

ETSI TS 128 633 V11.1.0 (2014-07)



TECHNICAL SPECIFICATION

**Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Inventory Management (IM) Network Resource Model (NRM)
Integration Reference Point (IRP);
Solution Set (SS) definitions
(3GPP TS 28.633 version 11.1.0 Release 11)**



Reference

RTS/TSGS-0528633vb10

Keywords

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

The present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (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 or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2014.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.
3GPP™ and **LTE™** are Trade Marks of ETSI 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://ipr.etsi.org>).

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>.

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**may not**", "**need**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Contents

Intellectual Property Rights	2
Foreword.....	2
Modal verbs terminology.....	2
Foreword.....	4
Introduction	4
1 Scope	5
2 References	5
3 Definitions and abbreviations.....	5
3.1 Definitions	5
3.2 Abbreviations	6
4 Solution Set definitions	6
Annex A (normative): XML definitions	7
A.1 Architectural features	7
A.1.1 Syntax for Distinguished Names	7
A.2 Mapping	7
A.3 Solution Set definitions	7
A.3.1 XML definition structure.....	7
A.3.2 XML schema "inventoryNrm.xsd"	7
A.3.3 XML schema "inventoryNrmAlt2.xsd"	10
Annex B (informative): Change history	13
History	14

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:

- 32.690: Inventory Management (IM); Requirements
- 28.631: Inventory Management (IM) Network Resource Model (NRM) Integration Reference Point (IRP); Requirements
- 28.632: Inventory Management (IM) Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)
- 28.633: Inventory Management (IM) Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definitions**

Inventory Management (IM), in general, provides the operator with the ability to assure correct and effective operation of the 3G network as it evolves. IM actions have the objective to monitor the actual configuration on the Network Elements (NEs) and Network Resources (NRs), and they may be initiated by the operator or by functions in the Operations Systems (OSs) or NEs. The final goal of IM is the establishment of an accurate and timely model of the actual inventory in the NEs or NRs.

The present document covers the Inventory Management (IM) Network Resource Model (NRM) Integration Reference Point (IRP): Solution Set (SS) definitions.

1 Scope

The present document provides the NRM-specific part related to the Inventory Management NRM IRP IS in 3GPP TS 28.632 [1] of solution set definitions.

This Solution Set definitions specification is related to 3GPP TS 28.632 V 11.0.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 28.632: "Telecommunication management; Inventory Management (IM) Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".
- [2] 3GPP TS 32.612: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP); Information Service (IS)".
- [3] 3GPP TS 32.616: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP); Solution Set (SS) definitions".
- [4] W3C REC-xml11-20060816: "Extensible Markup Language (XML) 1.1 (Second Edition)".
- [5] Void
- [6] W3C XML Schema Definition Language (XSD) 1.1 Part 1: Structures.
- [7] W3C XML Schema Definition Language (XSD) 1.1 Part 2: Datatypes.
- [8] W3C REC-xml-names-20060816: "Namespaces in XML 1.1 (Second Edition)".
- [9] 3GPP TS 32.300: "Telecommunication management; Configuration Management (CM); Name convention for Managed Objects".
- [10] 3GPP TS 32.342: "Telecommunication management; File Transfer (FT) Integration Reference Point (IRP); Information Service (IS)".
- [11] 3GPP TS 28.623: 'Generic network resources Integration Reference Point (IRP); Solution Set (SS) definition'.

3 Definitions and abbreviations

3.1 Definitions

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

XML file: See definition of [11].

XML document: See definition of [11].

XML declaration: See definition of [11].

XML element: See definition of [11].

empty XML element: See definition of [11].

XML content (of an XML element): See definition of [13].

XML start-tag: See definition of [11].

XML end-tag: See definition of [11].

XML empty-element tag: See definition of [11].

XML attribute specification: See definition of [11].

DTD: See definition of [11].

XML schema: See definition of [11].

XML namespace: See definition of [11].

