**Change Summary - DUIS XML Schema v5.1**

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

<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:ds="http://www.w3.org/2000/09/xmldsig#"

 xmlns:ra="http://www.dccinterface.co.uk/ResponseAndAlert"

 xmlns:sr="http://www.dccinterface.co.uk/ServiceUserGateway"

 targetNamespace="http://www.dccinterface.co.uk/ServiceUserGateway"

 elementFormDefault="qualified">

 <xs:import namespace="http://www.w3.org/2000/09/xmldsig#"

 schemaLocation="xmldsig-core-schema.xsd"/>

 <xs:import namespace="http://www.dccinterface.co.uk/ResponseAndAlert"

 schemaLocation="MMC Schema V5.1.xsd"/>

 <!--

 XML Filename - DUIS Schema V5.1a

 DUIS XML Schema Version - Request - 5.1

 DUIS XML Schema Version - Response - 5.1

 Aligned with GBCS version - 4.1

 Date - September 2021

 Minor revision of this XML schema - 71.6

 -->

 <!-- Common Types -->

 <xs:element name="Request" type="sr:Request"/>

 <xs:element name="Response" type="sr:Response"/>

 <xs:element name="SMETS1SignedResponse" type="sr:SMETS1SignedResponse"/>

 <xs:element name="S1SPAlert" type="sr:S1SPAlert"/>

 <xs:complexType name="SMETS1ResponseMessage">

 <xs:sequence>

 <xs:element name="ServiceReference" type="sr:ServiceReference" minOccurs="0"/>

 <xs:element maxOccurs="1" minOccurs="0" name="ServiceReferenceVariant"

 type="sr:ServiceReferenceVariant"/>

 <xs:element minOccurs="0" name="DSPScheduleID" type="sr:scheduleID"/>

 <xs:element name="ThrottledAlertSequenceId" type="xs:unsignedInt" minOccurs="0"

 maxOccurs="1"/>

 <xs:element name="ThrottledAlertCount" type="xs:unsignedInt" minOccurs="0" maxOccurs="1"/>

 <xs:element minOccurs="1" maxOccurs="1" ref="sr:SMETS1SignedResponse"/>

 </xs:sequence>

 </xs:complexType>

 <xs:simpleType name="range\_1\_3">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="3"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="range\_1\_4">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="4"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="range\_1\_5">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="5"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="range\_1\_7">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="7"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="range\_1\_8">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="8"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="range\_1\_20">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="20"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="range\_1\_48">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="48"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="FirmwareVersion">

 <xs:restriction base="xs:string">

 <xs:maxLength value="8"/>

 <xs:minLength value="1"/>

 </xs:restriction>

 </xs:simpleType>

 <!-- maximum floor number in security use cases -->

 <xs:simpleType name="floorSequenceNumber">

 <xs:restriction base="xs:nonNegativeInteger">

 <xs:maxInclusive value="9223372036854775807"/>

 </xs:restriction>

 </xs:simpleType>

 <!-- maximum number of schedule IDs for a device -->

 <xs:simpleType name="scheduleID">

 <xs:restriction base="xs:nonNegativeInteger">

 <xs:maxInclusive value="1000000000000"/>

 </xs:restriction>

 </xs:simpleType>

 <!-- maximum days when offsetting a command -->

 <xs:simpleType name="logPeriodOffset">

 <xs:restriction base="xs:nonPositiveInteger">

 <xs:minInclusive value="-400"/>

 </xs:restriction>

 </xs:simpleType>

 <!-- tolerance period for setting clock in seconds, set as 1 day -->

 <xs:simpleType name="tolerancePeriod">

 <xs:restriction base="xs:int">

 <xs:minInclusive value="0"/>

 <xs:maxInclusive value="86400"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:complexType name="FutureDatedAbstractType" abstract="true">

 <xs:sequence>

 <xs:element minOccurs="0" name="ExecutionDateTime" type="xs:dateTime"/>

 </xs:sequence>

 </xs:complexType>

 <xs:simpleType name="GasThresholdType">

 <xs:restriction base="xs:unsignedLong">

 <xs:maxInclusive value="281474976710655"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="PriceScale">

 <xs:restriction base="xs:integer">

 <xs:minInclusive value="-128"/>

 <xs:maxInclusive value="127"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="PriceType">

 <xs:restriction base="xs:short"/>

 </xs:simpleType>

 <xs:complexType abstract="true" name="MandatoryFutureDatedAbstractType">

 <xs:sequence>

 <xs:element name="ExecutionDateTime" type="xs:dateTime"/>

 </xs:sequence>

 </xs:complexType>

 <!-- tariff definitions -->

 <!-- Seasons -->

 <xs:complexType name="ElecSeasonsPrimary">

 <xs:sequence>

 <xs:element name="Season" type="sr:ElecSeasonPrimary" maxOccurs="4" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecSeasonsSecondary">

 <xs:sequence>

 <xs:element name="Season" type="sr:ElecSeasonSecondary" maxOccurs="4" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSeasons">

 <xs:sequence>

 <xs:element name="Season" type="sr:GasSeason" maxOccurs="3" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSeasonsNonDisablement">

 <xs:sequence>

 <xs:element name="Season" type="sr:GasSeasonNonDisablement" maxOccurs="3" minOccurs="1"

 />

 </xs:sequence>

 </xs:complexType>

 <!-- Switches -->

 <xs:complexType name="ElecSwitchingTablePrimary">

 <xs:sequence>

 <xs:element name="DayProfiles" type="sr:ElecDayProfiles"/>

 <xs:element name="WeekProfiles" type="sr:ElecWeekProfiles"/>

 <xs:element name="Seasons" type="sr:ElecSeasonsPrimary"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecSwitchingTableSecondary">

 <xs:sequence>

 <xs:element name="DayProfiles" type="sr:ElecDayProfilesSecondary"/>

 <xs:element name="WeekProfiles" type="sr:ElecWeekProfiles"/>

 <xs:element name="Seasons" type="sr:ElecSeasonsSecondary"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSwitchingTable">

 <xs:sequence>

 <xs:element name="DayProfiles" type="sr:GasDayProfiles"/>

 <xs:element name="WeekProfiles" type="sr:GasWeekProfiles"/>

 <xs:element name="Seasons" type="sr:GasSeasons"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Season -->

 <xs:complexType name="ElecSeasonPrimary">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="SeasonName">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:maxLength value="8"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="SeasonStartDate" type="sr:Date"/>

 <xs:element name="ReferencedWeekName" type="sr:ElecWeekName"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecSeasonSecondary">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="SeasonName">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:maxLength value="8"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="SeasonStartDate" type="sr:Date"/>

 <xs:element name="ReferencedWeekName" type="sr:ElecWeekName"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSeason">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="SeasonStartDate" type="sr:GasDateWithWildcards"/>

 <xs:element name="ReferencedWeekName" type="sr:GasWeekName"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSeasonNonDisablement">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="SeasonStartDate" type="sr:GasDateWithWildcards"/>

 <xs:element name="ReferencedWeekName" type="sr:GasWeekNameNonDisablement"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Week Profiles -->

 <xs:complexType name="ElecWeekProfiles">

 <xs:sequence>

 <xs:element name="WeekProfile" type="sr:ElecWeekProfile" maxOccurs="4" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasWeekProfiles">

 <xs:sequence>

 <xs:element name="WeekProfile" type="sr:WeekProfileGas" maxOccurs="2" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasWeekProfilesNonDisablement">

 <xs:sequence>

 <xs:element name="WeekProfile" type="sr:WeekProfileGasNonDisablement" maxOccurs="2"

 minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Week Profile -->

 <xs:complexType name="ElecWeekProfile">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="WeekName" type="sr:ElecWeekName"/>

 <xs:element name="ReferencedDayName" type="sr:ElecReferencedDayName" minOccurs="7"

 maxOccurs="7"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="WeekProfileGas">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="WeekName" type="sr:GasWeekName"/>

 <xs:element name="ReferencedDayName" type="sr:GasReferencedDayName" minOccurs="7"

 maxOccurs="7"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="WeekProfileGasNonDisablement">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="WeekName" type="sr:GasWeekName"/>

 <xs:element name="ReferencedDayName" type="sr:GasReferencedDayNameNonDisablement"

 minOccurs="7" maxOccurs="7"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Day Profiles -->

