**3GPP TSG-SA5 Meeting #131e *S5-203133Rev1***

**e-meeting 25th May-3rd June 2020**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **541** | **CR** | **295** | **rev** | **-** | **Current version:** | **1** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Correct NRM definition in XML solution | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CATT | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eNRM | | | | |  | ***Date:*** | | | 2020-05-03 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-16 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) Rel-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | There need a clean baseline for stage 3 XSD solutions | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Fix the XSD validation errors. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | 1. CI in Forge could not work  2. Incorrect specification potentially leading to incorrect implementations | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | C.4.3, F.4.3, I.4.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | Refer to https://forge.etsi.org/rep/3GPP/SA5/data-models/tree/Shumin\_XSD\_from\_specs\_approved\_at\_SA87 | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

|  |
| --- |
| **1st Modified Section** |

## C.4.3 XML schema "nRNrm.xsd"

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

<!--

3GPP TS 28.541 NR Network Resource Model

XML schema definition

nrNrm.xsd

-->

<schema xmlns="http://www.w3.org/2001/XMLSchema"

xmlns:xn="http://www.3gpp.org/ftp/specs/archive/28\_series/28.623#genericNrm"

xmlns:nn="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#nrNrm"

xmlns:en="http://www.3gpp.org/ftp/specs/archive/28\_series/28.659#eutranNrm"

xmlns:epc="http://www.3gpp.org/ftp/specs/archive/28\_series/28.709#epcNrm"

xmlns:sm="http://www.3gpp.org/ftp/specs/archive/28\_series/28.626#stateManagementIRP"

xmlns:ngc="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#ngcNrm"

xmlns:sp="http://www.3gpp.org/ftp/specs/archive/28\_series/28.629#sonPolicyNrm"

targetNamespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#nrNrm" elementFormDefault="qualified">

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.623#genericNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.709#epcNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.626#stateManagementIRP"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#ngcNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.629#sonPolicyNrm"/>

<simpleType name="GnbId">

<restriction base="unsignedLong">

<maxInclusive value="4294967295"/>

</restriction>

</simpleType>

<simpleType name="GnbIdLength">

<restriction base="integer">

<minLength value="22"/>

<maxLength value="32"/>

</restriction>

</simpleType>

<simpleType name="Nci">

<restriction base="unsignedLong">

<maxInclusive value="68719476735"/>

</restriction>

</simpleType>

<simpleType name="Pci">

<restriction base="unsignedShort">

<maxInclusive value="503"/>

<!-- Minimum value is 0, maximum value is 3x167+2=503 -->

</restriction>

</simpleType>

<simpleType name="NrTac">

<restriction base="unsignedLong">

<maxInclusive value="16777215"/>

<!--5G TAC is 3-octets length -->

</restriction>

</simpleType>

<simpleType name="GnbDuId">

<restriction base="unsignedLong">

<maxInclusive value="68719476735"/>

<!-- Minimum value is 0, maximum value is 2^36-1=68719476735 -->

</restriction>

</simpleType>

<simpleType name="GnbCuupId">

<restriction base="unsignedLong">

<maxInclusive value="68719476735"/>

<!-- Minimum value is 0, maximum value is 2^36-1=68719476735 -->

</restriction>

</simpleType>

<simpleType name="GnbName">

<restriction base="string">

<minLength value="1"/>

<maxLength value="150"/>

</restriction>

</simpleType>

<simpleType name="CyclicPrefix">

<restriction base="integer">

<enumeration value="15"/>

<enumeration value="30"/>

<enumeration value="60"/>

<enumeration value="120"/>

</restriction>

</simpleType>

<simpleType name="QuotaType">

<restriction base="string">

<enumeration value="STRICT"/>

<enumeration value="FLOAT"/>

</restriction>

</simpleType>

<simpleType name="CellState">

<restriction base="string">

<enumeration value="IDLE"/>

<enumeration value="INACTIVE"/>

<enumeration value="ACTIVE"/>

</restriction>

</simpleType>

<simpleType name="BwpContext">

<restriction base="string">

<enumeration value="DL"/>

<enumeration value="UL"/>

<enumeration value="SUL"/>

</restriction>

</simpleType>

<simpleType name="IsInitialBwp">

<restriction base="string">

<enumeration value="INITIAL"/>

<enumeration value="OTHER"/>

</restriction>

</simpleType>

<simpleType name="qOffsetRangeList">

<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"/>

<enumeration value="dB-5"/>

<enumeration value="dB-4"/>

<enumeration value="dB-3"/>

<enumeration value="dB-2"/>

<enumeration value="dB-1"/>

<enumeration value="dB0"/>

<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>

<simpleType name="cellReselectionPriority">

<restriction base="unsignedLong">

<minInclusive value="0"/>

<maxInclusive value="16"/>

<!--Value 0 means lowest priority-->

</restriction>

</simpleType>

<simpleType name="cellReselectionSubPriority">

<restriction base="unsignedLong">

<minInclusive value="0"/>

<maxInclusive value="16"/>

<!--Value 0 means lowest priority-->

</restriction>

</simpleType>

<simpleType name="PMaxRangeType">

<restriction base="short">

<minInclusive value="-30"/>

<maxInclusive value="33"/>

</restriction>

</simpleType>

<simpleType name="qOffsetFreq">

<restriction base="short">

<minInclusive value="-24"/>

<maxInclusive value="24"/>

</restriction>

</simpleType>

<simpleType name="qQualMin">

<restriction base="integer">

<minInclusive value="-34"/>

<maxInclusive value="0"/>

</restriction>

</simpleType>

<simpleType name="qRxLevMin">

<restriction base="integer">

<minInclusive value="-140"/>

<maxInclusive value="-44"/>

</restriction>

</simpleType>

<simpleType name="Thresxhighp">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="62"/>

</restriction>

</simpleType>

<simpleType name="Threshxhighq">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="31"/>

