

ETSI TS 132 505 V9.2.0 (2010-07)

Technical Specification

**Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Self-configuration of network elements;
Integration Reference Point (IRP):
eXtensible Markup Language (XML) file format definition
(3GPP TS 32.505 version 9.2.0 Release 9)**



Reference

RTS/TSGS-0532505v920

Keywords

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Foreword

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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:

- 32.501: Self-Configuration of Network Elements; Concepts and Integration Reference Point (IRP) Requirements
- 32.502: Self-Configuration of Network Elements Integration Reference Point (IRP); Information Service (IS)
- 32.503: Self-Configuration of Network Elements Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)
- 32.505: Self-Configuration of Network Elements Integration Reference Point (IRP); eXtensible Markup Language (XML) file format definition.**

1 Scope

The present document is the "XML file format definition" of Self-Configuration IRP (SCIRP) for the IRP whose semantics are specified in Self-Configuration IRP Information Service (3GPP TS 32.502 [2]).

This file format definition specification is related to TS 32.502 V9.0.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 32.502: "Telecommunication management; Self-Configuration of Network Elements Integration Reference Point (IRP); Information Service (IS)".
- [3] W3C REC-xml-20001006: "Extensible Markup Language (XML) 1.0 (Second Edition)".
- [4] W3C REC-xmlschema-0-20010502: "XML Schema Part 0: Primer".
- [5] W3C REC-xmlschema-1-20010502: "XML Schema Part 1: Structures".
- [6] W3C REC-xmlschema-2-20010502: "XML Schema Part 2: Datatypes".
- [7] 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:

IRP: See 3GPP TS 32.150 [1].

IRPAgent: See 3GPP TS 32.150 [1].

IRPManager: See 3GPP TS 32.150 [1].

Self Configuration: The process which brings a network element into service requiring minimal human operator intervention or none at all.

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 [3]; in the scope of the present document.

XML declaration: it specifies the version of XML being used

NOTE: See [3].

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 [3].

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 [3].

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 [3].

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 [3].

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

NOTE: See [3].

XML attribute specification: has a name and a value

NOTE: See [3].

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

NOTE: See [3].

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 [4], [5] and [6].

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

NOTE: See [7], 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 [4], [5] and [6].

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 [4], [5] and [6].