XML complex type: See definition of [11].

XML element type: See definition of [11].

3.2 Abbreviations

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

CORBA	Common Object Request Broker Architecture
DTD	Document Type Definition
IM	Inventory Management
IRP	Integration Reference Point
IS	Information Service
NRM	Network Resource Model
XML	eXtensible Markup Language
XSD	XML Schema Definition

4 Solution Set definitions

This specification defines the following 3GPP Inventory Management (IM) Network Resource Model (NRM) IRP Solution Set (SS) definitions:

- 3GPP Inventory Management (IM) Network Resource Model (NRM) IRP XML definitions (Annex A)

CORBA Solution Set is not present in the current version of this specification.

Annex A (normative): XML definitions

This annex provides the NRM-specific part related to the Inventory Management NRM IRP IS in 3GPP TS 28.632 [1] of the XML file format definition for the Bulk Configuration Management IRP IS in 3GPP TS 32.612 [2] as well as for use with File Transfer IRP [10].

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

A.1 Architectural features

The overall architectural feature of Inventory Management NRM IRP IS is specified in 3GPP TS 28.632 [1].

This clause specifies features that are specific to the XML Schema definitions.

A.1.1 Syntax for Distinguished Names

The syntax of a Distinguished Name is defined in 3GPP TS 32.300 [9].

A.2 Mapping

The mapping is not present in the current version of this specification.

A.3 Solution Set definitions

A.3.1 XML definition structure

The overall description of the file format of inventory data XML files is provided by 3GPP TS 32.616 [3].

A.3.2 defines the NRM-specific XML schema `inventoryNrm.xsd` for the Inventory Management NRM IRP IS alternative 1 defined in 3GPP TS 28.632 [1].

A.3.3 defines the NRM-specific XML schema `inventoryNrmAlt2.xsd` for the Inventory Management NRM IRP IS alternative 2 as defined in 3GPP TS 28.632 [1].

XML schema `inventoryNrmAlt1.xsd` and `inventoryNrmAlt2.xsd` explicitly declare 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 32.616 [3].

A.3.2 XML schema "inventoryNrm.xsd"

The following XML schema `inventoryNrm.xsd` is the NRM-specific schema for the Inventory Management NRM IRP IS alternative 1 defined in 3GPP TS 28.632 [1].

```
<?xml version="1.1" encoding="UTF-8"?>
<!--
3GPP TS 28.633 Inventory Management NRM IRP
Inventory data file NRM-specific XML schema
inventoryNrm.xsd
```

```

-->
<schema
  targetNamespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/28.633#inventoryNrm"
  elementFormDefault="qualified"
  xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:xn=
"http://www.3gpp.org/ftp/specs/archive/32_series/28.623#genericNrm"
  xmlns:in=
"http://www.3gpp.org/ftp/specs/archive/32_series/28.633#inventoryNrm"
>

  <import
    namespace=
"http://www.3gpp.org/ftp/specs/archive/32_series/28.623#genericNrm"
  />

  <!-- Inventory Management Alternative 1 NRM IRP NRM class associated XML elements -->
  <simpleType name="eightOctetsType">
    <restriction base="hexBinary">
      <length value="8"/>
    </restriction>
  </simpleType>
  <simpleType name="fourOctetsType">
    <restriction base="hexBinary">
      <length value="4"/>
    </restriction>
  </simpleType>
  <simpleType name="angleValueType">
    <restriction base="short">
      <minInclusive value="0"/>
      <maxInclusive value="3600"/>
    </restriction>
  </simpleType>

  <element
    name="InventoryUnit"
    substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass"
  >
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element
              name="attributes"
              minOccurs="0">
              <complexType>
                <all>
                  <element
                    name="inventoryUnitType"
                    type="string"
                  />
                  <element
                    name="vendorUnitFamilyType"
                    type="string"
                    minOccurs="0"
                  />
                  <element
                    name="vendorUnitTypeNumber"
                    type="string"
                    minOccurs="0"
                  />
                  <element
                    name="vendorName"
                    type="string"/>
                  <element
                    name="serialNumber"
                    type="string"
                    minOccurs="0"/>
                  <element
                    name="dateOfManufacture"
                    type="date"
                    minOccurs="0"/>
                  <element
                    name="dateOfLastService"
                    type="date"
                    minOccurs="0"/>
                </all>
              </complexType>
            </element>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>