</restriction>

</simpleType>

<simpleType name="Threshxlowp">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="62"/>

</restriction>

</simpleType>

<simpleType name="Threshxlowq">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="62"/>

</restriction>

</simpleType>

<simpleType name="Treselectionnr">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="7"/>

</restriction>

</simpleType>

<simpleType name="Treselectionnrsfhigh">

<restriction base="string">

<enumeration value="25"/>

<enumeration value="50"/>

<enumeration value="75"/>

<enumeration value="100"/>

</restriction>

</simpleType>

<simpleType name="Treselectionnrsfmedium">

<restriction base="string">

<enumeration value="25"/>

<enumeration value="50"/>

<enumeration value="75"/>

<enumeration value="100"/>

</restriction>

</simpleType>

<simpleType name="Absolutefrequencyssb">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="3279165"/>

</restriction>

</simpleType>

<simpleType name="Ssbsubcarrierspacing">

<restriction base="string">

<enumeration value="15"/>

<enumeration value="30"/>

<enumeration value="120"/>

<enumeration value="240"/>

</restriction>

</simpleType>

<simpleType name="Multifrequencybandlistnr">

<restriction base="integer">

<minInclusive value="1"/>

<maxInclusive value="256"/>

</restriction>

</simpleType>

<simpleType name="beamType">

<restriction base="string">

<enumeration value="SSB-BEAM"/>

</restriction>

</simpleType>

<simpleType name="beamAzimuth">

<restriction base="integer">

<minInclusive value="-1800"/>

<maxInclusive value="1800"/>

</restriction>

</simpleType>

<simpleType name="beamTilt">

<restriction base="integer">

<minInclusive value="-900"/>

<maxInclusive value="900"/>

</restriction>

</simpleType>

<simpleType name="beamHorizWidth">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="3599"/>

</restriction>

</simpleType>

<simpleType name="beamVertWidth">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="1800"/>

</restriction>

</simpleType>

<simpleType name="coverageShapeType">

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="65535"/>

</restriction>

</simpleType>

<simpleType name="resourceType">

<restriction base="string">

<enumeration value="PRB"/>

<enumeration value="RRC"/>

<enumeration value="DRB"/>

</restriction>

</simpleType>

<complexType name="LocalEndPoint">

<sequence>

<element name="ipv4Address" type="string"/>

<element name="ipv6Address" type="string"/>

<element name="ipv6Prefix" type="string"/>

<element name="vlanId" type="integer"/>

</sequence>

</complexType>

<complexType name="RemoteEndPoint">

<sequence>

<element name="ipv4Address" type="string"/>

<element name="ipv6Address" type="string"/>

<element name="ipv6Prefix" type="string"/>

</sequence>

</complexType>

<complexType name="blackListEntry">

<sequence minOccurs="0" maxOccurs="1007">

<element name="pci" type="en:Pci" maxOccurs="504"/>

</sequence>

</complexType>

<complexType name="blackListEntryIdleMode">

<sequence minOccurs="0" maxOccurs="1007">

<element name="pci" type="en:Pci" maxOccurs="504"/>

</sequence>

</complexType>

<complexType name="PLMNIdList">

<sequence>

<element name="pLMNId" type="en:PLMNId" maxOccurs="6"/>

<!-- The first pLMNId of the pLMNIdList is primary PLMN id -->

</sequence>

</complexType>

<complexType name="cellIndividualOffset">

<sequence>

<element name="rsrpOffsetSSB" type="qOffsetRangeList"/>

<element name="rsrqOffsetSSB" type="qOffsetRangeList"/>

<element name="sinrOffsetSSB" type="qOffsetRangeList"/>

<element name="rsrpOffsetCSI-RS" type="qOffsetRangeList"/>

<element name="rsrqOffsetCSI-RS" type="qOffsetRangeList"/>

<element name="sinrOffsetCSI-RS" type="qOffsetRangeList"/>

</sequence>

</complexType>

<complexType name="PLMNInfoType">

<sequence>

<element name="pLMNId" type="en:PLMNId"/>

<element name="sNSSAI" type="ngc:SNssai" minOccurs="0"/>

</sequence>

</complexType>

<complexType name="PLMNInfoListType">

<sequence>

<element name="pLMNInfo" type="PLMNInfoType" minOccurs="1"/>

</sequence>

</complexType>

<element name="GNBDUFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction-->

<element name="gnbId" type="nn:GnbId"/>

<element name="gnbIdLength" type="nn:GnbIdLength"/>

<element name="gnbDUId" type="nn:GnbDuId"/>

<element name="gnbDuName" type="nn:GnbName" minOccurs="0"/>

<element name="x2Blacklist" type="xn:dnList" minOccurs="0"/>

<element name="x2Whitelist" type="xn:dnList" minOccurs="0"/>

<element name="xnBlacklist" type="xn:dnList" minOccurs="0"/>

<element name="xnWhitelist" type="xn:dnList" minOccurs="0"/>

<element name="x2XnHOBlackList" type="xn:dnList" minOccurs="0"/>

<element name="aggressorSetID" type="nn:AggressorSetID"/>

<element name="victimSetID" type="nn:VictimSetID"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="nn:NRCellDU"/>

<element ref="nn:BWP"/>

<element ref="nn:NRSectorCarrier"/>

<element ref="nn:EP\_F1C"/>

<element ref="nn:EP\_F1U"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="GNBCUCPFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction-->

<element name="gnbId" type="nn:GnbId" />

<element name="gnbIdLength" type="nn:GnbIdLength"/>

<element name="gnbCuName" type=" nn:GnbName" minOccurs="0"/>

<element name="pLMNId" type="en:PLMNId" />

<element name="x2Blacklist" type="xn:dnList" minOccurs="0"/>

<element name="x2Whitelist" type="xn:dnList" minOccurs="0"/>

<element name="xnBlacklist" type="xn:dnList" minOccurs="0"/>

<element name="xnWhitelist" type="xn:dnList" minOccurs="0"/>

<element name="x2XnHOBlackList" type="xn:dnList" minOccurs="0"/>

<element name="mappingSetIDBackhaulAddress" type="MappingSetIDBackhaulAddress" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="nn:NRCellCU"/>