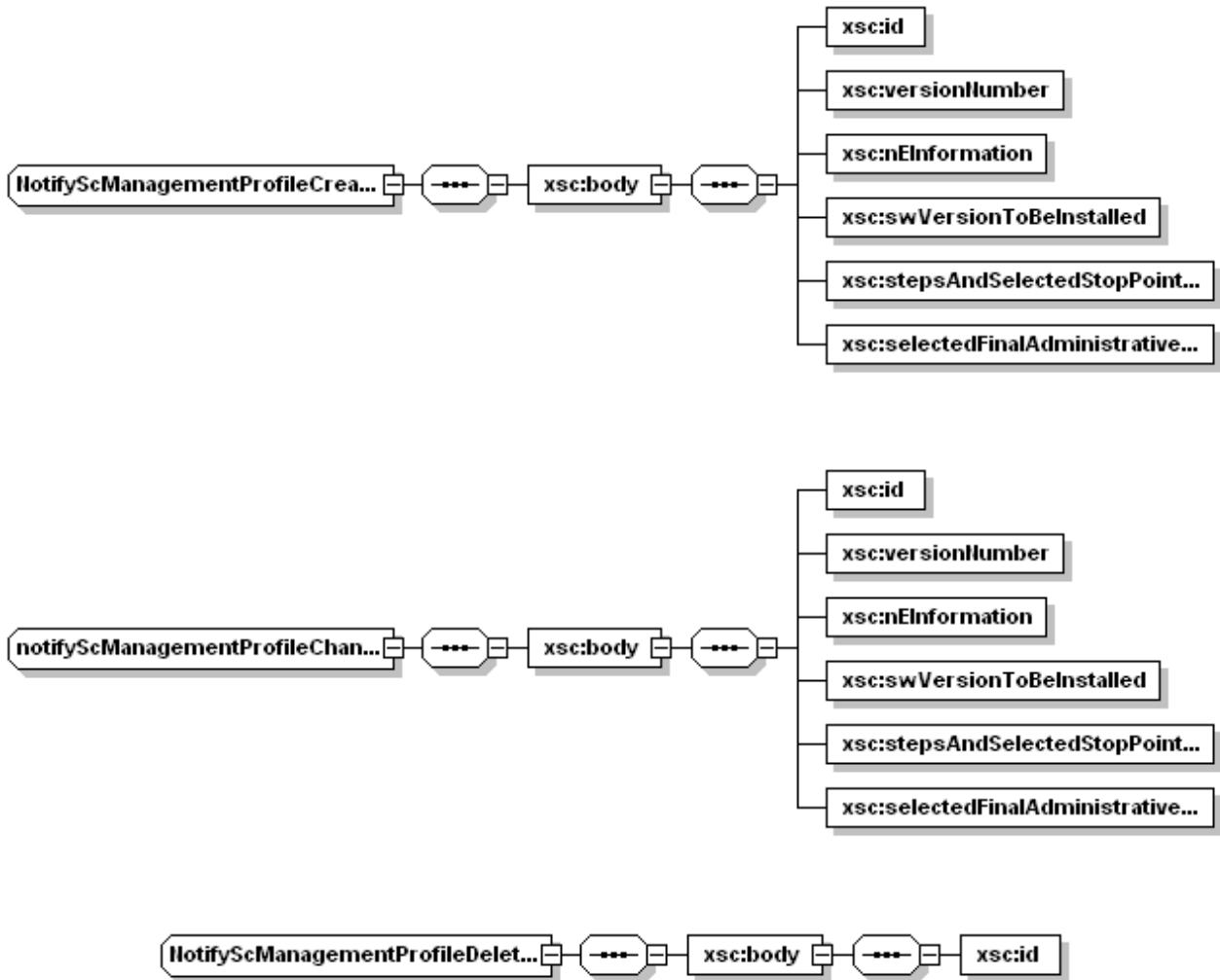
3.2 Abbreviations

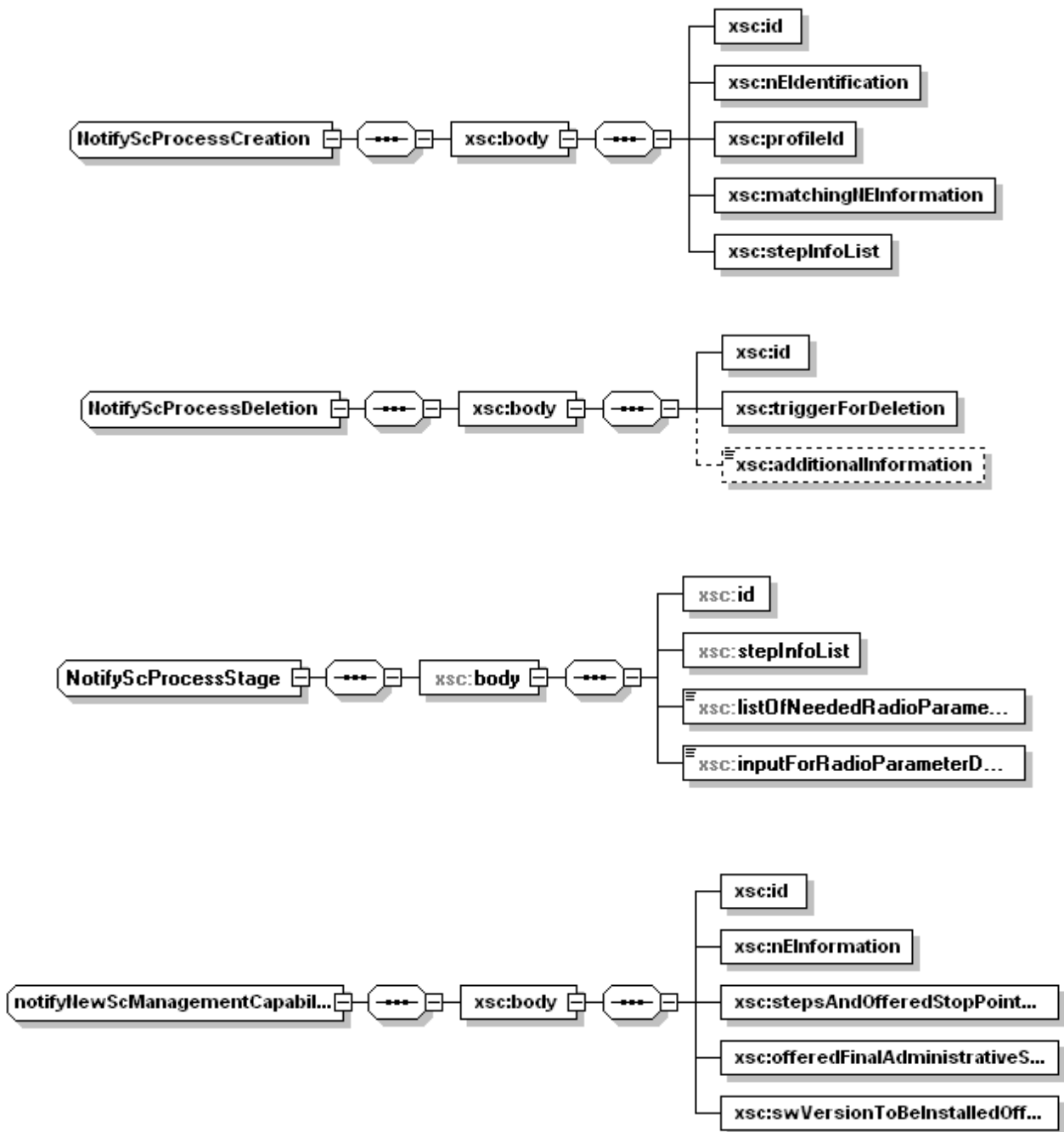
For the purposes of the present document, the following abbreviations apply:

SC	Self Configuration
XML	eXtensible Markup Language

4 Self Configuration IRP XML Definitions

4.1 Self Configuration notifications XML definition structure





4.2 Self Configuration IRP XML Schema for notifications (file name 'scIRPNotif.xsd')

```
<?xml version="1.0" encoding="UTF-8"?>
<!--
  3GPP TS 32.505 SCIRP Notification XML Schema
  scIRPNotif.xsd
-->
<schema targetNamespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.505#scnIRPNotif"
  xmlns:xsc="http://www.3gpp.org/ftp/specs/archive/32_series/32.505#scnIRPNotif"
  xmlns:swm="http://www.3gpp.org/ftp/specs/archive/32_series/32.535#swManagementIRPNotif"
  xmlns:xe="http://www.3gpp.org/ftp/specs/archive/32_series/32.305#notification"
  xmlns="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified"
  attributeFormDefault="unqualified">
  <import namespace="xe:Notification" schemaLocation="notification.xsd"/>
  <simpleType name="NeededRadioParameter">
```

```

    <restriction base="string"/>
  </simpleType>
  <simpleType name="SingleInputForRadioParameterDetermination">
    <restriction base="string"/>
  </simpleType>
  <complexType name="NotifyScManagementProfileCreation">
    <complexContent>
      <extension base="xe:Notification">
        <sequence>
          <element name="body">
            <complexType>
              <sequence>
                <element name="id" type="swm:Id"/>
                <element name="versionNumber" type="swm:VersionNumber"/>
                <element name="nEInformation" type="swm:NEInformation"/>
                <element name="swVersionToBeInstalled"
type="swm:SwVersionToBeInstalledConditional"/>
                <element name="stepsAndSelectedStopPointList"
type="swm:StepsAndSelectedStopPointList"/>
                <element name="selectedFinalAdministrativeState"
type="swm:FinalAdministrativeStateValue"/>
              </sequence>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
  <complexType name="NotifyScManagementProfileDeletion">
    <complexContent>
      <extension base="xe:Notification">
        <sequence>
          <element name="body">
            <complexType>
              <sequence>
                <element name="id" type="swm:Id"/>
              </sequence>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
  <complexType name="NotifyScProcessCreation">
    <complexContent>
      <extension base="xe:Notification">
        <sequence>
          <element name="body">
            <complexType>
              <sequence>
                <element name="id" type="swm:Id"/>
                <element name="nEIdentification" type="swm:Id"/>
                <element name="profileId" type="swm:ProfileId"/>
                <element name="matchingNEInformation" type="swm:NEInformation"/>
                <element name="stepInfoList" type="swm:StepInfoList"/>
              </sequence>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
  <complexType name="NotifyScProcessStage">
    <complexContent>
      <extension base="xe:Notification">
        <sequence>
          <element name="body">
            <complexType>
              <sequence>
                <element name="id" type="swm:Id"/>
                <element name="stepInfoList" type="swm:StepInfoList"/>
                <element name="listOfNeededRadioParameters"
type="xsc:NeededRadioParameter"/>
                <element name="inputForRadioParameterDetermination"
type="xsc:SingleInputForRadioParameterDetermination"/>
              </sequence>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>