 <xs:complexType name="ElecDayProfiles">

 <xs:sequence>

 <xs:element name="DayProfile" type="sr:ElecDayProfilePrimary" maxOccurs="16"

 minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecDayProfilesSecondary">

 <xs:sequence>

 <xs:element name="DayProfile" type="sr:ElecDayProfileSecondary" maxOccurs="16"

 minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasDayProfiles">

 <xs:sequence>

 <xs:element name="DayProfile" type="sr:GasDayProfile" maxOccurs="4" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Day Profile -->

 <xs:complexType name="ElecDayProfilePrimary">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="DayName" type="sr:ElecDayName"/>

 <xs:element name="ProfileSchedule" maxOccurs="48" minOccurs="1"

 type="sr:ElecProfileSchedulePrimary"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecProfileSchedulePrimary">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="StartTime" type="xs:time"> </xs:element>

 <xs:choice>

 <xs:element name="TOUTariffAction">

 <xs:simpleType>

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="48"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="BlockTariffAction">

 <xs:simpleType>

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="8"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:choice>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecDayProfileSecondary">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="DayName" type="sr:ElecDayName"/>

 <xs:element name="ProfileSchedule" maxOccurs="48" minOccurs="1"

 type="sr:ElecProfileScheduleSecondary"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecProfileScheduleSecondary">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="StartTime" type="xs:time"> </xs:element>

 <xs:element name="TOUTariffAction">

 <xs:simpleType>

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="4"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasDayProfile">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="DayName" type="sr:GasDayName"/>

 <xs:choice>

 <xs:element name="TOUTariffAction">

 <xs:simpleType>

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="4"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="BlockTariff" type="sr:NoType"/>

 </xs:choice>

 </xs:sequence>

 </xs:complexType>

 <!-- Special Days -->

 <xs:complexType name="ElecSpecialDaysPrimary">

 <xs:sequence>

 <xs:element name="SpecialDay" type="sr:ElecSpecialDayPrimary" minOccurs="0"

 maxOccurs="50"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecSpecialDayPrimary">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="Date" type="sr:Date"/>

 <xs:element name="ReferencedDayName" type="sr:ElecDayName"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecSpecialDaysSecondary">

 <xs:sequence>

 <xs:element name="SpecialDay" type="sr:ElecSpecialDaySecondary" minOccurs="0"

 maxOccurs="50"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecSpecialDaySecondary">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="Date" type="sr:Date"/>

 <xs:element name="ReferencedDayName" type="sr:ElecDayName"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSpecialDays">

 <xs:sequence>

 <xs:element name="SpecialDay" type="sr:GasSpecialDay" minOccurs="0" maxOccurs="20"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSpecialDaysNonDisablement">

 <xs:sequence>

 <xs:element name="SpecialDay" type="sr:GasSpecialDayNonDisablement" minOccurs="0"

 maxOccurs="20"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSpecialDay">

 <xs:sequence maxOccurs="1">

 <xs:element name="Date" type="sr:GasDateWithWildcards"/>

 <xs:element name="ReferencedDayName" type="sr:GasDayName"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasSpecialDayNonDisablement">

 <xs:sequence maxOccurs="1">

 <xs:element name="Date" type="sr:GasDateWithWildcards"/>

 <xs:element name="ReferencedDayName" type="sr:GasDayNameNonDisablement"/>

 </xs:sequence>

 </xs:complexType>

 <!-- thresholds -->

 <xs:complexType name="ElecThresholdMatrix">

 <xs:sequence>

 <xs:element name="Thresholds" type="sr:ElecThresholds" minOccurs="8" maxOccurs="8"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasThresholdMatrix">

 <xs:sequence>

 <xs:element name="BlockThreshold" type="sr:GasThreshold" minOccurs="1" maxOccurs="3"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasThreshold">

 <xs:simpleContent>

 <xs:extension base="sr:GasThresholdType">

 <xs:attribute name="index" type="sr:range\_1\_3" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <xs:complexType name="ElecThresholds">

 <xs:sequence>

 <xs:element name="BlockThreshold" minOccurs="1" maxOccurs="3">

 <xs:complexType>

 <xs:simpleContent>

 <xs:extension base="xs:unsignedInt">

 <xs:attribute name="index" type="sr:range\_1\_3" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 </xs:element>

 </xs:sequence>

 <xs:attribute name="index" type="sr:range\_1\_8" use="required"/>

 </xs:complexType>

 <!-- top level tariff -->

 <xs:complexType name="ElecTariffElements">

 <xs:sequence>

 <xs:element name="CurrencyUnits">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:enumeration value="GBP"/>

 <xs:enumeration value="ECB"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="SwitchingTable" type="sr:ElecSwitchingTablePrimary"/>

 <xs:element name="SpecialDays" type="sr:ElecSpecialDaysPrimary"/>

 <xs:element name="ThresholdMatrix" type="sr:ElecThresholdMatrix"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasTariffElements">

 <xs:sequence>

 <xs:element name="SwitchingTable" type="sr:GasSwitchingTable"/>

 <xs:element name="SpecialDays" type="sr:GasSpecialDays"/>

 <xs:element name="ThresholdMatrix" type="sr:GasThresholdMatrix"/>

 </xs:sequence>

 </xs:complexType>

 <!-- simple types days -->

 <xs:simpleType name="ElecDayName">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="16"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="GasDayNameNonDisablement">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="5"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="GasDayName">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="4"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:complexType name="ElecReferencedDayName">

 <xs:simpleContent>

 <xs:extension base="sr:ElecDayName">

 <xs:attribute name="index" type="sr:range\_1\_7" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <xs:complexType name="GasReferencedDayNameNonDisablement">

 <xs:simpleContent>

 <xs:extension base="sr:GasDayNameNonDisablement">

 <xs:attribute name="index" type="sr:range\_1\_7" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <xs:complexType name="GasReferencedDayName">

 <xs:simpleContent>

 <xs:extension base="sr:GasDayName">

 <xs:attribute name="index" type="sr:range\_1\_7" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <!-- simple types weeks -->

 <xs:simpleType name="ElecWeekName">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="4"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="GasWeekName">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="2"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="GasWeekNameNonDisablement">

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="2"/>

 </xs:restriction>

 </xs:simpleType>

 <!-- Blocks -->

 <xs:complexType name="ElecBlocks">

 <xs:sequence>

 <xs:element name="BlockPrice" type="sr:ElecBlockPrice" minOccurs="1" maxOccurs="4"/>

 </xs:sequence>

 <xs:attribute name="index" type="sr:range\_1\_8" use="required"/>

 </xs:complexType>

 <xs:complexType name="ElecBlockPrice">

 <xs:simpleContent>

 <xs:extension base="sr:PriceType">

 <xs:attribute name="index" type="sr:range\_1\_4" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <xs:complexType name="GasBlockPrice">

 <xs:simpleContent>

 <xs:extension base="xs:unsignedInt">

 <xs:attribute name="index" type="sr:range\_1\_4" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <!-- TOUs -->

 <xs:complexType name="ElecPrimaryTOUPrice">

 <xs:simpleContent>

 <xs:extension base="sr:PriceType">

 <xs:attribute name="index" type="sr:range\_1\_48" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <xs:complexType name="ElecSecondaryTOUPrice">

 <xs:simpleContent>

 <xs:extension base="sr:PriceType">

 <xs:attribute name="index" type="sr:range\_1\_4" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <xs:complexType name="GasTOUPrice">

 <xs:simpleContent>

 <xs:extension base="xs:unsignedInt">

 <xs:attribute name="index" type="sr:range\_1\_4" use="required"/>

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <!-- top level prices -->

 <xs:complexType name="PricePrimary">

 <xs:sequence>

 <xs:choice>

 <xs:element name="ElectricityPriceElements" type="sr:ElecPriceElementsPrimary"/>

 <xs:element name="GasPriceElements" type="sr:GasPriceElements"/>

 </xs:choice>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="PriceSecondary">

 <xs:sequence>

 <xs:element name="PriceScale" type="sr:PriceScale"/>

 <xs:element name="ElectricityPriceElement" type="sr:ElecSecondaryTOUPrice" maxOccurs="4"

 minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasPriceElements">

 <xs:sequence>

 <xs:element name="CurrencyUnits">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:enumeration value="GBP"/>

 <xs:enumeration value="ECB"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="StandingCharge" type="xs:unsignedInt"/>

 <xs:choice>

 <xs:element name="BlockTariff" type="sr:GasBlockPriceMatrix"/>

 <xs:element name="TOUTariff" type="sr:GasTOUPriceMatrix"/>

 </xs:choice>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasBlockPriceMatrix">

 <xs:sequence>

 <xs:element name="BlockPrice" type="sr:GasBlockPrice" maxOccurs="4" minOccurs="1"/>