```

```

        <element
            name="unitPosition"
            type="string"
            minOccurs="0"/>
        <element
            name="manufacturerData"
            type="string"
            minOccurs="0"/>
        <element
            name="versionNumber"
            type="string"
            minOccurs="0"/>
        <element name="relatedFunction" type="xn:dn" minOccurs="0"/>
    </all>
</complexType>
</element>
<choice minOccurs="0" maxOccurs="unbounded">
    <element ref="in:InventoryUnit"/>
    <element ref="xn:VsDataContainer"/>
    <element ref="in:TmaInventoryUnit"/>
    <element ref="in:AntennaInventoryUnit"/>
</choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>
<element name="TmaInventoryUnit" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
                    <element name="attributes" minOccurs="0">
                        <complexType>
                            <all>
                                <!-- Inherited attributes from InventoryUnit -->
                                <element name="inventoryUnitType" type="string"/>
                                <element name="vendorUnitFamilyType" type="string" minOccurs="0"/>
                                <element name="vendorUnitTypeNumber" type="string" minOccurs="0"/>
                                <element name="vendorName" type="string"/>
                                <element name="serialNumber" type="string" minOccurs="0"/>
                                <element name="dateOfManufacture" type="date" minOccurs="0"/>
                                <element name="dateOfLastService" type="date" minOccurs="0"/>
                                <element name="unitPosition" type="string" minOccurs="0"/>
                                <element name="manufacturerData" type="string" minOccurs="0"/>
                                <element name="versionNumber" type="string" minOccurs="0"/>
                                <element name="relatedFunction" type="xn:dn" minOccurs="0"/>
                                <!-- End of inherited attributes from InventoryUnit -->
                                <element name="tmaNumberOfNonLinearGainValues" type="short" minOccurs="0"/>
                                <element name="tmaNonLinearGainValue" type="short" minOccurs="0"/>
                                <element name="tmaAdditionalDataFieldNumber" type="short" minOccurs="0"/>
                                <element name="tmaAntennaModelNumber" type="string" minOccurs="0"/>
                                <element name="tmaAntennaOperatingBands" type="short" minOccurs="0"/>
                                <element name="tmaBeamwidthForEachOpBandInBandOrder" type="in:eightOctetsType"
minOccurs="0"/>
                                <element name="tmaGainForEachOpBandInBandOrder" type="in:fourOctetsType"
minOccurs="0"/>
                                <element name="tmaInstallationDate" type="string" minOccurs="0"/>
                                <element name="tmaInstallersId" type="string" minOccurs="0"/>
                                <element name="tmaMaxSupportedGain" type="short" minOccurs="0"/>
                                <element name="tmaMinSupportedGain" type="short" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                </sequence>
                <choice minOccurs="0" maxOccurs="unbounded">
                    <element ref="in:InventoryUnit"/>
                    <element ref="xn:VsDataContainer"/>
                </choice>
            </extension>
        </complexContent>
    </complexType>
</element>
<element name="AntennaInventoryUnit"
substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">