```

```

    </sequence>
  </extension>
</complexContent>
</complexType>
<complexType name="NotifyScProcessDeletion">
  <complexContent>
    <extension base="xe:Notification">
      <sequence>
        <element name="body">
          <complexType>
            <sequence>
              <element name="id" type="swm:Id"/>
              <element name="triggerForDeletion" type="swm:TriggerForDeletion"/>
              <element name="additionalInformation" type="string" minOccurs="0"/>
            </sequence>
          </complexType>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
<complexType name="notifyNewScManagementCapabilityAvailability">
  <complexContent>
    <extension base="xe:Notification">
      <sequence>
        <element name="body">
          <complexType>
            <sequence>
              <element name="id" type="swm:Id"/>
              <element name="nEInformation" type="swm:NEInformation"/>
              <element name="stepsAndOfferedStopPointList"
type="swm:StepsAndOfferedStopPointList"/>
              <element name="offeredFinalAdministrativeStateInformation"
type="swm:OfferedFinalAdministrativeStateInformation"/>
              <element name="swVersionToBeInstalledOfferList"
type="swm:swVersionToBeInstalledOfferList"/>
            </sequence>
          </complexType>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
<complexType name="notifyScManagementProfileChange">
  <complexContent>
    <extension base="xe:Notification">
      <sequence>
        <element name="body">
          <complexType>
            <sequence>
              <element name="id" type="swm:Id"/>
              <element name="versionNumber" type="swm:VersionNumber"/>
              <element name="nEInformation" type="swm:NEInformation"/>
              <element name="swVersionToBeInstalled"
type="swm:SwVersionToBeInstalledConditional"/>
              <element name="stepsAndSelectedStopPointList"
type="swm:StepsAndSelectedStopPointList"/>
              <element name="selectedFinalAdministrativeState"
type="swm:FinalAdministrativeStateValue"/>
            </sequence>
          </complexType>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
<element name="notifyScManagementProfileCreation" type="swm:NotifyScManagementProfileCreation"/>
<element name="notifyScManagementProfileDeletion" type="swm:NotifyScManagementProfileDeletion"/>
<element name="notifyScManagementProcessCreation" type="swm:NotifyScManagementProcessCreation"/>
<element name="notifyScProcessStage" type="swm:NotifyScProcessStage"/>
<element name="notifyScManagementProcessDeletion" type="swm:NotifyScManagementProcessDeletion"/>
<element name="notifyNewScManagementCapabilityAvailability"
type="swm:notifyNewScManagementCapabilityAvailability"/>
<element name="notifyScManagementProfileChange" type="swm:NotifyScManagementProfileChange"/>
</schema>

```

4.3 Self Configuration XML Schema for IOCs (file name 'scIRPIOCs.xsd')

```

<?xml version="1.0" encoding="UTF-8"?>
<!--
3GPP TS 32.505 Self Configuration IRP IOC XML Schema
scIRPIOCs.xsd
-->
<schema xmlns="http://www.w3.org/2001/XMLSchema"
xmlns:xsc="http://www.3gpp.org/ftp/specs/archive/32_series/32.505#scIRPIOCs"
xmlns:xn="http://www.3gpp.org/ftp/specs/archive/32_series/32.535#swManagementIRPIOCs"
xmlns:ns1="http://www.3gpp.org/ftp/specs/archive/32_series/32.535#swManagementIRPIOCs"
targetNamespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.505#scIRPIOCs"
elementFormDefault="qualified" attributeFormDefault="unqualified">
  <import namespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.535#swManagementIRPIOCs"
schemaLocation="swManagementIRPIOCs.xsd"/>
  <simpleType name="id">
    <restriction/>
  </simpleType>
  <simpleType name="neInformation">
    <restriction/>
  </simpleType>
  <simpleType name="radioParameterName">
    <restriction base="string"/>
  </simpleType>
  <simpleType name="radioParameterValue">
    <restriction/>
  </simpleType>
  <simpleType name="FileLocation">
    <restriction base="string"/>
  </simpleType>
  <simpleType name="validationErrorInfo">
    <restriction base="string">
      <enumeration value="ParameterNotSupported"/>
      <enumeration value="InvalidParameter"/>
      <enumeration value="ValueNotSupported"/>
      <enumeration value="MissingParameterValue"/>
      <enumeration value="ConflictingParameterValue"/>
      <enumeration value="SemanticsError"/>
      <enumeration value="OtherError"/>
    </restriction>
  </simpleType>
  <simpleType name="VersionNumber">
    <restriction base="unsignedShort"/>
  </simpleType>
  <complexType name="ProfileId">
    <sequence>
      <element name="id" type="xsc:Id"/>
      <element name="versionNumber" type="xsc:VersionNumber"/>
    </sequence>
  </complexType>
  <simpleType name="FinalAdministrativeStateValue">
    <restriction base="string">
      <enumeration value="LOCKED"/>
      <enumeration value="UNLOCKED"/>
      <enumeration value="DETERMINED_BY_CONFIGURATION_DATA"/>
    </restriction>
  </simpleType>
  <complexType name="listOfNeededRadioParameters">
    <sequence>
      <element name="radioParameterName" type="xsci:radioParameterName"/>
      <element name="radioParameterValue" type="xsci:radioParameterValue"/>
    </sequence>
  </complexType>
  <complexType name="valuesOfNeededRadioParameter">
    <sequence>
      <element name="listOfNeededRadioParameters" type="xsci:listOfNeededRadioParameters"/>
    </sequence>
  </complexType>
  <complexType name="OfferedFinalAdministrativeStateInformation">
    <sequence>
      <element name="OfferedFinalAdministrativeStateValue"
type="xsc:FinalAdministrativeStateValue"/>
    </sequence>
  </complexType>
  <complexType name="StepsAndOfferedStopPointListEntry">