 <xs:element name="NumberOfThresholds" maxOccurs="1" minOccurs="1">

 <xs:simpleType>

 <xs:restriction base="xs:positiveInteger">

 <xs:minInclusive value="1"/>

 <xs:maxInclusive value="3"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasTOUPriceMatrix">

 <xs:sequence>

 <xs:element name="TOUPrice" type="sr:GasTOUPrice" maxOccurs="4" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecPriceElementsPrimary">

 <xs:sequence>

 <xs:element name="StandingCharge" type="sr:PriceType"/>

 <xs:element name="StandingChargeScale" type="sr:PriceScale"/>

 <xs:element name="PriceScale" type="sr:PriceScale"/>

 <xs:choice>

 <xs:element name="BlockTariff" type="sr:ElecBlockTariff"/>

 <xs:element name="TOUTariff" type="sr:ElecTOUTariff"/>

 <xs:element name="HybridTariff" type="sr:ElecHybridTariff"/>

 </xs:choice>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecBlockTariff">

 <xs:sequence>

 <xs:element name="BlockPrices" type="sr:ElecBlocks" maxOccurs="8" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecTOUTariff">

 <xs:sequence>

 <xs:element name="TOUPrice" type="sr:ElecPrimaryTOUPrice" maxOccurs="48" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecHybridTariff">

 <xs:sequence>

 <xs:element name="BlockPrices" type="sr:ElecBlocks" maxOccurs="8" minOccurs="1"/>

 <xs:element name="TOUPrice" type="sr:ElecPrimaryTOUPrice" maxOccurs="48" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="TariffPrimaryElement">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:choice>

 <xs:element name="ElecTariffElements" type="sr:ElecTariffElements"/>

 <xs:element name="GasTariffElements" type="sr:GasTariffElements"/>

 </xs:choice>

 <xs:element name="PriceElements" type="sr:PricePrimary"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="TariffSecondaryElement">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:element name="SwitchingTable" type="sr:ElecSwitchingTableSecondary"/>

 <xs:element name="SpecialDays" type="sr:ElecSpecialDaysSecondary"/>

 <xs:element name="PriceElements" type="sr:PriceSecondary"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="UpdatePricePrimaryElement">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:element name="PriceElements" type="sr:PricePrimary"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="UpdatePriceSecondaryElement">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:element name="PriceElements" type="sr:PriceSecondary"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

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 <xs:simpleType name="RequestIDType">

 <xs:restriction base="xs:token">

 <xs:pattern

 value="[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}:[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}:(0|[1-9][0-9]{0,18}|1[0-7][0-9]{18}|18[0-3][0-9]{17}|184[0-3][0-9]{16}|1844[0-5][0-9]{15}|18446[0-6][0-9]{14}|184467[0-3][0-9]{13}|1844674[0-3][0-9]{12}|184467440[0-6][0-9]{10}|1844674407[0-2][0-9]{9}|18446744073[0-6][0-9]{8}|1844674407370[0-8][0-9]{6}|18446744073709[0-4][0-9]{5}|184467440737095[0-4][0-9]{4}|18446744073709550[0-9]{3}|18446744073709551[0-5][0-9]{2}|1844674407370955160[0-9]|1844674407370955161[0-5])"

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 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="EUI">

 <xs:restriction base="xs:token">

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 />

 </xs:restriction>

 </xs:simpleType>

 <xs:element name="RequestID" type="sr:RequestIDType"/>

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 <xs:sequence>

 <xs:element name="ReadLogPeriod" type="sr:ReadLogPeriod"/>

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 </xs:complexType>

 <xs:complexType abstract="true" name="ReadLogPeriodFDAbstractType">

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 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:element name="ReadLogPeriod" type="sr:ReadLogPeriod"/>

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 </xs:extension>

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 </xs:complexType>

 <xs:complexType name="ReadLogPeriod">

 <xs:sequence>

 <xs:element name="StartDateTime" type="xs:dateTime"/>

 <xs:element name="EndDateTime" type="xs:dateTime"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ReadDataOnDemand"/>

 <xs:complexType name="NoType"/>

 <xs:complexType name="ReadDataOnDemandOrFutureDated">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType"/>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="ReadLogOnDemand">

 <xs:complexContent>

 <xs:extension base="sr:ReadLogPeriodAbstractType"/>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="ReadLogFutureDatable">

 <xs:complexContent>

 <xs:extension base="sr:ReadLogPeriodFDAbstractType"/>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="ReadLogFutureDatableAndURPCredentials">

 <xs:complexContent>

 <xs:extension base="sr:ReadLogPeriodFDAbstractType">

 <xs:sequence minOccurs="0">

 <xs:element name="KAPublicSecurityCredentials" type="sr:Certificate"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="ReadLogPeriodOffset">

 <xs:sequence>

 <xs:element name="StartDateOffset" type="sr:logPeriodOffset"/>

 <xs:element name="StartTime" type="xs:time"/>

 <xs:element name="EndDateOffset" type="sr:logPeriodOffset"/>

 <xs:element name="EndTime" type="xs:time"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="UpdatePrepayConfiguration">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:choice>

 <xs:element name="UpdatePrepayConfigElectricity"

 type="sr:UpdatePrepayConfigElec"/>

 <xs:element name="UpdatePrepayConfigGas" type="sr:UpdatePrepayConfigGas"/>

 </xs:choice>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="UpdatePrepayConfigElec">

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 <xs:element name="DebtRecoveryRateCap" type="xs:unsignedShort"/>

 <xs:element name="EmergencyCreditLimit" type="xs:int"/>

 <xs:element name="EmergencyCreditThreshold" type="xs:int"/>

 <xs:element name="LowCreditThreshold" type="xs:int"/>

 <xs:element name="ElectricityNonDisablementCalendar"

 type="sr:ElectricityNonDisablementCalendar"/>

 <xs:element name="MaxMeterBalance" type="xs:int"/>

 <xs:element name="MaxCreditThreshold" type="xs:int"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="UpdatePrepayConfigGas">

 <xs:sequence>

 <xs:element name="DebtRecoveryRateCap" type="xs:int"/>

 <xs:element name="EmergencyCreditLimit" type="xs:unsignedInt"/>

 <xs:element name="EmergencyCreditThreshold" type="xs:unsignedInt"/>

 <xs:element name="LowCreditThreshold" type="xs:unsignedInt"/>

 <xs:element name="GasNonDisablementCalendar" type="sr:GasNonDisablementCalendar"/>

 <xs:element name="MaxMeterBalance" type="xs:unsignedInt"/>

 <xs:element name="MaxCreditThreshold" type="xs:unsignedInt"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="PartialAddress">

 <xs:sequence>

 <xs:element name="PostCode" type="sr:PostCode"> </xs:element>

 <xs:element name="AddressIdentifier" type="sr:AddressIdentifier"> </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecSpecialDaysPrepayment">

 <xs:sequence>

 <xs:element name="SpecialDay" maxOccurs="20" minOccurs="0">

 <xs:complexType>

 <xs:complexContent>

 <xs:extension base="sr:ElecSpecialDayPrepayment">

 <xs:attribute name="index" type="sr:range\_1\_20" use="required"/>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElecSpecialDayPrepayment">

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 </xs:complexType>

 <xs:complexType name="ElectricityNonDisablementCalendar">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="ElectricitySpecialDays" type="sr:ElecSpecialDaysPrepayment"/>

 <xs:element name="ElectricityNonDisablementSchedule"

 type="sr:ElectricityNonDisablementSchedule" maxOccurs="22" minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ElectricityNonDisablementSchedule">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="NonDisablementScript">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:enumeration value="START"/>

 <xs:enumeration value="STOP"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="SpecialDaysApplicability" type="sr:SpecialDaysApplicability"/>

 <xs:element name="DaysOfWeekApplicability" type="sr:DaysOfWeekApplicability"/>

 <xs:element name="ScheduleDatesAndTime" type="sr:ScheduleDatesAndTimeWithoutWildcards"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ALCSHCALCSConnectionSchedule">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element minOccurs="1" name="ActivateDeactivateSwitch"

 type="sr:ActivateDeactivateSwitch"/>

 <xs:element maxOccurs="20" name="SpecialDaysApplicability" minOccurs="0">

 <xs:complexType>

 <xs:attribute name="index" type="sr:range\_1\_20" use="required"/>

 </xs:complexType>

 </xs:element>

 <xs:element name="DaysOfWeekApplicability" type="sr:DaysOfWeekApplicability"

 minOccurs="0"/>

 <xs:element name="ALCSScheduleDatesAndTime" type="sr:ScheduleDatesAndTime"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ActivateDeactivateSwitch">