```

```

<sequence>
  <element name="attributes" minOccurs="0">
    <complexType>
      <all>
        <!-- Inherited attributes from InventoryUnit-->
        <element name="inventoryUnitType" type="string"/>
        <element name="vendorUnitFamilyType" type="string" minOccurs="0"/>
        <element name="vendorUnitTypeNumber" type="string" minOccurs="0"/>
        <element name="vendorName" type="string"/>
        <element name="serialNumber" type="string" minOccurs="0"/>
        <element name="dateOfManufacture" type="date" minOccurs="0"/>
        <element name="dateOfLastService" type="date" minOccurs="0"/>
        <element name="unitPosition" type="string" minOccurs="0"/>
        <element name="manufacturerData" type="string" minOccurs="0"/>
        <element name="versionNumber" type="string" minOccurs="0"/>
        <element name="relatedFunction" type="xn:dn" minOccurs="0"/>
        <!-- End of inherited attributes from InventoryUnit-->
        <element name="maxTiltValue" type="in:angleValueType" minOccurs="0"/>
        <element name="minTiltValue" type="in:angleValueType" minOccurs="0"/>
        <element name="mechanicalOffset" type="in:angleValueType" minOccurs="0"/>
        <element name="baseElevation" type="integer" minOccurs="0"/>
        <element name="latitude" type="decimal" minOccurs="0"/>
        <element name="longitude" type="decimal" minOccurs="0"/>
        <element name="patternLabel" type="string" minOccurs="0"/>
      </all>
    </complexType>
  </element>
  <choice minOccurs="0" maxOccurs="unbounded">
    <element ref="in:InventoryUnit"/>
    <element ref="xn:VsDataContainer"/>
  </choice>
</sequence>
</extension>
</complexContent>
</complexType>
</element>
</schema>

```

A.3.3 XML schema "inventoryNrmAlt2.xsd"

The following XML schema `inventoryNrmAlt2.xsd` is the NRM-specific schema for the Inventory Management NRM IRP IS alternative 2 defined in 3GPP TS 28.632 [1].

```

<?xml version="1.1" encoding="UTF-8"?>
<!--
  3GPP TS 28.633 Inventory Management NRM IRP
  Inventory data file NRM-specific XML schema
  inventoryNrmAlt2.xsd
-->
<schema xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:xn="http://www.3gpp.org/ftp/specs/archive/32_series/28.623#genericNrm"
  xmlns:in="http://www.3gpp.org/ftp/specs/archive/32_series/28.633#inventoryNrmAlt2"
  targetNamespace="http://www.3gpp.org/ftp/specs/archive/32_series/28.633#inventoryNrmAlt2"
  elementFormDefault="qualified">
  <import namespace="http://www.3gpp.org/ftp/specs/archive/32_series/28.623#genericNrm"/>
  <!-- Inventory Management Alternative 2 NRM IRP NRM class associated XML elements -->
  <element name="InventoryUnitNE"
  substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>
                  <element name="neId" type="string"/>
                  <element name="customerIdentifier" type="string" minOccurs="0"/>
                  <element name="productName" type="string"/>
                  <element name="vendorName" type="string"/>
                  <element name="productType" type="string" minOccurs="0"/>
                  <element name="salesUniqueId" type="string" minOccurs="0"/>
                  <element name="operatorUniqueName" type="string" minOccurs="0"/>
                  <element name="siteId" type="integer" minOccurs="0"/>
                  <element name="additionalInformation" type="string"
minOccurs="0"/>
                  <element name="hWList" type="xn:dnList" minOccurs="0"/>
                  <element name="sWList" type="xn:dnList" minOccurs="0"/>
                </all>
              </complexType>
            </element>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>