```

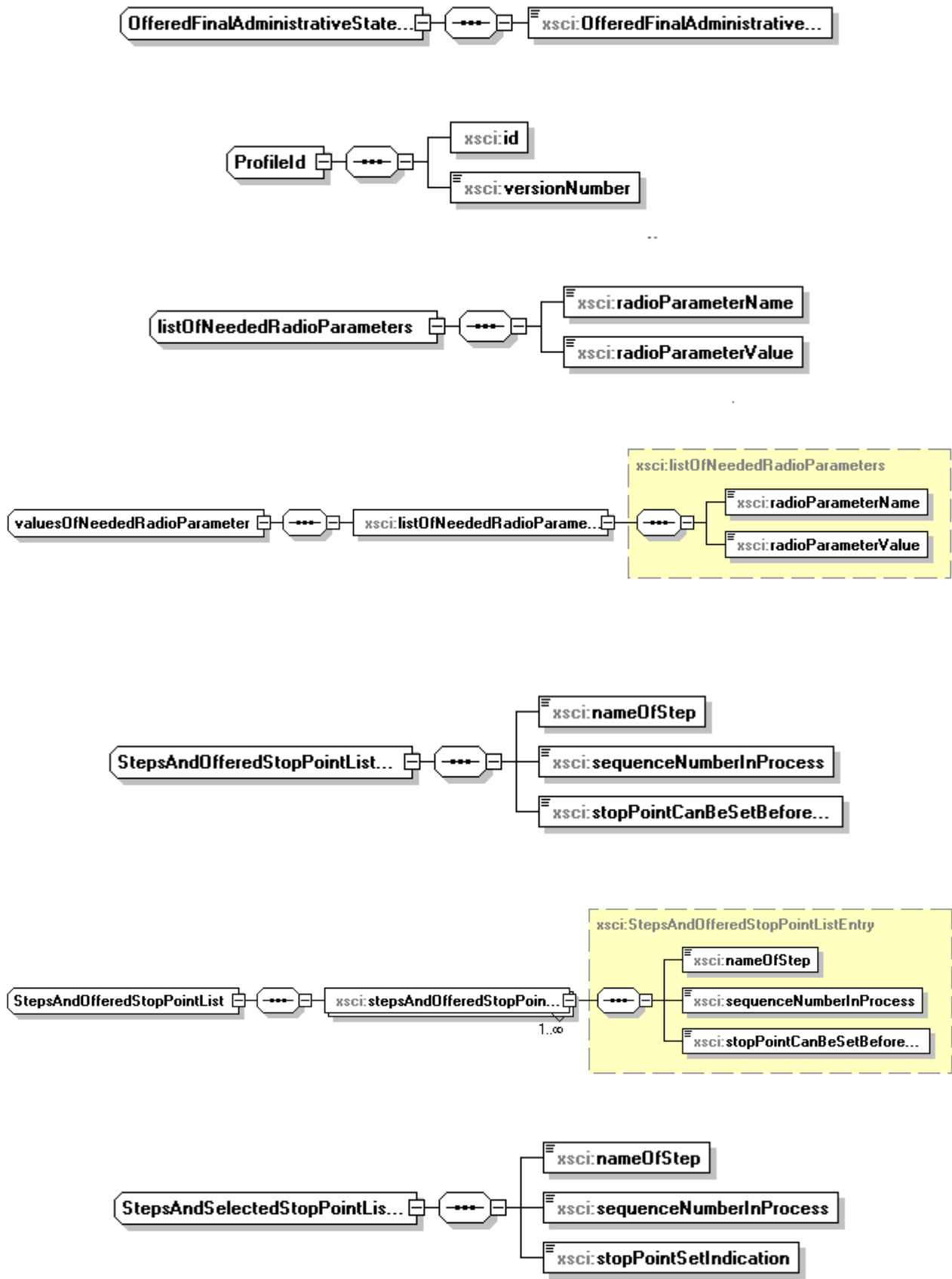
```

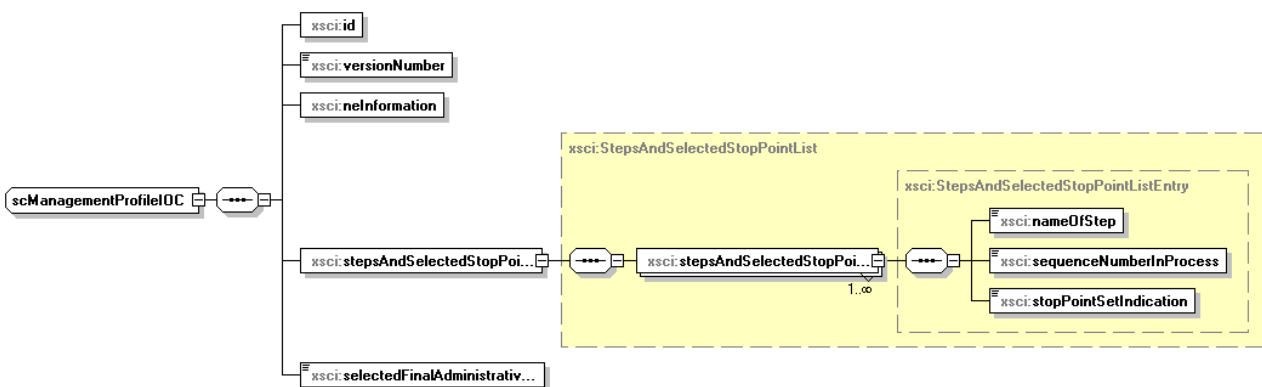
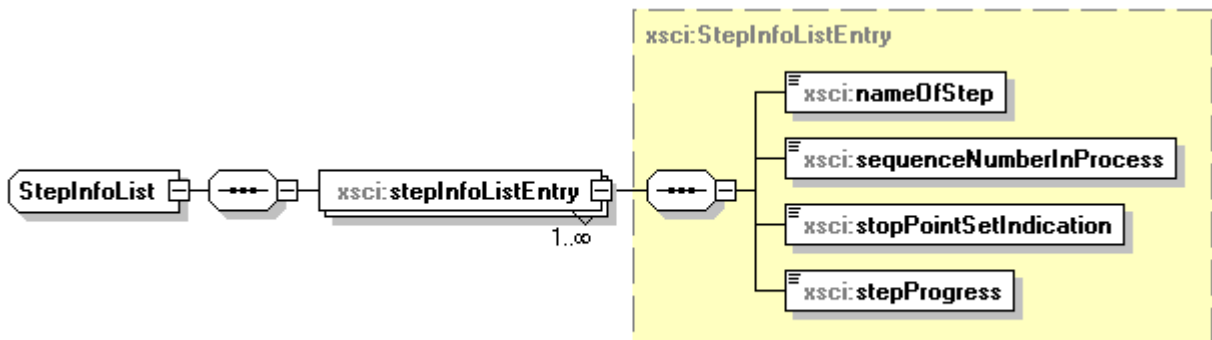
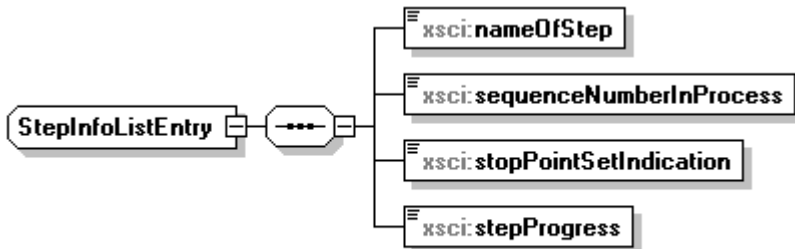
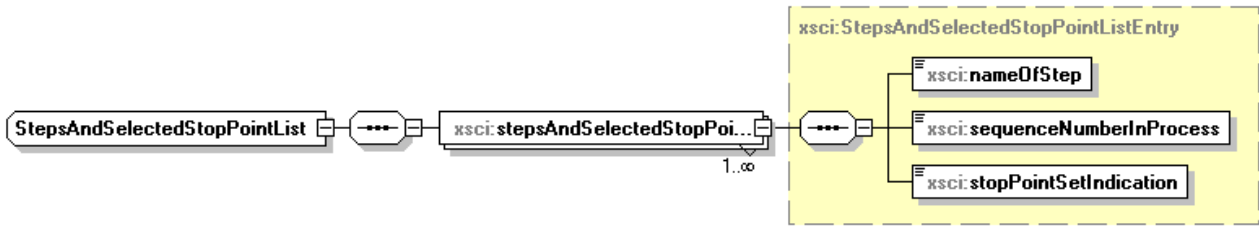
    <sequence>
      <element name="nameOfStep" type="xsc:NameOfStep"/>
      <element name="sequenceNumberInProgress" type="xsc:SequenceNumberInProgress"/>
      <element name="stopPointCanBeSetBeforeThisStep"
type="xsc:StopPointCanBeSetBeforeThisStep"/>
    </sequence>
  </complexType>
  <complexType name="StepsAndOfferedStopPointList">
    <sequence>
      <element name="stepsAndOfferedStopPointListEntry"
type="xsc:StepsAndOfferedStopPointListEntry" maxOccurs="unbounded"/>
    </sequence>
  </complexType>
  <simpleType name="StopPointCanBeSetBeforeThisStep">
    <restriction base="boolean"/>
  </simpleType>
  <complexType name="StepsAndSelectedStopPointListEntry">
    <sequence>
      <element name="nameOfStep" type="xsc:NameOfStep"/>
      <element name="sequenceNumberInProgress" type="xsc:SequenceNumberInProgress"/>
      <element name="stopPointSetIndication" type="xsc:StopPointSetIndication"/>
    </sequence>
  </complexType>
  <complexType name="StepsAndSelectedStopPointList">
    <sequence>
      <element name="stepsAndSelectedStopPointListEntry"
type="xsc:StepsAndSelectedStopPointListEntry" maxOccurs="unbounded"/>
    </sequence>
  </complexType>
  <simpleType name="StopPointSetIndication">
    <restriction base="string">