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 <xs:element name="ActivateSwitch" type="sr:NoType"/>

 <xs:element name="DeactivateSwitch" type="sr:NoType"/>

 </xs:choice>

 <xs:attribute name="index" type="sr:range\_1\_5" use="required"/>

 </xs:complexType>

 <xs:complexType name="MaximumDemandTimePeriodSchedule">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="StartTime" type="xs:time"/>

 <xs:element name="EndTime" type="xs:time"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ScheduleDatesAndTimeWithoutWildcards">

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 <xs:element name="SwitchTime" type="xs:time"/>

 <xs:element name="StartDate" type="xs:date"/>

 <xs:element name="EndDate" type="xs:date"/>

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 <xs:complexType name="ScheduleDatesAndTime">

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 <xs:element name="StartDate" type="sr:Date"/>

 <xs:element name="EndDate" type="sr:Date"/>

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 </xs:complexType>

 <xs:complexType name="SpecialDayApplicability">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element name="SpecialDayID" maxOccurs="1" minOccurs="1">

 <xs:simpleType>

 <xs:restriction base="xs:positiveInteger">

 <!-- Special Day 1 -->

 <xs:minInclusive value="1"/>

 <!-- Special Day 20 -->

 <xs:maxInclusive value="20"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="DaysOfWeekApplicability">

 <xs:sequence maxOccurs="1">

 <xs:element maxOccurs="7" minOccurs="0" name="DayOfWeekApplicability"

 type="sr:DayOfWeekApplicability"> </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="DayOfWeekApplicability">

 <xs:sequence maxOccurs="1">

 <xs:element maxOccurs="1" minOccurs="1" name="DayOfWeekID">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:enumeration value="Monday"/>

 <xs:enumeration value="Tuesday"/>

 <xs:enumeration value="Wednesday"/>

 <xs:enumeration value="Thursday"/>

 <xs:enumeration value="Friday"/>

 <xs:enumeration value="Saturday"/>

 <xs:enumeration value="Sunday"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="GasNonDisablementCalendar">

 <xs:sequence>

 <xs:element name="DayProfiles" type="sr:GasNonDisablementDayProfiles" maxOccurs="1"

 minOccurs="1"/>

 <xs:element name="WeekProfiles" type="sr:GasWeekProfilesNonDisablement" maxOccurs="1"

 minOccurs="1"/>

 <xs:element name="SeasonProfiles" type="sr:GasSeasonsNonDisablement" maxOccurs="1"

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 <xs:element name="SpecialDays" type="sr:GasSpecialDaysNonDisablement" maxOccurs="1"

 minOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="UpdateSecurityCredentialsKRP">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

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 <xs:element name="RemotePartyRole" type="sr:RemotePartyRole"/>

 <xs:element name="RemotePartyFloorSeqNumber" minOccurs="0"

 type="sr:floorSequenceNumber"/>

 <xs:element name="RemotePartyPrepaymentTopUpFloorSeqNumber"

 type="sr:floorSequenceNumber" minOccurs="0"/>

 <xs:element name="ReplacementCertificates" type="sr:ReplacementCertificatesKRP"> </xs:element>

 <xs:element name="CertificationPathCertificates"

 type="sr:CertificationPathCertificates"> </xs:element>

 <xs:element name="ApplyTimeBasedCPVChecks" type="xs:boolean"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="UpdateSecurityCredentialsDevice">

 <xs:sequence>

 <xs:element maxOccurs="1" name="DeviceCertificate" type="sr:Certificate"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="IssueSecurityCredentials">

 <xs:sequence>

 <xs:element name="CredentialType" type="sr:CredentialType"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="RequestHandoverOfDCCControlledDevice">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:element name="RemotePartyRole" type="sr:RemotePartyRole"/>

 <xs:element name="RemotePartyFloorSeqNumber" type="sr:floorSequenceNumber"

 minOccurs="0"/>

 <xs:element name="RemotePartyPrepaymentTopUpFloorSeqNumber"

 type="sr:floorSequenceNumber" minOccurs="0"/>

 <xs:element name="ReplacementCertificates"

 type="sr:ReplacementCertificatesDCCHandover"> </xs:element>

 <xs:element name="CertificationPathCertificates"

 type="sr:CertificationPathCertificates"> </xs:element>

 <xs:element name="ApplyTimeBasedCPVChecks" type="xs:boolean"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:simpleType name="EnableDisableAlert">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Disable"/>

 <xs:enumeration value="Enable"/>

 </xs:restriction>

 </xs:simpleType>

 <!-- Supplier ESME Event / Alert Common-->

 <xs:complexType name="SupplierESMECommon">

 <xs:sequence>

 <xs:element name="x810D" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x810E" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8119" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8145" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8154" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8155" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8161" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8162" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8168" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8183" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81A0" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81A1" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81A2" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81A3" type="sr:EnableDisableAlert" minOccurs="0"/>

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 <xs:element name="x81A7" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81A8" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81A9" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81AA" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81AB" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81AC" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81AD" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81AE" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81AF" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81B0" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81B1" type="sr:EnableDisableAlert" minOccurs="0"/>

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 <xs:element name="x81B8" type="sr:EnableDisableAlert" minOccurs="0"/>

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 <xs:element name="x81BB" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81BC" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81BD" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81BE" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81C0" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81C1" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81C4" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81C5" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81C6" type="sr:EnableDisableAlert" minOccurs="0"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Supplier ESME Event / Alert Single Phase -->

 <!-- Supplier ESME Event / Alert Poly Phase -->

 <xs:complexType name="SupplierESMEPolyPhase">

 <xs:sequence>

 <xs:element name="x81B7" type="sr:EnableDisableAlert" minOccurs="0"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Electricity Supplier Event / Alert -->

 <xs:complexType name="ElectricitySupplierAlerts">

 <xs:sequence>

 <xs:element name="SupplierESMECommon" type="sr:SupplierESMECommon" minOccurs="0"

 maxOccurs="1"/>

 <xs:element name="SupplierESMEPolyPhase" type="sr:SupplierESMEPolyPhase" minOccurs="0"

 maxOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Network Operator ESME Event / Alert Common -->

 <xs:complexType name="NetworkOperatorESMECommon">

 <xs:sequence>

 <xs:element name="x8014" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8015" type="sr:EnableDisableAlert" minOccurs="0"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Network Operator ESME Event / Alert Single Phase -->

 <xs:complexType name="NetworkOperatorESMESinglePhase">

 <xs:sequence>

 <xs:element name="x8002" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8006" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8020" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8024" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8028" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x802C" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8085" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8089" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x808D" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8091" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8095" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8099" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8010" type="sr:EnableDisableAlert" minOccurs="0"/>

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 </xs:complexType>

 <!-- Network Operator ESME Event / Alert Poly Phase -->

 <xs:complexType name="NetworkOperatorESMEPolyPhase">

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 <xs:element name="x8003" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8004" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8005" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8007" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8008" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8009" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8021" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8022" type="sr:EnableDisableAlert" minOccurs="0"/>

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 <xs:element name="x8029" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x802A" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x802B" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x802D" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x802E" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x802F" type="sr:EnableDisableAlert" minOccurs="0"/>

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 <xs:element name="x808A" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x808B" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x808C" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x808E" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x808F" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8090" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8092" type="sr:EnableDisableAlert" minOccurs="0"/>

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 <xs:element name="x809A" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x809B" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x809C" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8011" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8016" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8013" type="sr:EnableDisableAlert" minOccurs="0"/>

 </xs:sequence>

 </xs:complexType>

 <!-- Electricity Network Operator Event / Alert -->

 <xs:complexType name="ElectricityNetworkOperatorAlerts">

 <xs:sequence>

 <xs:element name="NetworkOperatorESMECommon" type="sr:NetworkOperatorESMECommon"

 minOccurs="0" maxOccurs="1"/>

 <xs:choice>

 <xs:element name="NetworkOperatorESMESinglePhase"

 type="sr:NetworkOperatorESMESinglePhase" minOccurs="0" maxOccurs="1"/>

 <xs:element name="NetworkOperatorESMEPolyPhase"

 type="sr:NetworkOperatorESMEPolyPhase" minOccurs="0" maxOccurs="1"/>

 </xs:choice>

 </xs:sequence>

 </xs:complexType>

 <!-- Supplier GSME WAN Alerts -->

 <xs:complexType name="SupplierGSME">

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 <xs:element name="x810E" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8119" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8145" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element minOccurs="0" name="x8154" type="sr:EnableDisableAlert"/>