<element ref="nn:EP\_F1C"/>

<element ref="nn:EP\_E1"/>

<element ref="nn:EP\_XnC"/>

<element ref="nn:EP\_X2C"/>

<element ref="nn:EP\_NgC"/>

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="GNBCUUPFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction-->

<element name="gNBCUUPId" type="nn:GnbCuupId "/>

<element name="pLMNInfoList" type="PLMNInfoListType"/>

<element name="gNBId" type="nn:GnbId"/>

<element name="gnbIdLength" type="nn:GnbIdLength"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="nn:EP\_E1"/>

<element ref="nn:EP\_F1U"/>

<element ref="nn:EP\_XnU"/>

<element ref="nn:EP\_NgU"/>

<element ref="nn:EP\_X2U"/>

<element ref="nn:EP\_S1U"/>

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NRCellCU">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction-->

<element name="nCGI" type="nn:Ncgi"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sNSSAIList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="nRFrequencyRef" type="xn:dn" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

<element ref="nRCellRelation"/>

<element ref="nRFreqRelation"/>

<element ref="eUtranCellRelation"/>

<element ref="eUtranFreqRelation"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref= "RRMPolicyRatio"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NRCellDU">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction-->

<element name="nCGI" type="nn:Ncgi" minOccurs="0"/>

<element name="operationalState" type="sm:operationalStateType" minOccurs="0"/>

<element name="administrativeState" type="sm:administrativeStateType" minOccurs="0"/>

<element name="cellState" type="nn:CellState"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sNSSAIList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="nRpci" type="nn:Pci" />

<element name="nRTac" type="nn:NrTac" />

<element name="arfcnDL" type="integer"/>

<element name="arfcnUL" type="integer" minOccurs="0"/>

<element name="arfcnSUL" type="integer" minOccurs="0"/>

<element name="bSChannelBwDL" type="integer"/>

<element name="bSChannelBwUL" type="integer" minOccurs="0"/>

<element name="bSChannelBwSUL" type="integer" minOccurs="0"/>

<element name="nRFrequencyRef" type="xn:dn" minOccurs="0"/>

<element name="nRSectorCarrierRef" type="xn:dn" minOccurs="0"/>

<element name="bWPRef" type="xn:dn" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="RRMPolicyRatio"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NRSectorCarrier">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction-->

<element name="txDirection" type="nn:TxDirection"/>

<element name="configuredMaxTxPower" type="integer"/>

<element name="arfcnDL" type="integer" minOccurs="0"/>

<element name="arfcnUL" type="integer" minOccurs="0"/>

<element name="bSChannelBwDL" type="integer" minOccurs="0"/>

<element name="bSChannelBwUL" type="integer" minOccurs="0"/>

<element name="sectorEquipmentFunctionRef" type="xn:dn" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="BWP">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction-->

<element name="bwpContext" type="nn:BwpContext"/>

<element name="isInitialBwp" type="nn:IsInitialBwp"/>

<element name="subCarrierSpacing" type="integer"/>

<element name="cyclicPrefix" type="nn:CyclicPrefix"/>

<element name="startRB" type="integer"/>

<element name="numberOfRBs" type="integer"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="CommonBeamformingFunction">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="coverageShape" type="coverageShapeType" minOccurs="0"/>

<element name="digitalTilt" type="beamTilt" minOccurs="0"/>

<element name="digitalAzimuth" type="beamAzimuth" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="Beam">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="beamIndex" type="integer" minOccurs="0"/>

<element name="beamType" type="beamType" minOccurs="0"/>

<element name="beamAzimuth" type="beamAzimuth" minOccurs="0"/>

<element name="beamTilt" type="beamTilt" minOccurs="0"/>

<element name="beamHorizWidth" type="beamHorizWidth" minOccurs="0"/>

<element name="beamVertWidth" type="beamVertWidth" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_E1">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_XnC">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_XnU">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_NgC">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LoacalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_NgU">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_F1C">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_F1U">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_S1U">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_X2C">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_X2U">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="nn:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="nn:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NRCellRelation">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction -->

<element name="nRTCI" type="nn:Nrtci"/>

<element name="cellIndividualOffset" type="en:CellIndividualOffset"/>

<element name="nRFreqRelationRef" type="xn:dn" minOccurs="0"/>

<element name="adjacentNRCellRef" type="xn:dn" minOccurs="0"/>

<element name="isRemoveAllowed" type="boolean" minOccurs="0"/>

<element name="isHOAllowed" type="boolean" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NRFreqRelation">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction -->

<element name="offsetMO" type="en:qOffsetRangeList"/>

<element name="blackListEntry" type="en:blackListEntry" minOccurs="0"/>

<element name="blackListEntryIdleMode" type="en:blackListEntryIdleMode" minOccurs="0"/>

<element name="cellReselectionPriority" type="en:cellReselectionPriority"/>

<element name="cellReselectionSubPriority" type="en:cellReselectionSubPriority"/>

<element name="pMax" type="en:PMaxRangeType" minOccurs="0"/>

<element name="qOffserFreq" type="nn:qOffserFreq" minOccurs="0"/>

<element name="qQualMin" type="en:qQualMin" minOccurs="0"/>

<element name="qRxLevMin" type="en:qRxLevMin" minOccurs="0"/>

<element name="threshXHighP" type="en:threshxhighp" minOccurs="0"/>

<element name="threshXHighQ" type="en:threshxhighq" minOccurs="0"/>

<element name="threshXLowP" type="en:threshxlowp" minOccurs="0"/>

<element name="threshXLowQ" type="en:threshxlowp" minOccurs="0"/>

<element name="tReselectionNr" type="nn:Treselectionnr" minOccurs="0"/>

<element name="tReselectionNRSfHigh" type="nn:Treselectionnrsfhigh" minOccurs="0"/>