      <enumeration value="STOP_POINT_IS_SET_BEFORE_THIS_STEP"/>
      <enumeration value="STOP_POINT_IS_NOT_SET"/>
    </restriction>
  </simpleType>
  <simpleType name="SequenceNumberInProgress">
    <restriction base="unsignedShort"/>
  </simpleType>
  <simpleType name="NameOfStep">
    <restriction base="string">
      <enumeration value="SW_DOWNLOAD"/>
      <enumeration value="SW_INSTALLATION"/>
      <enumeration value="SW_ACTIVATION"/>
      <enumeration value="PREPARE_BASIC_CONFIGURATION_AND_OAMLINK"/>
      <enumeration value="RETRIEVE_CONFIGURATION_DATA"/>
      <enumeration value="SETUP_PRECONFIGURED_SIGNALLING_LINKS"/>
      <enumeration value="SET_FINAL_STATE_OF_NE "/>
    </restriction>
  </simpleType>
  <simpleType name="StepProgress">
    <restriction base="string">
      <enumeration value="NOT_YET_STARTED"/>
      <enumeration value="RUNNING"/>
      <enumeration value="COMPLETED"/>
      <enumeration value="AWAITING_RESUME"/>
      <enumeration value="FAILURE"/>
      <enumeration value="TERMINATED"/>
    </restriction>
  </simpleType>
  <complexType name="StepInfoListEntry">
    <sequence>
      <element name="nameOfStep" type="xsc:NameOfStep"/>
      <element name="sequenceNumberInProgress" type="xsc:SequenceNumberInProgress"/>
      <element name="stopPointSetIndication" type="xsc:StopPointSetIndication"/>
      <element name="stepProgress" type="xsc:StepProgress"/>
    </sequence>
  </complexType>
  <complexType name="StepInfoList">