 <xs:element minOccurs="0" name="x8155" type="sr:EnableDisableAlert"/>

 <xs:element name="x8168" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8183" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x8184" type="sr:EnableDisableAlert" minOccurs="0"/>

 <xs:element name="x81A1" type="sr:EnableDisableAlert" minOccurs="0"/>

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 type="sr:ElectricitySupplierAlerts"/>

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 <xs:element name="GasSupplierAlerts" type="sr:SupplierGSME"/>

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 type="sr:ReplacementCertificatesCoS"> </xs:element>

 <xs:element name="CertificationPathCertificates"

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 <xs:element name="ApplyTimeBasedCPVChecks" type="xs:boolean"/>

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 <xs:enumeration value="Recovery"/>

 <xs:enumeration value="Root"/>

 <xs:enumeration value="Supplier"/>

 <xs:enumeration value="TransCoS"/>

 <xs:enumeration value="LoadController"/>

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 <xs:element name="DebtRecoveryPerPayment">

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 <xs:element name="LoadLimitRestorationPeriod" type="xs:unsignedInt"/>

 <xs:element name="LoadLimitSupplyState">

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 type="sr:AverageRMSVoltageSettings"/>

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 type="sr:PolyPhaseVoltageSettings" maxOccurs="3" minOccurs="3"/>

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 <xs:extension base="sr:ReadLogOnDemand">

 <xs:sequence>

 <xs:element name="LogToRead">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:enumeration value="Event"/>

 <xs:enumeration value="ALCSEvent"/>

 <xs:enumeration value="PowerEvent"/>

 <xs:enumeration value="Security"/>

 <xs:enumeration value="GSMEEvent"/>

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 <!-- CV Value Input Output MoO Process Critical Return SM WAN Req Resp

 Pattern to SU WS WS

 =============================================================================================

 1 SR Cmd OD & Async No No Yes SC RRS

 FD

 2 SR Cmd LD OD Sync No Yes No DO C DO

 3 SR Cmd & OD Sync & No Yes Yes SC RRS

 Cmd LD Async

 4 SR Pre-Cmd T Sync Yes Yes No T C T

 5 Signed Cmd OD & Async Yes No Yes SC RRS

 Pre-Cmd FD

 6 Signed Cmd LD OD Sync Yes Yes No DO C DO

 Pre-Cmd

 7 Signed Cmd & OD Sync & Yes Yes Yes SC RRS

 Pre-Cmd Cmd LD Async

 8 SR SResponse DO Sync No Yes No DO C DO

 from DCC

 9 (N/A to SR - Internal to DCC Data Systems)

Cmd = Command

 Cmd LD = Command for Local Delivery

 C OD = Completion of DCC Only Request

 C T = Completion of Transform Request

 CV = Command Variant

 DO = DCC Only

 FD = Future Dated

 MoO = Mode of Operation

 OD = On Demand

 RRS = Receive Response Service

 SC = Send Command

 SR = Service Request

 SResponse = Service Response

 SU = Service User

 T = Transform

 WS = Web Service

 -->

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 <xs:element name="NonGSMEPoorCommsMeasurementPeriods">

 <xs:simpleType>

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 <xs:element name="LocalCHNoiseMeasurementPeriod">

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 <xs:element name="LocalCHFailurePercentage">

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 <xs:enumeration value="Whitelisted"/>

 <xs:enumeration value="InstalledNotCommissioned"/>

 <xs:enumeration value="Commissioned"/>

 <xs:enumeration value="Decommissioned"/>

 <xs:enumeration value="Withdrawn"/>

 <xs:enumeration value="Suspended"/>

 <xs:enumeration value="Recovery"/>

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 <xs:simpleType name="UpdateDeviceStatusExceptCH">

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 <xs:simpleType name="UpdateDeviceStatusCH">

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 <xs:enumeration value="CHF"/>

 <xs:enumeration value="HCALCS"/>

 <xs:enumeration value="PPMID"/>

 <xs:enumeration value="IHD"/>

 <xs:enumeration value="CAD"/>

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 <xs:simpleType>

 <xs:restriction base="xs:nonNegativeInteger">

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 <xs:maxInclusive value="12"/>

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 <xs:choice>

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 <xs:complexType name="UpdateDeviceConfigurationALCDescriptions">

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 <xs:element name="HCALCS" type="sr:EUI"/>

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 <xs:element name="DSPScheduleID" type="sr:scheduleID"/>

 <xs:element name="DeviceID" type="sr:EUI"/>

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 maxOccurs="1"/>

 <xs:element name="DeleteDevice" minOccurs="1" maxOccurs="1" type="sr:DeleteDevice"/>

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 <xs:element name="MPxNs" type="sr:MeterMPxNs" minOccurs="1" maxOccurs="1"/>

 <xs:element name="OptInDate" type="xs:date" minOccurs="1" maxOccurs="1"/>

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 <xs:complexType name="ResetALCSHCALCS">

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 <xs:element name="OtherDeviceID" type="sr:EUI"/>

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 <xs:complexType name="ReadDeviceLog">

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 <xs:element name="ReadSecurityDetails">

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 <xs:element name="DeviceID" type="sr:EUI"/>

 <xs:element name="RequestType">

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 <xs:enumeration value="Add"/>

 <xs:enumeration value="Remove"/>

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 type="sr:AddDeviceToCHFWhitelist"/>

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 <xs:complexType name="AddDeviceToCHFWhitelist">

 <xs:sequence>

 <xs:element name="JoinTimePeriod">

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 <xs:element name="InstallCode">

 <xs:simpleType>

 <xs:restriction base="xs:hexBinary">

 <xs:minLength value="6"/>

 <xs:maxLength value="16"/>

 </xs:restriction>

 </xs:simpleType>

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 <xs:element minOccurs="0" name="ImportMPxN" type="sr:ImportMPxN"> </xs:element>

 <xs:element minOccurs="0" name="SecondaryImportMPAN" type="sr:MPAN"> </xs:element>

 <xs:element minOccurs="0" name="ExportMPAN" type="sr:MPAN"> </xs:element>

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 <xs:complexType name="RestoreHANDeviceLog">

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 <xs:element name="OldCHFID" type="sr:EUI"/>

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 <xs:complexType name="RestoreGPFDeviceLog">

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 <!-- Data types for the 8.14.x SRs -->

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 <xs:enumeration value="Replacement CHF Install"/>

 <xs:enumeration value="CHF Install - no SM WAN"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="UserRefID">

 <xs:restriction base="xs:string">

 <xs:maxLength value="25"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="GISData">

 <xs:restriction base="xs:string">

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 </xs:simpleType>

 <xs:simpleType name="CHFLocation">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Outside Premises"/>

 <xs:enumeration value="Indoors on external wall"/>

 <xs:enumeration value="Deep indoors"/>

 <xs:enumeration value="Basement or Cellar"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="PremiseType">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Detached / Semi Detached"/>

 <xs:enumeration value="Terraced"/>

 <xs:enumeration value="Low Rise Apartment (MDU &lt;= 5 floors)"/>

 <xs:enumeration value="High Rise Apartment (MDU > 5 floors)"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="CHFFaultReturnType">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Fault identified prior to installation"/>

 <xs:enumeration value="Fault identified post installation"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="CHFNoFaultReturnType">

 <xs:restriction base="xs:string">

 <xs:enumeration value="No Fault Return (general)"/>

 <xs:enumeration value="No Fault Return (non-dom opt out)"/>

 <xs:enumeration value="No Fault Return (dual supplier HAN variant replacement)"/>

 <xs:enumeration value="No Fault Return (SM WAN variant replacement requested by DCC)"/>

 <xs:enumeration value="Lost or Stolen Hub"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="CHFFaultReason">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Damaged case"/>

 <xs:enumeration value="Damaged Connector"/>

 <xs:enumeration value="Illegal interference or missing seals"/>

 <xs:enumeration value="Environmental conditions exceeded"/>

 <xs:enumeration value="SM WAN Fault"/>

 <xs:enumeration value="SMHAN Interface Fault"/>

 <xs:enumeration value="LED Fault"/>

 <xs:enumeration value="Aerial fault"/>

 <xs:enumeration value="Manufacturing defect"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="CHFConnectionMethod">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Hot-shoe"/>

 <xs:enumeration value="Cradle"/>

 <xs:enumeration value="ESME"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="IncidentReference">