<element name="tReselectionNRSfMedium" type="nn:Treselectionnrsfmedium" minOccurs="0"/>

<element name="nRFrequencyRef" type="xn:dn" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="ExternalNRCellCU">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction -->

<element name="nCGI" type="nn:Ncgi"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="nRPCI" type="nn:Nrpci" minOccurs="0"/>

<element name="nRFrequencyRef" type="xn:dn" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="ExternalGNBCUCPFunction" substitutionGroup="xn:SubNetworkOptionallyContainedNrmClass ">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction -->

<element name="gnbId" type="nn:GnbId" />

<element name="gnbIdLength" type="nn:GnbIdLength"/>

<element name="pLMNId" type="en:PLMNId" />

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="RRMPolicy\_">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="resourceType" type="ResourceType" />

<element name="rRMPolicyMemberList" type="PLMNInfoListType"/>

</all>

</complexType>

</element>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="RRMPolicyRatio">

<complexType>

<complexContent>

<extension base="RRMPolicy\_">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="quotaType" type="nn:quotaType"/>

<element name="rRMPolicyMaxRatio" type="integer" minOccurs="1"/>

<element name="rRMPolicyMarginMaxRatio" type="integer" minOccurs="0"/>

<element name="rRMPolicyMinRatio" type="integer" minOccurs="1"/>

<element name="rRMPolicyMarginMinRatio" type="integer" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NRFrequency" substitutionGroup="xn:SubNetworkOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from ManagedFunction -->

<element name="userLabel" type="string" minOccurs="0"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="peeParametersList" type="xn:peeParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!--End of inherited attributes from ManagedFunction -->

<element name="absoluteFrequencySSB" type="nn:Absolutefrequencyssb" minOccurs="0"/>

<element name="sSBSubCarrierSpacing" type="nn:Ssbsubcarrierspacing" minOccurs="0"/>

<element name="multiFrequencyBandListNR" type="nn:MultifrequencyBandlistnr" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

<choice minOccurs="0" maxOccurs="1">

<element ref="sp:EnergySavingProperties"/>

<element ref="sp:ESPolicies"/>

</choice>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="MappingSetIDBackhaulAddress">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="setID" type="nn:SetId" />

<element name="backhaulAdress" type="BackhaulAddress" minOccurs="0"/>

</all>

</complexType>

</element>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="BackhaulAddress">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="gNBID" type="nn:GnbId" />

<element name="tAI" type="TAI" minOccurs="0"/>

</all>

</complexType>

</element>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="TAI">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="nRTac" type="nn:NrTac" />

<element name="pLMNId" type="en:PLMNId" />

</all>

</complexType>

</element>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

</schema>

|  |
| --- |
| **Next Modified Section** |

## F.4.3 XML schema "ngcNrm.xsd"

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

<!--

3GPP TS 28.541 5GC Network Resource Model

XML schema definition

ngcNrm.xsd

-->

<schema

targetNamespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#ngcNrm"

elementFormDefault="qualified"

attributeFormDefault="unqualified"

xmlns="http://www.w3.org/2001/XMLSchema"

xmlns:xn="http://www.3gpp.org/ftp/specs/archive/28\_series/28.623#genericNrm" xmlns:nn="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#nrNrm" xmlns:en="http://www.3gpp.org/ftp/specs/archive/28\_series/28.659#eutranNrm"

xmlns:ngc="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#ngcNrm"

>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.623#genericNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.659#eutranNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#nrNrm"/>