    <sequence>
      <element name="stepInfoListEntry" type="xsc:StepInfoListEntry" maxOccurs="unbounded"/>
    </sequence>
  </complexType>
  <complexType name="scManagementCapabilityIOC">
    <sequence>
      <element name="id" type="xsc:Id"/>
      <element name="neInformation" type="xsc:NEInformation"/>
      <element name="stepsAndOfferedStopPointList" type="xsc:StepsAndOfferedStopPointList"/>
    </sequence>
  </complexType>

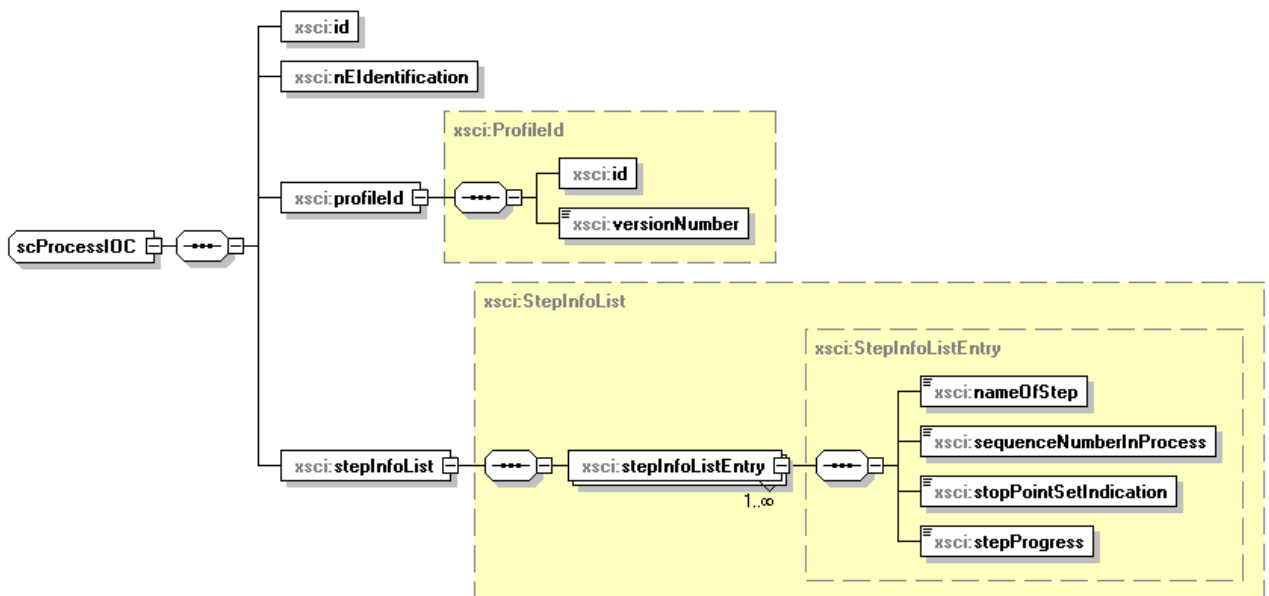
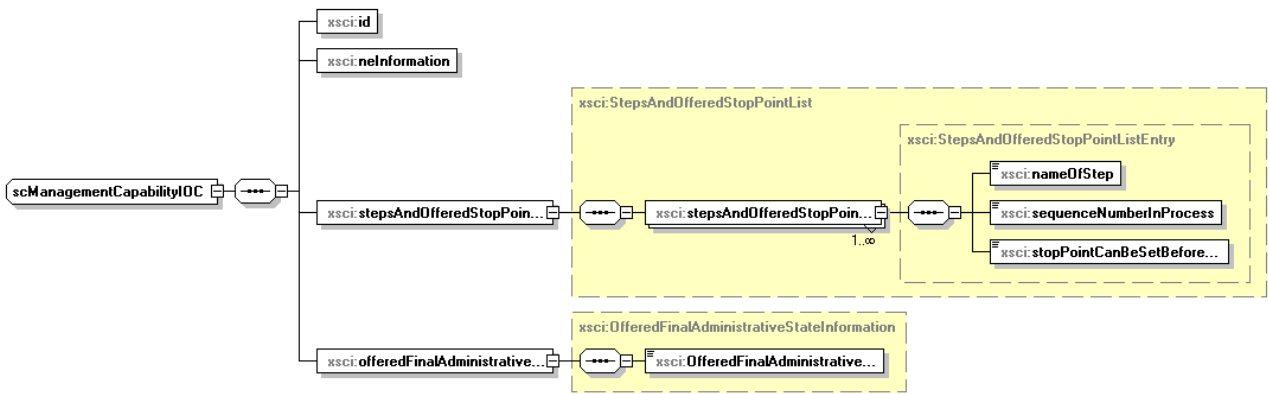
```

```
        <element name="offeredFinalAdministrativeStateInformation"
type="xsc:OfferedFinalAdministrativeStateInformation"/>
      </sequence>
    </complexType>
  <complexType name="scManagementProfileIOC">
    <sequence>
      <element name="id" type="xsc:Id"/>
      <element name="versionNumber" type="xsc:VersionNumber"/>
      <element name="neInformation" type="xsc:NEInformation"/>
      <element name="stepsAndSelectedStopPointList" type="xsc:StepsAndSelectedStopPointList"/>
      <element name="selectedFinalAdministrativeState"
type="xsc:FinalAdministrativeStateValue"/>
    </sequence>
  </complexType>
  <complexType name="scProcessIOC">
    <sequence>
      <element name="id" type="xsc:Id"/>
      <element name="neIdentification" type="xsc:NEInformation"/>
      <element name="profileId" type="xsc:ProfileId"/>
      <element name="stepInfoList" type="xsc:StepInfoList"/>
    </sequence>
  </complexType>
</schema>
```