 <xs:restriction base="xs:string">

 <xs:maxLength value="15"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:complexType name="CHFInstallSuccessSMWAN">

 <!-- SR 8.14.1 -->

 <xs:sequence>

 <xs:element name="DeviceID" type="sr:EUI" minOccurs="1" maxOccurs="1"/>

 <xs:element name="CHFInstallType" type="sr:CHFInstallType"/>

 <xs:element name="InstallDateTime" type="xs:dateTime" minOccurs="0" maxOccurs="1"/>

 <xs:element name="UserRefID" type="sr:UserRefID" minOccurs="0" maxOccurs="1"/>

 <xs:element name="MPxN" maxOccurs="1" type="sr:MPxN"> </xs:element>

 <xs:element name="GISData" type="sr:GISData" minOccurs="0" maxOccurs="1"/>

 <xs:element name="AerialInstall" type="xs:boolean" minOccurs="1" maxOccurs="1"/>

 <xs:element name="CHFLocation" type="sr:CHFLocation" minOccurs="1" maxOccurs="1"/>

 <xs:element name="AdditionalInformation" minOccurs="0" maxOccurs="1">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:maxLength value="200"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="CHFInstallSuccessNoSMWAN">

 <!-- SR 8.14.2 -->

 <xs:sequence>

 <xs:element name="DeviceID" type="sr:EUI" minOccurs="1" maxOccurs="1"/>

 <xs:element name="CHFInstallType" type="sr:CHFInstallType"/>

 <xs:element name="InstallDateTime" type="xs:dateTime" minOccurs="0" maxOccurs="1"/>

 <xs:element name="UserRefID" type="sr:UserRefID" minOccurs="0" maxOccurs="1"/>

 <xs:element name="MPxN" maxOccurs="1" type="sr:MPxN"> </xs:element>

 <xs:element name="GISData" type="sr:GISData" minOccurs="0" maxOccurs="1"/>

 <xs:element name="AerialInstall" type="xs:boolean" minOccurs="1" maxOccurs="1"/>

 <xs:element name="CHFLocation" type="sr:CHFLocation" minOccurs="1" maxOccurs="1"/>

 <xs:element name="PremiseType" type="sr:PremiseType" minOccurs="1" maxOccurs="1"/>

 <xs:element name="MetalObstructionCheck" type="xs:boolean" minOccurs="1" maxOccurs="1"/>

 <xs:element name="ConnectivityObstructionCheck" type="xs:boolean" minOccurs="1"

 maxOccurs="1"/>

 <xs:element name="SharedObstructionCheck" type="xs:boolean" minOccurs="1" maxOccurs="1"/>

 <xs:element name="AdditionalInformation" minOccurs="0" maxOccurs="1">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:maxLength value="200"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="CHFFaultReturn">

 <!-- SR 8.14.3 -->

 <xs:sequence>

 <xs:element name="DeviceID" type="sr:EUI" minOccurs="1" maxOccurs="1"/>

 <xs:element name="CHFFaultReturnType" type="sr:CHFFaultReturnType" minOccurs="1"

 maxOccurs="1"/>

 <xs:element name="UserRefDateTime" type="xs:dateTime" minOccurs="0" maxOccurs="1"/>

 <xs:element name="UserRefID" type="sr:UserRefID" minOccurs="0" maxOccurs="1"/>

 <xs:element name="OtherDeviceID" type="sr:EUI" maxOccurs="1"/>

 <xs:element name="IncidentReference" type="sr:IncidentReference" minOccurs="0"

 maxOccurs="1"/>

 <xs:element name="CHFConnectionMethod" type="sr:CHFConnectionMethod" minOccurs="1"

 maxOccurs="1"/>

 <xs:element name="CHFFaultReason" type="sr:CHFFaultReason" minOccurs="1" maxOccurs="1"/>

 <xs:element name="AdditionalInformation" minOccurs="0" maxOccurs="1">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:maxLength value="200"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="CHFNoFaultReturn">

 <!-- SR 8.14.4 -->

 <xs:sequence>

 <xs:element name="DeviceID" type="sr:EUI" minOccurs="1" maxOccurs="1"/>

 <xs:element name="CHFNoFaultReturnType" type="sr:CHFNoFaultReturnType" minOccurs="1"

 maxOccurs="1"/>

 <xs:element name="UserRefDateTime" type="xs:dateTime" minOccurs="0" maxOccurs="1"/>

 <xs:element name="UserRefID" type="sr:UserRefID" minOccurs="0" maxOccurs="1"/>

 <xs:element name="IncidentReference" type="sr:IncidentReference" minOccurs="0"

 maxOccurs="1"/>

 <xs:element name="AdditionalInformation" minOccurs="0" maxOccurs="1">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:maxLength value="200"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="UpdateFirmware">

 <xs:sequence>

 <xs:element name="FirmwareImage">

 <xs:simpleType>

 <xs:restriction base="xs:base64Binary">

 <xs:maxLength value="10240000"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="FirmwareVersion" type="sr:FirmwareVersion"/>

 <xs:element name="DeviceIDList">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:maxLength value="1199999"/>

 <xs:minLength value="23"/>

 <xs:pattern

 value="([A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2},)\*([A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2})"

 />

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ReadFirmwareVersion">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType"/>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="ActivateFirmware">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:element name="FirmwareHash">

 <xs:simpleType>

 <xs:restriction base="xs:hexBinary">

 <xs:maxLength value="32"/>

 <xs:minLength value="32"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="UpdatePPMIDFirmware">

 <xs:sequence>

 <xs:element name="FirmwareImage">

 <xs:simpleType>

 <xs:restriction base="xs:base64Binary">

 <xs:maxLength value="10240000"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 <xs:element name="FirmwareVersion" type="sr:FirmwareVersion"/>

 <xs:element name="DeviceIDList">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:maxLength value="1199999"/>

 <xs:minLength value="23"/>

 <xs:pattern

 value="([A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2},)\*([A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2})"

 />

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="RequestWANMatrix">

 <xs:choice>

 <xs:element name="UPRN" type="sr:UPRN" minOccurs="1" maxOccurs="1"/>

 <xs:element name="PartialAddress" type="sr:PartialAddress"/>

 </xs:choice>

 </xs:complexType>

 <xs:complexType name="DevicePrenotification">

 <xs:sequence>

 <xs:element name="DeviceID" type="sr:EUI" minOccurs="1" maxOccurs="1"/>

 <xs:element name="DeviceManufacturer" type="sr:DeviceManufacturer"> </xs:element>

 <xs:element name="DeviceModel" type="sr:DeviceModel"> </xs:element>

 <xs:element name="DeviceType" type="sr:DeviceType"/>

 <xs:element name="SMETSCHTSVersion" type="sr:SMETSCHTSVersion" minOccurs="0"> </xs:element>

 <xs:element name="FirmwareVersion" type="sr:FirmwareVersion" minOccurs="0"/>

 <xs:element minOccurs="0" name="ESMEVariant" type="sr:ESMEVariant"/>

 <xs:element name="AssociatedGPFDeviceID" type="sr:EUI" minOccurs="0" maxOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 <xs:simpleType name="DeviceManufacturer">

 <xs:restriction base="xs:string">

 <xs:maxLength value="30"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="DeviceModel">

 <xs:restriction base="xs:string">

 <xs:maxLength value="30"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="FirmwareVersionStatus">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Active"/>

 <xs:enumeration value="Cancelled"/>

 <xs:enumeration value="Expired"/>

 <xs:enumeration value="Withdrawn"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="CPLStatus">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Active"/>

 <xs:enumeration value="Cancelled"/>

 <xs:enumeration value="Expired"/>

 <xs:enumeration value="Withdrawn"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="SMETSCHTSVersion">

 <xs:restriction base="xs:string">

 <xs:minLength value="1"/>

 <xs:maxLength value="20"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="ESMEVariant">

 <xs:restriction base="xs:string">

 <xs:enumeration value="A"/>

 <xs:enumeration value="B"/>

 <xs:enumeration value="C"/>

 <xs:enumeration value="AD"/>

 <xs:enumeration value="BD"/>

 <xs:enumeration value="CD"/>

 <xs:enumeration value="ADE"/>

 <xs:enumeration value="BDE"/>

 <xs:enumeration value="CDE"/>

 <xs:enumeration value="ADF"/>

 <xs:enumeration value="BDF"/>

 <xs:enumeration value="CDF"/>

 <xs:enumeration value="ADEF"/>

 <xs:enumeration value="BDEF"/>

 <xs:enumeration value="CDEF"/>

 <xs:enumeration value="ADG"/>

 <xs:enumeration value="ADEG"/>

 <xs:enumeration value="AF"/>

 <xs:enumeration value="BF"/>

 <xs:enumeration value="CF"/>

 <xs:enumeration value="AEF"/>

 <xs:enumeration value="BEF"/>

 <xs:enumeration value="CEF"/>

 <xs:enumeration value="AG"/>

 <xs:enumeration value="AEG"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:complexType name="RecordNetworkDataGAS"/>