<!--NGC NRM IM class associated XML elements -->

<complexType name="aMFIdentifier">

<sequence>

<element name="amfRegionId" type="ngc:AmfRegionId"/>

<element name="amfSetId" type="ngc:AmfSetId"/>

<element name="amfPointer" type="ngc:AmfPointer"/>

</sequence>

</complexType>

<simpleType name="AmfRegionId">

<restriction base="integer">

<maxInclusive value="255"/>

<!-- The AMF Region ID is 8-bitslength, defined in 23.003 -->

</restriction>

</simpleType>

<simpleType name="AmfSetId">

<restriction base="integer">

<maxInclusive value="1023"/>

<!-- The AMF Region ID is 10-bits length, defined in 23.003 -->

</restriction>

</simpleType>

<simpleType name="AmfPointer">

<restriction base="integer">

<maxInclusive value="63"/>

<!-- The AMF Pointer is 6-bits length, defined in 23.003 -->

</restriction>

</simpleType> <complexType name="NrTACList">

<sequence>

<element name="tac" type="nn:NrTac" minOccurs="0" maxOccurs="unbounded"/>

</sequence>

</complexType>

<complexType name="managedNFProfile">

<sequence>

<element name="nfInstanceID" type="string"/>

<element name="nfType" type="ngc:NfType"/>

<element name="hostAddr" type="ngc:hostAddr"/>

<element name="authzInfo" type="string" minOccurs="0"/>

<element name="location" type="string" minOccurs="0"/>

<element name="capacity" type="ngc:capacity" minOccurs="0"/>

<element name="nfInfo" type="ngc:Nfinfo"/>

</sequence>

</complexType>

<complexType name="hostAddr">

<!-- Refer to definitions in TS 28.541-->

<sequence>

<choice minOccurs="0" maxOccurs="1">

<element name="ipAddress" type="string"/>

<element name="fqdn" type="string"/>

</choice>

</sequence>

</complexType>

<simpleType name="capacity">

<!-- Refer to definitions in TS 28.541-->

<restriction base="integer">

<minInclusive value="0"/>

<maxInclusive value="65535"/>

</restriction>

</simpleType>

<complexType name="Nfinfo">

<!-- Refer to definitions in TS 28.541-->

<sequence>

<choice minOccurs="0" maxOccurs="1">

<element name="amfInfo" type="ngc:AmfInfo"/>

<element name="udrInfo" type="ngc:UdrInfo"/>

<element name="udmInfo" type="ngc:UdmInfo"/>

<element name="ausfInfo" type="ngc:AusfInfo"/>

<element name="upfInfo" type="ngc:UpfInfo"/>

</choice>

</sequence>

</complexType>

<complexType name="NFProfileList">

<sequence>

<element name="nfProfile" type="ngc:NfProfile"/>

</sequence>

</complexType>

<complexType name="NfProfile">

<sequence>

<element name="nfInstanceID" type="string"/>

<!-- nfInstanceID is uuid of NF instance -->

<element name="nfType" type="ngc:NfType"/>

<element name="sNssais" type="ngc: SnssaiList"/>

<element name="fqdn" type="string"/>

<element name="interPlmnFqdn" type="string"/>

<element name="ipv4Addresses" type="string"/>

<element name="ipv6Addresses" type="string"/>

<element name="ipv6Prefixes" type="string"/>

<element name="capacity" type="string"/>

<element name="udrInfo" type="ngc:UdrInfo"/>

<element name="amfInfo" type="ngc:AmfInfo"/>

<element name="smfInfo" type="ngc:SmfInfo"/>

<element name="upfInfo" type="ngc:UpfInfo"/>

<element name="nfServices" type="ngc:NfServices"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="nFSrvGroupId" type="string"/>

<element name="smfServingAreas" type="string"/>

<element name="locality" type="string"/>

<element name="authzInfo" type="string"/>

</sequence>

</complexType>

<complexType name="NfServices">

<sequence>

<element name="serviceInstanceId" type="string"/>

<element name="serviceName" type="string"/>

<element name="version" type="string"/>

<element name="schema" type="string"/>

<element name="fqdn" type="string"/>

<element name="interPlmnFqdn" type="string"/>

<element name="ipEndPoints" type="ngc:IpEndpoints"/>

<element name="apiPrefix" type="string"/>

<element name="defaultNotificationSubscriptions" type="ngc:DefaultNotificationSubscriptions"/>