```

```

        <element name="lICList" type="xn:dnList" minOccurs="0"/>
        <element name="mFunction" type="xn:dn" minOccurs="0"/>
    </all>
</complexType>
</element>
<element ref="in:InventoryUnitNE" minOccurs="0" maxOccurs="unbounded"/>
</sequence>
</extension>
</complexContent>
</complexType>
</element>
<element name="InventoryUnitHw"
substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
                    <element name="attributes" minOccurs="0">
                        <complexType>
                            <all>
                                <element name="hwId" type="string"/>
                                <element name="hwType" type="string"/>
                                <element name="hwName" type="string" minOccurs="0"/>
                                <element name="vendorName" type="string" minOccurs="0"/>
                                <element name="hwVersion" type="string"/>
                                <element name="salesUniqueId" type="string" minOccurs="0"/>
                                <element name="hwUnitLocation" type="string"/>
                                <element name="model" type="string" minOccurs="0"/>
                                <element name="hwCapability" type="string" minOccurs="0"/>
                                <element name="modificationDate" type="string" minOccurs="0"/>
                                <element name="manualDataEntry" type="string" minOccurs="0"/>
                                <element name="additionalInformation" type="string"
minOccurs="0"/>
                                <element name="nEList" type="xn:dnList" minOccurs="0"/>
                                <element name="swList" type="xn:dnList" minOccurs="0"/>
                                <element name="lICList" type="xn:dnList" minOccurs="0"/>
                                <element name="mFunction" type="xn:dn" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <element ref="in:InventoryUnitHw" minOccurs="0" maxOccurs="unbounded"/>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>
<element name="InventoryUnitSw"
substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">
    <complexType>
        <complexContent>
            <extension base="xn:NrmClass">
                <sequence>
                    <element name="attributes" minOccurs="0">
                        <complexType>
                            <all>
                                <element name="swId" type="string"/>
                                <element name="swName" type="string" minOccurs="0"/>
                                <element name="vendorName" type="string" minOccurs="0"/>
                                <element name="swVersion" type="string" minOccurs="0"/>
                                <element name="salesUniqueId" type="string" minOccurs="0"/>
                                <element name="classification" type="string"/>
                                <element name="swInstallationTime" type="dateTime"
minOccurs="0"/>
                                <element name="swActivationTime" type="dateTime" minOccurs="0"/>
                                <element name="swStatus" type="string" minOccurs="0"/>
                                <element name="additionalInformation" type="string"
minOccurs="0"/>
                                <element name="nEList" type="xn:dnList" minOccurs="0"/>
                                <element name="hwList" type="xn:dnList" minOccurs="0"/>
                                <element name="lICList" type="xn:dnList" minOccurs="0"/>
                                <element name="mFunction" type="xn:dn" minOccurs="0"/>
                            </all>
                        </complexType>
                    </element>
                    <element ref="in:InventoryUnitSw" minOccurs="0" maxOccurs="unbounded"/>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
</element>

```

```

    </complexType>
  </element>
  <element name="InventoryUnitLic"
substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">
    <complexType>
      <complexContent>
        <extension base="xn:NrmClass">
          <sequence>
            <element name="attributes" minOccurs="0">
              <complexType>
                <all>
                  <element name="licId" type="string"/>
                  <element name="licType" type="string" minOccurs="0"/>
                  <element name="vendorName" type="string" minOccurs="0"/>
                  <element name="validity" type="string" minOccurs="0"/>
                  <element name="key" type="string" minOccurs="0"/>
                  <element name="licActivationTime" type="dateTime"
minOccurs="0"/>
                  <element name="licStatus" type="string" minOccurs="0"/>
                  <element name="salesUniqueId" type="string" minOccurs="0"/>
                  <element name="additionalInformation" type="string"
minOccurs="0"/>
                  <element name="nEList" type="xn:dnList" minOccurs="0"/>
                  <element name="hWList" type="xn:dnList" minOccurs="0"/>
                  <element name="sWList" type="xn:dnList" minOccurs="0"/>
                  <element name="mFunction" type="xn:dn" minOccurs="0"/>
                </all>
              </complexType>
            </element>
          </sequence>
        </extension>
      </complexContent>
    </complexType>
  </element>
</schema>

```

Annex B (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2014-06	SA#64	SP-140332	001	-	upgrade XSD	11.0.0	11.1.0
		SP-140358	002	-	remove the feature support statements		

History

Document history		
V11.0.0	January 2013	Publication
V11.1.0	July 2014	Publication