 <xs:simpleType name="AuxiliaryControllerLevel">

 <xs:restriction base="xs:unsignedShort">

 <xs:minInclusive value="0"/>

 <xs:maxInclusive value="100"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:complexType name="ReadAuxiliaryControllerConfigurationData">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType"> </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="ReadAuxiliaryControllerOperationalData">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType"> </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="SetAuxiliaryControllerState">

 <xs:sequence>

 <xs:element name="StartDateTime" type="xs:dateTime"/>

 <xs:element name="EndDateTime" type="xs:dateTime"/>

 <!-- Note that this will be applied as a percentage to an APC, and anything but 100 will switch off an ALCS or HCALCS -->

 <xs:element name="CommandedStateLevel" type="sr:AuxiliaryControllerLevel"/>

 <xs:element name="InputFromControlledLoad" type="sr:NoType" minOccurs="0"/>

 </xs:sequence>

 <xs:attribute name="auxiliaryControllerN" type="sr:range\_1\_5" use="required"/>

 </xs:complexType>

 <xs:complexType name="UpdateDeviceConfigurationAuxiliaryControllerScheduler">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:element maxOccurs="120" minOccurs="0" name="AuxiliaryControllerSchedule"

 type="sr:AuxiliaryControllerSchedule"/>

 <xs:element maxOccurs="1" minOccurs="1"

 name="AuxiliaryControllerSpecialDayDefinitions"

 type="sr:AuxiliaryControllerSpecialDayDefinitions"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:complexType name="AuxiliaryControllerSpecialDayDefinitions">

 <xs:sequence>

 <xs:element maxOccurs="20" minOccurs="0" name="AuxiliaryControllerSpecialDayDefinition">

 <xs:complexType>

 <xs:complexContent>

 <xs:extension base="sr:Date">

 <xs:attribute name="identifier" type="sr:range\_1\_20" use="required"/>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="AuxiliaryControllerSchedule">

 <xs:sequence maxOccurs="1" minOccurs="1">

 <xs:element minOccurs="1" name="AuxiliaryControllerAction"

 type="sr:AuxiliaryControllerAction"/>

 <xs:element maxOccurs="20" name="SpecialDaysApplicability" minOccurs="0">

 <xs:complexType>

 <xs:attribute name="identifier" type="sr:range\_1\_20" use="required"/>

 </xs:complexType>

 </xs:element>

 <xs:element name="DaysOfWeekApplicability" type="sr:DaysOfWeekApplicability"

 minOccurs="0"/>

 <xs:element name="AuxiliaryControllerSchedulePeriodAndTime"

 type="sr:ScheduleDatesAndTime"/>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="AuxiliaryControllerAction">

 <xs:sequence>

 <!-- Where an Auxiliary Controller is an APC, the number will be used by the Device as a percentage of the maximum energy flow.

 For an ALCS or HCALCS, 100 will cause activation of the switch and any other value will cause deactivation. -->

 <xs:element name="CommandedStateLevel" type="sr:AuxiliaryControllerLevel"/>

 <xs:element name="InputFromControlledLoad" type="sr:NoType" minOccurs="0"/>

 </xs:sequence>

 <xs:attribute name="auxiliaryControllerN" type="sr:range\_1\_5" use="required"/>

 </xs:complexType>

 <xs:complexType name="LimitAPCLevel">

 <xs:sequence>

 <xs:element name="StartDateTime" type="xs:dateTime"/>

 <xs:element name="EndDateTime" type="xs:dateTime"/>

 <xs:element name="CommandedStateLevel" type="sr:AuxiliaryControllerLevel"/>

 <xs:element name="InputFromControlledLoad" type="sr:NoType" minOccurs="0"/>

 </xs:sequence>

 <xs:attribute name="auxiliaryControllerN" type="sr:range\_1\_5" use="required"/>

 </xs:complexType>

 <xs:complexType name="SignedPreCommand">

 <xs:complexContent>

 <xs:extension base="sr:FutureDatedAbstractType">

 <xs:sequence>

 <xs:element name="GBCSPayload" type="xs:base64Binary"/>

 </xs:sequence>

 </xs:extension>

 </xs:complexContent>

 </xs:complexType>

 <xs:simpleType name="UPRN">

 <xs:restriction base="xs:positiveInteger">

 <xs:totalDigits value="12"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="PostCode">

 <xs:restriction base="xs:string">

 <xs:minLength value="6"/>

 <xs:maxLength value="8"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="AddressIdentifier">

 <xs:restriction base="xs:string">

 <xs:maxLength value="30"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="CSPRegion">

 <xs:restriction base="xs:string">

 <xs:enumeration value="North"/>

 <xs:enumeration value="Central"/>

 <xs:enumeration value="South"/>

 <xs:enumeration value="Unknown"/>

 <xs:enumeration value="SMETS1"/>

 </xs:restriction>

 </xs:simpleType>

 <xs:complexType name="PropertyFilter">

 <xs:sequence>

 <xs:element name="PostCode" type="sr:PostCode"> </xs:element>

 <xs:element name="AddressIdentifier" type="sr:AddressIdentifier"> </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ReadInventory">

 <xs:choice>

 <xs:element name="UPRN" minOccurs="1" maxOccurs="1" type="sr:UPRN"> </xs:element>

 <xs:element name="DeviceID" type="sr:EUI" minOccurs="1" maxOccurs="1"/>

 <xs:element name="MPxN" minOccurs="1" maxOccurs="1" type="sr:ImportMPxN"> </xs:element>

 <xs:element name="PropertyFilter" type="sr:PropertyFilter"/>

 </xs:choice>

 </xs:complexType>

 <xs:complexType name="Request">

 <xs:sequence>

 <xs:element name="Header">

 <xs:complexType>

 <xs:sequence>

 <xs:element name="RequestID" type="sr:RequestIDType" minOccurs="1"

 maxOccurs="1"/>

 <xs:element minOccurs="0" name="FirstInSequence" type="xs:boolean"/>

 <xs:element name="PrecedingServiceRequestID" type="sr:RequestIDType"

 minOccurs="0" maxOccurs="1"/>

 <xs:element name="CommandVariant" type="sr:CommandVariant" minOccurs="1"

 maxOccurs="1"/>

 <xs:element name="ServiceReference" type="sr:ServiceReference"/>

 <xs:element name="ServiceReferenceVariant" type="sr:ServiceReferenceVariant"

 maxOccurs="1"/>

 </xs:sequence>

 </xs:complexType>

 </xs:element>

 <xs:element name="Body">

 <xs:complexType>

 <xs:choice>

 <!-- Service Ref 1.x -->

 <xs:element name="UpdateImportTariffPrimaryElement"

 type="sr:TariffPrimaryElement"/>

 <xs:element name="UpdateImportTariffSecondaryElement"

 type="sr:TariffSecondaryElement"/>

 <xs:element name="UpdatePricePrimaryElement"

 type="sr:UpdatePricePrimaryElement"/>

 <xs:element name="UpdatePriceSecondaryElement"

 type="sr:UpdatePriceSecondaryElement"/>

 <xs:element name="UpdateMeterBalance" type="sr:UpdateMeterBalance"/>

 <xs:element name="UpdatePaymentMode" type="sr:UpdatePaymentMode"/>

 <xs:element name="ResetTariffBlockCounterMatrix"

 type="sr:ResetTariffBlockCounterMatrix"/>

 <!-- Service Ref 2.x -->

 <xs:element name="UpdatePrepayConfiguration"

 type="sr:UpdatePrepayConfiguration"/>

 <xs:element name="TopUpDevice" type="sr:TopUpDevice"/>

 <xs:element name="UpdateDebt" type="sr:UpdateDebt"/>

 <xs:element name="ActivateEmergencyCredit" type="sr:ActivateEmergencyCredit"/>

 <!-- Service Ref 3.x -->

 <xs:element name="DisplayMessage" type="sr:DisplayMessage"/>

 <xs:element name="RestrictAccessForChangeOfTenancy"