<element name="allowedPlmns" type="nn:PLMNIdList"/>

<element name="allowedNfTypes" type="ngc:NFTypeList"/>

<element name="allowedNssais" type="ngc:Nssai"/>

<element name="capacity" type="string"/>

<element name="supportedFeatures" type="string"/>

</sequence>

</complexType>

<simpleType name="NfType">

<restriction base="string">

<!-- NF name is defined in TS 23.501 -->

<enumeration value="NRF"/>

<enumeration value="UDM"/>

<enumeration value="AMF"/>

<enumeration value="SMF"/>

<enumeration value="AUSF"/>

<enumeration value="NEF"/>

<enumeration value="PCF"/>

<enumeration value="SMSF"/>

<enumeration value="NSSF"/>

<enumeration value="UDR"/>

<enumeration value="LMF"/>

<enumeration value="GMLC"/>

<enumeration value="5GEIR"/>

<enumeration value="SEPP"/>

<enumeration value="UPF"/>

<enumeration value="N3IWF"/>

<enumeration value="AF"/>

<enumeration value="UDSF"/>

<enumeration value="DN"/>

</restriction>

</simpleType>

<complexType name="NFTypeList">

<sequence>

<element name="NFType" type="ngc:NfType"/>

</sequence>

</complexType>

<complexType name="LocalEndPoint">

<sequence>

<element name="ipv4Address" type="string"/>

<element name="ipv6Address" type="string"/>

<element name="ipv6Prefix" type="string"/>

<element name="vlanId" type="integer"/>

</sequence>

</complexType>

<complexType name="RemoteEndPoint">

<sequence>

<element name="ipv4Address" type="string"/>

<element name="ipv6Address" type="string"/>

<element name="ipv6Prefix" type="string"/>

</sequence>

</complexType>

<complexType name="UdrInfo">

<sequence>

<element name="supiRange" type="ngc:SupiRange"/>

</sequence>

</complexType>

<complexType name="SupiRange">

<sequence>

<element name="start" type="string"/>

<element name="end" type="string"/>

<element name="pattern" type="string"/>

</sequence>

</complexType>

<complexType name="AmfInfo">

<sequence>

<element name="amfSetId" type="ngc:AmfSetId"/>

</sequence>

</complexType>

<complexType name="SmfInfo">

<sequence>

<element name="dnn" type="string"/>

</sequence>

</complexType>

<complexType name="UpfInfo">

<sequence>

<element name="snssaiUpfInfo" type="ngc:SnssaiUpfInfo"/>

</sequence>

</complexType>

<complexType name="UdmInfo">

<sequence>

<element name="nFSrvGroupId" type="string"/>

</sequence>

</complexType>

<complexType name="AusfInfo">

<sequence>

<element name="nFSrvGroupId" type="string"/>

</sequence>

</complexType>

<complexType name="SnssaiUpfInfo">

<sequence>

<element name="sNssai" type="ngc:SNssai"/>

<element name="dnnUpfInfoList" type="ngc:DnnUpfInfoList"/>

</sequence>

</complexType>

<complexType name="DnnUpfInfoList">

<sequence>

<element name="dnn" type="string"/>

</sequence>

</complexType>

<complexType name="DefaultNotificationSubscription">

<sequence>

<element name="notificationType" type="ngc:NotificationType"/>

<element name="callbackUri" type="string"/>

<element name="n1MessageClass" type="string"/>

<element name="n2InformationClass" type="string"/>

</sequence>

</complexType>

<simpleType name="NotificationType">

<restriction base="string">

<enumeration value="N1\_MESSAGES"/>

<enumeration value="N2\_INFORMATION"/>

<enumeration value="LOCATION\_NOTIFICATION"/>

</restriction>

</simpleType>

<simpleType name="TransportProtocol">

<restriction base="string">

<enumeration value="TCP"/>

</restriction>

</simpleType>

<simpleType name="NfStatus">

<restriction base="string">

<enumeration value="REGISTERED"/>

<enumeration value="SUSPENDED"/>

</restriction>

</simpleType>

<complexType name="NfRegistrationData">

<sequence>

<element name="heartBeatTimer" type="integer"/>

<element name="nfProfile" type="ngc:NfProfile"/>

</sequence>

</complexType>

<complexType name="NSILdList">

<sequence>

<element name="nSIId" type="string"/>

<!-- NSI Id is defined in TS 29.531 -->

</sequence>

</complexType>

<complexType name="SnssaiList">

<sequence>

<element name="sNssai" type="ngc:SNssai"/>

</sequence>

</complexType>

<complexType name="SNssai">

<sequence>

<element name="sst" type="ngc:Sst" minOccurs="0"/>

<element name="sd" type="ngc:Sd"/>

</sequence>

</complexType>

<simpleType name="Sst">

<restriction base="integer">

<maxInclusive value="255"/>

<!-- SST is 1-octets length and defined in TS 23.003 -->

</restriction>

</simpleType>

<simpleType name="Sd">

<restriction base="integer">

<maxInclusive value="65535"/>

<!-- SST is 2-octets length and defined in TS 23.003 -->

</restriction>

</simpleType>

<simpleType name="WeightFactor">

<restriction base="integer">

</restriction>

</simpleType>

<simpleType name="SEPPType">

<restriction base="string">

<enumeration value="CSEPP"/>

<enumeration value="PSEPP"/>

</restriction>

</simpleType>

<complexType name="SupportedFunc">

<sequence>

<element name="function" type="string"/>

<element name="policy" type="string" minOccurs="0"/>

</sequence>

</complexType>

<complexType name="SupportedFuncList">

<sequence>

<element name="supportedFunc" type="ngc:SupportedFunc"/>

</sequence>

</complexType>

<simpleType name="CommModelType">

<restriction base="string">

<enumeration value="DIRECT\_COMMUNICATION\_WO\_NRF"/>

<enumeration value="DIRECT\_COMMUNICATION\_WITH\_NRF"/>

<enumeration value="INDIRECT\_COMMUNICATION\_WO\_DEDICATED\_DISCOVERY"/>

<enumeration value="INDIRECT\_COMMUNICATION\_WITH\_DEDICATED\_DISCOVERY"/>

</restriction>

</simpleType>

<complexType name="CommModel">

<sequence>

<element name="groupId" type="integer"/>

<element name="commModelType" type="ngc:CommModelType"/>

<element name="targetNFServiceList" type="xn:dnlist"/>

<element name="commModelConfiguration" type="string"/>

</sequence>

</complexType>

<complexType name="CommModelList">

<sequence>

<element name="commModel" type="ngc:CommModel"/>

</sequence>

</complexType>

<complexType name="CapabilityList">

<sequence>

<element name="capability" type="string"/>

</sequence>

</complexType>

<element name="AMFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="nn:PLMNIdList"/>

<element name="aMFIdentifier" type="ngc:aMFIdentifier"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="aMFSet" type="xn:dn" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N2"/>

<element ref="ngc:EP\_N8"/>

<element ref="ngc:EP\_N11"/>

<element ref="ngc:EP\_N12"/>

<element ref="ngc:EP\_N14"/>

<element ref="ngc:EP\_N15"/>

<element ref="ngc:EP\_N17"/>

<element ref="ngc:EP\_N22"/>

<element ref="ngc:EP\_N26"/>

<element ref="ngc:EP\_N20"/>

<element ref="ngc:EP\_NLS"/>

<element ref="ngc:EP\_NLG"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="SMFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="nRTACList" type="ngc:NrTACList"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N4"/>

<element ref="ngc:EP\_N10"/>

<element ref="ngc:EP\_N11"/>

<element ref="ngc:EP\_N7"/>

<element ref="ngc:EP\_N16"/>

<element ref="ngc:EP\_S5C"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="UPFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="nRTACList" type="ngc:NrTACList"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N4"/>

<element ref="ngc:EP\_N3"/>

<element ref="ngc:EP\_N9"/>

<element ref="ngc:EP\_S5U"/>

<element ref="ngc:EP\_N6"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="N3IWFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N2"/>

<element ref="ngc:EP\_N3"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="PCFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList" />

<element name="sBIFqdn" type="string" />

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N7"/>

<element ref="ngc:EP\_N15"/>

<element ref="ngc:EP\_N16"/>

<element ref="ngc:EP\_N5"/>

<element ref="ngc:EP\_Rx"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="AUSFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N12"/>

<element ref="ngc:EP\_N13"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="UDMFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N8"/>

<element ref="ngc:EP\_N10"/>

<element ref="ngc:EP\_N13"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="UDRFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="UDSFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NRFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="nSIIdList" type="ngc:NSIIdList" minOccurs="0"/>

<element name="nFProfileList" type="ngc:NFProfileList" minOccurs="0"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N27"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NSSFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="nSIIdList" type="ngc:NSIIdList"/>

<element name="snssaiList" type="ngc: SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/> <element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N27"/>

<element ref="ngc:EP\_N31"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="SMSFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N20"/>

<element ref="ngc:EP\_N21"/>

<element ref="ngc:EP\_MAP\_SMSC"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="LMFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_NLS"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/> </choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NGEIRFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/> <element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N17"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="SEPPFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNId" type="en:PLMNId"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="sEPPType" type="nn:SEPPType"/>

<element name="sEPPId" type="integer"/>

<element name="fqdn" type="string"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N32"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="ExternalSEPPFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNId" type="en:PLMNId"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="sEPPId" type="integer"/>

<element name="fqdn" type="string"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="ngc:EP\_N32"/>

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NWDAFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:managedNFProfile" minOccurs="0"/>

<element name="commModelList" type="ngc:CommModelList" minOccurs="1"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="SCPFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="supportedFuncList" type="ngc:SupportedFuncList"/>

