-------|-----------|------|-----|---|-----|-------|-------|--|
| Date           | TSG # | TSG Doc.  | CR   | Rev | Subject/Comment   | Cat | Old   | New   |  |
| Jun 2002       | SA_16 | SP-020298 | --   | --  | Submitted to TSG SA #16 for Information   | --  | 1.0.0 |       |  |
| Sep 2002       | SA_17 | SP-020461 | --   | --  | Submitted to TSG SA #17 for Approval  | --  | 2.0.0 | 5.0.0 |  |
| Jun 2003       | SA_20 | SP-030287 | 0001 | --  | Correction of Core NRM XML schema namespace URIs  | F   | 5.0.0 | 5.1.0 |  |
| Jun 2003       | SA_20 | SP-030288 | 0002 | --  | Generic NRM XML schema dependencies removal   | F   | 5.0.0 | 5.1.0 |  |
| Oct 2003       | --    | --        | --   | --  | Attached to this TS the normative XML schema electronic files corresponding to June 2003 TS 32.635    | --  | 5.1.0 | 5.1.1 |  |
| Mar 2004       | SA_23 | SP-040131 | 0003 | --  | Add the capability to contain instances of VsDataContainer to some MOs - Align with the IS 32.632     | F   | 5.1.1 | 5.2.0 |  |
| Jun 2004       | SA_24 | SP-040259 | 0004 | --  | Removal of XML schema URI dependencies  | F   | 5.2.0 | 5.3.0 |  |
| Jun 2004       | SA_24 | SP-040258 | 0005 | --  | Correction of the annex related to XML schema electronic files publication                            | F   | 5.2.0 | 5.3.0 |  |
| Sep 2004       | SA_25 | SP-040583 | 0006 | --  | Add missing elements in the Core Network XML file format definition                                   | F   | 5.3.0 | 5.4.0 |  |
| Sep 2004       | SA_25 | SP-040582 | 0007 | --  | Correction of modelling of Media GateWay (MGW)  | F   | 5.3.0 | 5.4.0 |  |
| Sep 2004       | SA_25 | SP-040541 | --   | --  | Automatic upgrade to Rel- 6 (no CR) as per request in SP-040541 SA5_presentation_SA_25.ppt (slide 17) | --  | 5.4.0 | 6.0.0 |  |
| Dec 2004       | SA_26 | SP-040809 | 0008 | --  | Add new IMS Entities  | B   | 6.0.0 | 6.1.0 |  |
| Mar 2005       | SA_27 | SP-050047 | 0010 | --  | Align with 32.632, regarding the IS template and UML repertoire                                       | A   | 6.1.0 | 6.2.0 |  |
| Mar 2005       | SA_27 | SP-050047 | 0013 | --  | Correction to SgsnFunction XML, correct IS reference and Editorial corrections                        | A   | 6.1.0 | 6.2.0 |  |
| Jun 2005       | SA_28 | SP-050296 | 0014 | --  | Correction of XML definitions for IOCs MscServerFunction and SgsnFunction                             | F   | 6.2.0 | 6.3.0 |  |
| Jun 2006       | SA_32 | SP-060257 | 0015 | --  | Add missing Link entities- Align with 32.632 Information Service(IS).                                 | F   | 6.3.0 | 6.4.0 |  |
| Sep 2006       | SA_33 | SP-060611 | 0016 | --  | Add missing CscfFunction to CN NRM - Align with 32.632  | F   | 6.4.0 | 6.5.0 |  |
| Sep 2006       | SA_33 | SP-060611 | 0017 | --  | Add missing link (Link_Scscf_Scscf) - Align with 32.632   | F   | 6.4.0 | 6.5.0 |  |
| Sep 2006       | SA_33 | SP-060655 | 0018 | 1   | Correct the usage of dnList instead of string type for indicating multiple DN                         | F   | 6.4.0 | 6.5.0 |  |
| Dec 2006       | SA_34 | SP-060712 | 0019 | --  | Correct the Link subclasses to model Mg and Mj reference points - Align with 32.632                   | F   | 6.5.0 | 6.6.0 |  |
| Dec 2006       | SA_34 | SP-060731 | 0020 | --  | Move IMS part to new IMS NRM (32.735)   | C   | 6.6.0 | 7.0.0 |  |
| Mar 2007       | SA_35 | SP-070047 | 0021 | --  | Removing IMS links from CN NRM  | F   | 7.0.0 | 7.1.0 |  |

---

## History

| <b>Document history</b> |            |             |
|-------------------------|------------|-------------|
| V7.1.0                  | March 2007 | Publication |
|                         |            |             |
|                         |            |             |
|                         |            |             |
|                         |            |             |