4.4 Self Configuration IRP IOC XML definition structure

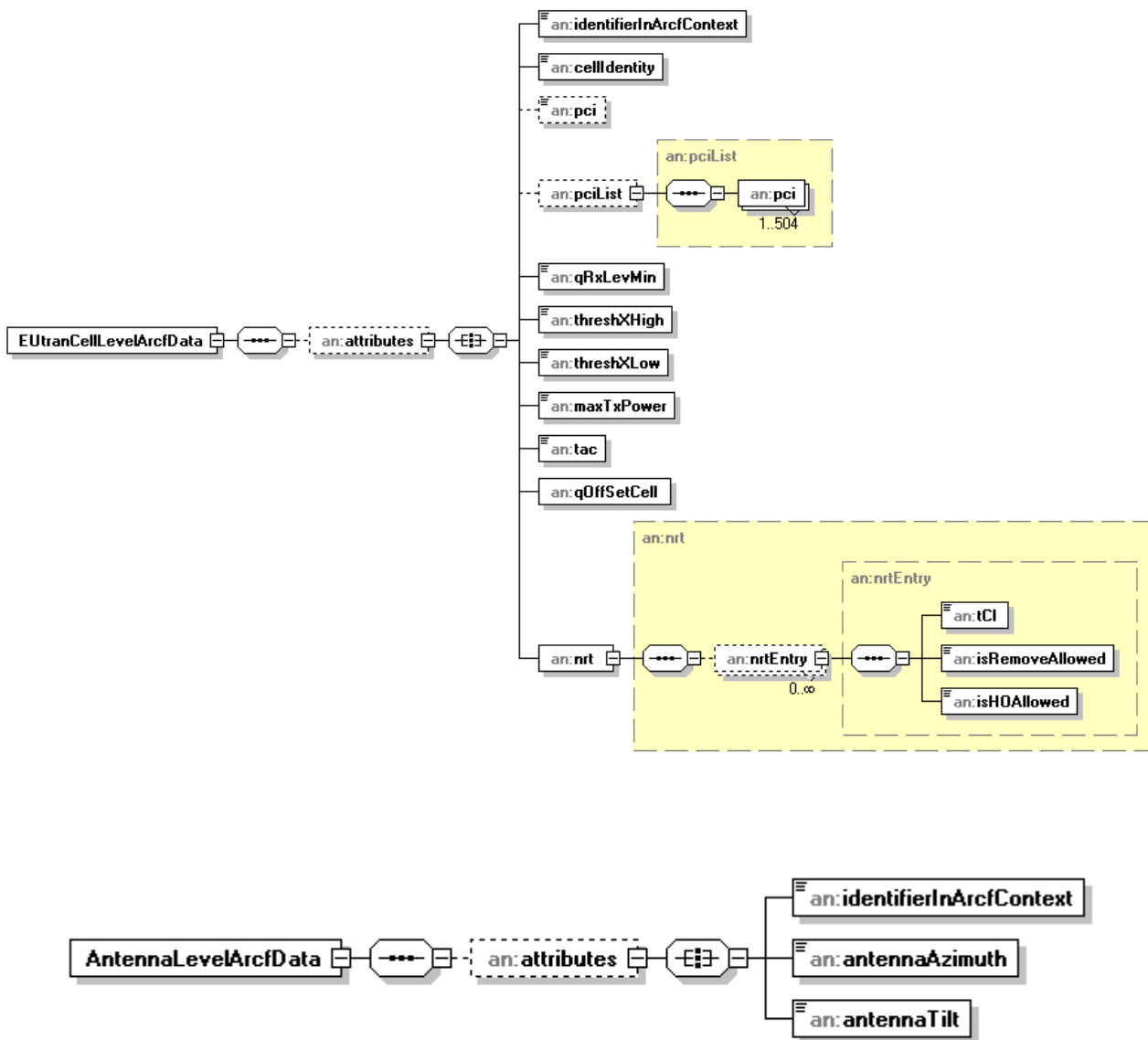


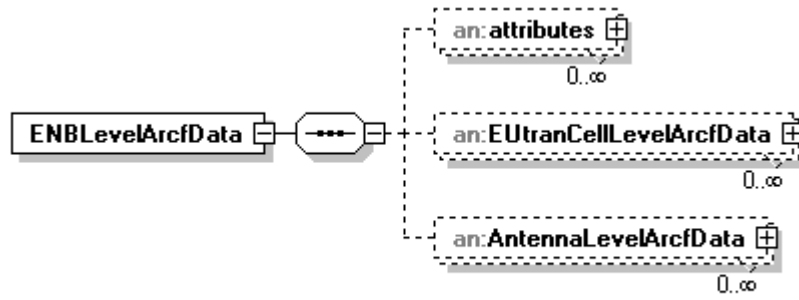




4.5 ARCF NRM XML definition structure

Remark: These definitions are to be used only embedded into SOAP operations defined by Self-Configuration IRP SOAP solution set or by Bulk CM IRP or FT IRP during self-configuration,





The same definition structure applies for ENBLevelArcfData2, EUTranCellLevelArcfData2 and AntennaLevelArcfData2.

4.6 ARCF XML Schemas for IOCs

4.6.1 ARCF XML Schema for operation resumeScProcessWithArcfData and usage of FT IRP (file name 'arcfNrm.xsd')

```

<?xml version="1.0" encoding="UTF-8"?>
<!--
  3GPP TS 32.505 ARCF Network Resource Model IRP
  XML schema definition
  arcfNrm.xsd
-->
<schema xmlns="http://www.w3.org/2001/XMLSchema"
  xmlns:xn="http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"
  xmlns:en="http://www.3gpp.org/ftp/specs/archive/32_series/32.765#eutranNrm"
  xmlns:an="http://www.3gpp.org/ftp/specs/archive/32_series/32.505#arcfNrm"
  targetNamespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.505#arcfNrm"
  elementFormDefault="qualified">
  <import namespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"/>
  <import namespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.765#eutranNrm"/>
  <simpleType name="identifierInArcfContext">
    <restriction base="string"/>
  </simpleType>
  <simpleType name="cellIdentity">
    <restriction base="en:cellIdentity"/>
  </simpleType>
  <simpleType name="pci">
    <restriction base="en:pci">
      <maxInclusive value="503"/>
      <!-- Minimum value is 0, maximum value is 3x167+2=503 -->
    </restriction>
  </simpleType>
  <complexType name="pciList">
    <sequence>
      <element name="pci" type="en:Pci" maxOccurs="504"/>
    </sequence>
  </complexType>
  <simpleType name="qRxLevMin">
    <restriction base="short">
      <minInclusive value="-70"/>
      <maxInclusive value="-22"/>
    </restriction>
  </simpleType>
  <simpleType name="threshXHigh">
    <restriction base="short"/>
  </simpleType>
  <simpleType name="threshXLow">
    <restriction base="short"/>
  </simpleType>
  <simpleType name="maxTxPower">
    <restriction base="short"/>
  </simpleType>
  <simpleType name="tac">
    <restriction base="short"/>
  </simpleType>
  <simpleType name="antennaAzimuth">
    <restriction base="short"/>
  </simpleType>
  <simpleType name="antennaTilt">
    <restriction base="short"/>
  </simpleType>
  <simpleType name="qOffsetCell">
    <restriction base="string">
      <enumeration value="dB-24"/>
      <enumeration value="dB-22"/>
      <enumeration value="dB-20"/>
      <enumeration value="dB-18"/>
      <enumeration value="dB-16"/>
      <enumeration value="dB-14"/>
      <enumeration value="dB-12"/>
      <enumeration value="dB-10"/>
      <enumeration value="dB-8"/>
      <enumeration value="dB-6"/>
    </restriction>
  </simpleType>