<element name="address" type="string"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NEFFunction" substitutionGroup="xn:ManagedElementOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<element name="userLabel" type="string"/>

<element name="vnfParametersList" type="xn:vnfParametersListType" minOccurs="0"/>

<element name="priority" type="integer" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<element name="sBIFqdn" type="string"/>

<element name="snssaiList" type="ngc:SnssaiList" minOccurs="0"/>

<element name="managedNFProfile" type="ngc:ManagedNFProfile"/>

<element name="capabilitylist" type="ngc:CapabilityList"/>

<element name="isINEF" type="boolean"/>

<element name="isCAPIFSup" type="boolean"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N2">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N3">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N4">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N5">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemotePoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N6">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemotePoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N7">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemotePoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N8">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemotePoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N9">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N10">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:Remote" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N11">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:Remote" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N12">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N13">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N14">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N15">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N16">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:Local" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemotePoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N17">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemotePoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N20">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:Local" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemotePoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N21">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:Local" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemotePoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N22">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N26">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N27">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N31">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_N32">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

<element name="remotePlmnId" type="en:PLMNId"/>

<element name="remoteSeppAddress" type="string"/>

<element name="remoteSeppId" type="integer" minOccurs="0"/>

<element name="n32cParas" type="string" minOccurs="0"/>

<element name="n32fPolicy" type="string" minOccurs="0"/>

<element name="withIPX" type="boolean"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_S5C"> <complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_S5U">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_Rx">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_MAP\_SMSC">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_NLS">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="EP\_NLG">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<!-- Inherited attributes from EP\_RP -->

<element name="farEndEntity" type="xn:dn" minOccurs="0"/>

<element name="userLabel" type="string" minOccurs="0"/>

<!-- End of inherited attributes from EP\_RP -->

<element name="localAddress" type="ngc:LocalEndPoint" minOccurs="0"/>

<element name="remoteAddress" type="ngc:RemoteEndPoint" minOccurs="0"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:VsDataContainer"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

</schema>

|  |
| --- |
| **Next Modified Section** |

## I.4.3 XML schema "sliceNrm.xsd"

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

<!--

3GPP TS 28.541 network slice Network Resource Model

XML schema definition

sliceNrm.xsd

-->

<schema xmlns="http://www.w3.org/2001/XMLSchema"

xmlns:xn="http://www.3gpp.org/ftp/specs/archive/28\_series/28.623#genericNrm"

xmlns:sl="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#sliceNrm"

xmlns:nn="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#nrNrm"

xmlns:ngc="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#ngcNrm"

xmlns:en="http://www.3gpp.org/ftp/specs/archive/28\_series/28.659#eutranNrm"

xmlns:sm="http://www.3gpp.org/ftp/specs/archive/28\_series/28.626#stateManagementIRP"

targetNamespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#sliceNrm" elementFormDefault="qualified">

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.623#genericNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#nrNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.541#ngcNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.659#eutranNrm"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.626#stateManagementIRP"/>

<simpleType name="MobilityLevel">

<restriction base="string">

<enumeration value="STATIONARY"/>

<enumeration value="NOMADIC"/>

<enumeration value="RESTRICTED MOBILITY"/>

<enumeration value="FULLY MOBILITY"/>

</restriction>

</simpleType>

<simpleType name="SharingLevel">

<restriction base="string">

<enumeration value="SHARED"/>

<enumeration value="NON-SHARED"/>

</restriction>

</simpleType>

<simpleType name="Category">

<restriction base="string">

<enumeration value="character"/>

<enumeration value="scalability"/>

</restriction>

</simpleType>

<simpleType name="Tagging">

<restriction base="string">

<enumeration value="performance"/>

<enumeration value="function"/>

<enumeration value="operation"/>

</restriction>

</simpleType>

<simpleType name="Exposure">

<restriction base="string">

<enumeration value="API"/>

<enumeration value="KPI"/>

</restriction>

</simpleType>

<complexType name="ServAttrCom">

<sequence>

<element name="category" type="sl:Category"/>

<element name="tagging" type="sl:Tagging" minOccurs="0"/>

<element name="exposure" type="sl:Exposure" minOccurs="0"/>

</sequence>

</complexType >

<simpleType name="DelayToleranceSupport">

<restriction base="string">

<enumeration value="NOT SUPPORTED"/>

<enumeration value="SUPPORTED"/>

</restriction>

</simpleType>

<simpleType name="DeterminCommAvailability">

<restriction base="string">

<enumeration value="NOT SUPPORTED"/>

<enumeration value="SUPPORTED"/>

</restriction>

</simpleType>

<simpleType name="UserMgmtOpenSupport">

<restriction base="string">

<enumeration value="NOT SUPPORTED"/>

<enumeration value="SUPPORTED"/>

</restriction>

</simpleType>

<simpleType name="V2XCommModelsV2XMode">

<restriction base="string">

<enumeration value="NOT SUPPORTED"/>

<enumeration value="SUPPORTED BY NR"/>

</restriction>

</simpleType>

<complexType name="DelayTolerance">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="support" type="sl:DelayToleranceSupport"/>

</sequence>

</complexType>

<complexType name="DeterminComm">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="availability" type="sl:DeterminCommAvailability"/>

<element name="periodicityList" type="string"/>

</sequence>

</complexType>

<complexType name="DLThpt">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="guaThpt" type="float"/>

<element name="maxThpt" type="float"/>

</sequence>

</complexType>

<complexType name="ULThpt">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="guaThpt" type="float" minOccurs="0"/>

<element name="maxThpt" type="float" minOccurs="0"/>

</sequence>

</complexType>

<complexType name="MaxPktSize">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="maxsize" type="integer"/>

</sequence>

</complexType>

<complexType name="KPIMonitoring">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="kPIList" type="string"/>

</sequence>

</complexType>

<complexType name="SupportedAccessTech">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="accTechList" type="integer"/>

</sequence>

</complexType>

<complexType name="UserMgmtOpen">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="support" type="sl:UserMgmtOpenSupport"/>

</sequence>

</complexType>

<complexType name="V2XCommMode">

<sequence>

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="v2XMode" type="sl:V2XCommModelsV2XMode"/>

</sequence>

</complexType>

<complexType name="TermDensity">

<sequence>

<choice minOccurs="1" maxOccurs="1">

<element name="servAttrCom" type="sl:ServAttrCom"/>

<element name="density" type="integer"/>

</choice>

</sequence>

</complexType>

<complexType name="ServiceProfile">

<sequence>

<element name="serviceProfileId" type="string"/>

<element name="sNSSAIList" type="ngc:SnssaiList"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="maxNumberofUEs" type="long" minOccurs="0"/>

<element name="latency" type="integer" minOccurs="0"/>

<element name="uEMobilityLevel" type="integer" minOccurs="0"/>

<element name="resourceSharingLevel" type="integer" minOccurs="0"/>

<element name="sst" type="ngc:Sst"/>

<element name="availability" type="float" minOccurs="0"/>

<element name="delayTolerance" type="sl:DelayTolerance" minOccurs="0"/>

<element name="deterministicComm" type="sl:DeterminComm" minOccurs="0"/>

<element name="dLThptPerSlice" type="sl:DLThpt" minOccurs="0"/>

<element name="dLThptPerUE" type="sl:DLThpt" minOccurs="0"/>

<element name="uLThptPerSlic" type="sl:ULThpt" minOccurs="0"/>

<element name="uLThptPerUE" type="sl:ULThpt" minOccurs="0"/>

<element name="maxPktSize" type="sl:MaxPktSize" minOccurs="0"/>

<element name="maxNumberofConns" type="sl:MaxNumberofConns" minOccurs="0"/>

<element name="kPIMonitoring" type="sl:KPIMonitoring" minOccurs="0"/>

<element name="supportedAccessTech" type="sl:SupportedAccessTech" minOccurs="0"/>

<element name="userMgmtOpen" type="sl:UserMgmtOpen" minOccurs="0"/>

<element name="v2XCommModels" type="sl:V2XCommMode" minOccurs="0"/>

<element name="coverageArea" type="string" minOccurs="0"/>

<element name="termDensity" type="sl:TermDensity" minOccurs="0"/>

<element name="activityFactor" type="float" minOccurs="0"/>

<element name="uESpeed" type="integer" minOccurs="0"/>

<element name="jitter" type="integer" minOccurs="0"/>

<element name="survivalTime" type="string" minOccurs="0"/>

<element name="reliability" type="string" minOccurs="0"/>

</sequence>

</complexType>

<complexType name="ServiceProfileList">

<sequence>

<element name="serviceProfile" type="sl:ServiceProfile"/>

</sequence>

</complexType>

<complexType name="SliceProfile">

<sequence>

<element name="sliceProfileId" type="string"/>

<element name="sNSSAIList" type=" ngc:SnssaiList"/>

<element name="pLMNIdList" type="en:PLMNIdList"/>

<element name="perfReq" type="sl:PerfReq"/>

<element name="maxNumberofUEs" type="long" minOccurs="0"/>

<element name="coverageAreaTAList" type="ngc:NrTACList" minOccurs="0"/>

<element name="latency" type="integer" minOccurs="0"/>

<element name="uEMobilityLevel" type="sl:MobilityLevel" minOccurs="0"/>

<element name="resourceSharingLevel" type="integer" minOccurs="0"/>

</sequence>

</complexType>

<complexType name="SliceProfileList">

<sequence>

<element name="sliceProfile" type="sl:SliceProfile"/>

</sequence>

</complexType>

<complexType name="NsInfo">

<!-- Refer to definitions in subclause 8.3.3.2.2 of ETSI NFV IFA013 -->

<sequence>

<element name="nsInstanceId" type="string"/>

<element name="nsName" type="string"/>

<element name="description" type="string"/>

</sequence>

</complexType>

<element name="NetworkSlice" substitutionGroup="xn:SubNetworkOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from SubNetwork -->

<element name="dnPrefix" type="string" minOccurs="0"/>

<element name="userLabel" type="string"/>

<element name="userDefinedNetworkType" type="string"/>

<element name="setOfMcc" type="string" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!-- End of inherited attributes from SubNetwork -->

<element name="operationalState" type="sm:operationalStateType"/>

<element name="administrativeState" type="sm:administrativeStateType"/>

<element name="serviceProfileList" type="sl:ServiceProfileList"/> <element *name*="networkSliceSubnetRef" *type*="xn:dn"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

<element name="NetworkSliceSubnet" substitutionGroup="xn:SubNetworkOptionallyContainedNrmClass">

<complexType>

<complexContent>

<extension base="xn:NrmClass">

<sequence>

<element name="attributes">

<complexType>

<all>

<!-- Inherited attributes from SubNetwork -->

<element name="dnPrefix" type="string" minOccurs="0"/>

<element name="userLabel" type="string"/>

<element name="userDefinedNetworkType" type="string"/>

<element name="setOfMcc" type="string" minOccurs="0"/>

<element name="measurements" type="xn:MeasurementTypesAndGPsList" minOccurs="0"/>

<!-- End of inherited attributes from SubNetwork -->

<element name="operationalState" type="sm:operationalStateType"/>

<element name="administrativeState" type="sm:administrativeStateType"/>

<element name="nsInfo" type="sl:NsInfo" minOccurs="0"/>

<element name="sliceProfileList" type="sl:SliceProfileList"/>

<element *name*="managedFunctionRef" *type*="xn:dnlist"/>

<element *name*="networkSliceSubnetRef" *type*="xn:dnlist"/>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xn:MeasurementControl"/>

</choice>

</sequence>

</extension>

</complexContent>

</complexType>

</element>

</schema>

|  |
| --- |
| **End of Modified Sections** |