```

```

    <enumeration value="dB-5"/>
    <enumeration value="dB-4"/>
    <enumeration value="dB-3"/>
    <enumeration value="dB-2"/>
    <enumeration value="dB-1"/>
    <enumeration value="dB-0"/>
    <enumeration value="dB1"/>
    <enumeration value="dB2"/>
    <enumeration value="dB3"/>
    <enumeration value="dB4"/>
    <enumeration value="dB5"/>
    <enumeration value="dB6"/>
    <enumeration value="dB8"/>
    <enumeration value="dB10"/>
    <enumeration value="dB12"/>
    <enumeration value="dB14"/>
    <enumeration value="dB16"/>
    <enumeration value="dB18"/>
    <enumeration value="dB20"/>
    <enumeration value="dB22"/>
    <enumeration value="dB24"/>
  </restriction>
</simpleType>
<complexType name="nrtEntry">
  <sequence>
    <element name="tCI" type="long"/>
    <element name="isRemoveAllowed" type="boolean"/>
    <element name="isHOAllowed" type="boolean"/>
  </sequence>
</complexType>
<complexType name="nrt">
  <sequence>
    <element name="nrtEntry" type="an:nrtEntry" minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
</complexType>
<element name="EUTranCellLevelArcfData">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="identifierInArcfContext"
type="an:identifierInArcfContext"/>
                <element name="cellIdentity" type="an:cellIdentity"/>
                <element name="pci" type="an:pci" minOccurs="0"/>
                <element name="pciList" type="an:pciList" minOccurs="0"/>
                <element name="qRxLevMin" type="an:qRxLevMin"/>
                <element name="threshXHigh" type="an:threshXHigh"/>
                <element name="threshXLow" type="an:threshXLow"/>
                <element name="maxTxPower" type="an:maxTxPower"/>
                <element name="tac" type="an:tac"/>
                <element name="qOffSetCell" type="an:qOffSetCell"/>
                <element name="nrt" type="an:nrt"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>
<element name="AntennaLevelArcfData">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="identifierInArcfContext"
type="an:identifierInArcfContext"/>
                <element name="antennaAzimuth" type="an:antennaAzimuth"/>
                <element name="antennaTilt" type="an:antennaTilt"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>

```

```

        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>
<element name="ENBLevelArcfData">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0" maxOccurs="unbounded">
            <complexType>
              <all>
                <element name="identifierInArcfContext"
type="an:identifierInArcfContext"/>
              </all>
            </complexType>
          </element>
          <element name="EUTranCellLevelArcfData" minOccurs="0" maxOccurs="unbounded">
            <complexType>
              <complexContent>
                <extension base="xn:NrmClass">
                  <sequence>
                    <element name="attributes" minOccurs="0">
                      <complexType>
                        <all>
                          <element name="identifierInArcfContext"
type="an:identifierInArcfContext"/>
                          <element name="cellIdentity"
type="an:cellIdentity"/>
                          <element name="pci" type="an:pci"
minOccurs="0"/>
                          <element name="pciList" type="an:pciList"
minOccurs="0"/>
                          <element name="qRxLevMin"
type="an:qRxLevMin"/>
                          <element name="threshXHigh"
type="an:threshXHigh"/>
                          <element name="threshXLow"
type="an:threshXLow"/>
                          <element name="maxTxPower"
type="an:maxTxPower"/>
                          <element name="tac" type="an:tac"/>
                          <element name="qOffSetCell"
type="an:qOffSetCell"/>
                          <element name="nrt" type="an:nrt"/>
                        </all>
                      </complexType>
                    </element>
                  </sequence>
                </extension>
              </complexContent>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>
<element name="AntennaLevelArcfData" minOccurs="0" maxOccurs="unbounded">
  <complexType>
    <complexContent>
      <extension base="xn:NrmClass">
        <sequence>
          <element name="attributes" minOccurs="0">
            <complexType>
              <all>
                <element name="identifierInArcfContext"
type="an:identifierInArcfContext"/>
                <element name="antennaAzimuth"
type="an:antennaAzimuth"/>
                <element name="antennaTilt"
type="an:antennaTilt"/>
              </all>
            </complexType>
          </element>
        </sequence>
      </extension>
    </complexContent>
  </complexType>
</element>
</sequence>
</extension>
</complexContent>
</complexType>
</element>
</sequence>
</extension>
</complexContent>
</complexType>

```

```
        </complexContent>  
      </complexType>  
    </element>  
</schema>
```

4.6.2 ARCF XML Schema for bulkCMIRP usage (file name ' arcfNrm2.xsd ')

Not available in this release.

Annex A (informative):
Void

Annex B (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Dec 2009	SA#46	SP-0907355	--	--	Presentation to SA for Information and approval	--	1.0.0
Dec 2009	--	--	--	--	Publication	1.0.0	8.0.0
Dec 2009	-	-	-	-	Update to Rel-9 version	8.0.0	9.0.0
Mar 2010	SA#47	SP-100034	006	--	Correction of XML definitions structure of Self Configuration IOC	9.0.0	9.1.0
Mar 2010	SA#47	SP-100034	009	--	Add XML definitions structure diagram of Self Configuration Notifications	9.0.0	9.1.0
Jun 2010	SA#48	SP-100261	0010	-	Alignment of XML with TS 32.502 for ARCF	9.1.0	9.2.0

History

Document history		
V9.0.0	February 2010	Publication
V9.1.0	April 2010	Publication
V9.2.0	July 2010	Publication