 type="sr:RestrictAccessForChangeOfTenancy"/>

 <xs:element name="ClearEventLog" type="sr:ClearEventLog"/>

 <xs:element name="UpdateSupplierName" type="sr:UpdateSupplierName"/>

 <xs:element name="DisablePrivacyPIN" type="sr:DisablePrivacyPIN"/>

 <!-- Service Ref 4.x -->

 <xs:element name="ReadInstantaneousImportRegisters"

 type="sr:ReadInstantaneousImportRegisters"/>

 <xs:element name="ReadInstantaneousImportTOUMatrices"

 type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="ReadInstantaneousImportTOUWithBlocksMatrices"

 type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="ReadInstantaneousImportBlockCounters"

 type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="ReadInstantaneousExportRegisters"

 type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="ReadInstantaneousPrepayValues"

 type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="RetrieveCoMOrTariffTriggeredBillingDataLog"

 type="sr:ReadLogFutureDatableAndURPCredentials"/>

 <xs:element name="RetrieveBillingCalendarTriggeredBillingDataLog"

 type="sr:ReadLogFutureDatableAndURPCredentials"/>

 <xs:element name="RetrieveBillingDataLogDebtPayments"

 type="sr:ReadLogFutureDatable"/>

 <xs:element name="RetrieveBillingDataLogPrepaymentCredits"

 type="sr:ReadLogFutureDatable"/>

 <xs:element name="RetrieveImportDailyReadLog"

 type="sr:ReadLogFutureDatableAndURPCredentials"/>

 <xs:element name="RetrieveExportDailyReadLog" type="sr:ReadLogFutureDatable"/>

 <xs:element name="ReadActiveImportProfileData"

 type="sr:ReadLogFutureDatableAndURPCredentials"/>

 <xs:element name="ReadReactiveImportProfileData"

 type="sr:ReadLogFutureDatable"/>

 <xs:element name="ReadExportProfileData" type="sr:ReadLogFutureDatable"/>

 <xs:element name="ReadNetworkData"

 type="sr:ReadLogFutureDatableAndURPCredentials"/>

 <xs:element name="ReadTariffPrimaryElement" type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadTariffSecondaryElement" type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadMaximumDemandImportRegisters"

 type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="ReadMaximumDemandExportRegisters"

 type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="ReadPrepaymentConfiguration"

 type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="ReadPrepaymentDailyReadLog"

 type="sr:ReadLogFutureDatableAndURPCredentials"/>

 <xs:element name="ReadLoadLimitData" type="sr:ReadDataOnDemandOrFutureDated"/>

 <xs:element name="ReadActivePowerImport" type="sr:ReadDataOnDemand"/>

 <xs:element name="RetrieveDailyConsumptionLog"

 type="sr:ReadLogFutureDatableAndURPCredentials"/>

 <xs:element name="ReadMeterBalance" type="sr:ReadDataOnDemandOrFutureDated"/>

 <!-- Service Ref 5.x -->

 <xs:element name="CreateSchedule" type="sr:DSPSchedule"/>

 <xs:element name="ReadSchedule" type="sr:ReadSchedule"/>

 <xs:element name="DeleteSchedule" type="sr:DeleteSchedule"/>

 <!-- Service Ref 6.x -->

 <xs:element name="ReadDeviceConfigurationVoltage" type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadDeviceConfigurationRandomisation"

 type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadDeviceConfigurationBillingCalendar"

 type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadDeviceConfigurationIdentityExcMPxN"

 type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadDeviceConfigurationInstantaneousPowerThresholds"

 type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadDeviceConfigurationMPxN" type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadDeviceConfigurationGas" type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadDeviceConfigurationPaymentMode"

 type="sr:ReadDataOnDemand"/>

 <xs:element name="ReadDeviceConfigurationEventAndAlertBehaviours"

 type="sr:ReadDataOnDemand"/>

 <xs:element name="UpdateDeviceConfigurationLoadLimitingGeneralSettings"

 type="sr:UpdateDeviceConfigurationLoadLimitingGeneralSettings"/>

 <xs:element name="UpdateDeviceConfigurationLoadLimitingCounterReset"

 type="sr:UpdateDeviceConfigurationLoadLimitingCounterReset"/>

 <xs:element name="UpdateDeviceConfigurationVoltage"

 type="sr:UpdateDeviceConfigurationVoltage"/>

 <xs:element name="UpdateDeviceConfigurationGasConversion"

 type="sr:UpdateDeviceConfigurationGasConversion"/>

 <xs:element name="UpdateDeviceConfigurationGasFlow"

 type="sr:UpdateDeviceConfigurationGasFlow"/>

 <xs:element name="UpdateDeviceConfigurationBillingCalendar"

 type="sr:BillingCalendar"/>

 <xs:element name="SynchroniseClock" type="sr:SynchroniseClock"/>

 <xs:element name="UpdateDeviceConfigurationInstantaneousPowerThreshold"

 type="sr:UpdateDeviceConfigurationInstantaneousPowerThreshold"/>

 <xs:element name="ReadEventOrSecurityLog" type="sr:ReadEventOrSecurityLog"/>

 <xs:element name="UpdateDeviceConfigurationALCDescriptions"

 type="sr:UpdateDeviceConfigurationALCDescriptions"/>

 <xs:element name="UpdateDeviceConfigurationALCScheduler"

 type="sr:UpdateDeviceConfigurationALCScheduler"/>

 <xs:element name="UpdateDeviceConfigurationAuxiliaryControllerScheduler"

 type="sr:UpdateDeviceConfigurationAuxiliaryControllerScheduler"/>

 <xs:element name="UpdateSecurityCredentialsKRP"

 type="sr:UpdateSecurityCredentialsKRP"/>

 <xs:element name="UpdateSecurityCredentialsDevice"

 type="sr:UpdateSecurityCredentialsDevice"/>

 <xs:element name="IssueSecurityCredentials"

 type="sr:IssueSecurityCredentials"/>

 <xs:element name="SetMaximumDemandConfigurableTimePeriod"

 type="sr:SetMaximumDemandConfigurableTimePeriod"/>

 <xs:element name="ResetMaximumDemandRegisters"

 type="sr:ResetMaximumDemandRegisters"/>

 <xs:element name="SetDeviceConfigurationImportMPxN"

 type="sr:SetDeviceConfigurationImportMPxN"/>

 <xs:element name="SetDeviceConfigurationExportMPAN"

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 <xs:element name="RequestHandoverOfDCCControlledDevice"

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 <xs:element name="ConfigureAlertBehaviour" type="sr:ConfigureAlertBehaviour"/>

 <xs:element name="UpdateSecurityCredentialsCoS"

 type="sr:UpdateSecurityCredentialsCoS"/>

 <xs:element name="RetrieveDeviceSecurityCredentialsKRP"

 type="sr:RetrieveDeviceSecurityCredentialsKRP"/>

 <xs:element name="RetrieveDeviceSecurityCredentialsDevice"

 type="sr:RetrieveDeviceSecurityCredentialsDevice"/>

 <xs:element name="SetElectricitySupplyTamperState"

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 <xs:element

 name="UpdateDeviceConfigurationDailyResettingOfTariffBlockCounterMatrix"

 type="sr:UpdateDeviceConfigurationDailyResettingOfTariffBlockCounterMatrix"/>

 <xs:element name="UpdateDeviceConfigurationRMSVoltageCounterReset"

 type="sr:UpdateDeviceConfigurationRMSVoltageCR"/>

 <xs:element name="SetCHFSubGHzConfiguration" type="sr:SubGHzConfiguration"/>

 <xs:element name="RequestCHFSubGHzChannelScan"

 type="sr:RequestCHFSubGHzChannelScan"/>

 <xs:element name="ReadCHFSubGHzConfiguration"

 type="sr:ReadCHFSubGHzConfiguration"/>

 <xs:element name="ReadCHFSubGHzChannel" type="sr:ReadCHFSubGHzChannel"/>

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 <!-- Service Ref 7.x -->

 <xs:element name="EnableSupply" type="sr:EnableSupply"/>

 <xs:element name="DisableSupply" type="sr:DisableSupply"/>

 <xs:element name="ArmSupply" type="sr:ArmSupply"/>

 <xs:element name="ReadSupplyStatus" type="sr:ReadDataOnDemand"/>

 <xs:element name="ActivateAuxiliaryLoad" type="sr:ActivateAuxiliaryLoad"/>

 <xs:element name="DeactivateAuxiliaryLoad" type="sr:DeactivateAuxiliaryLoad"/>

 <xs:element name="ReadALCSData" type="sr:ReadALCSData"/>

 <xs:element name="ResetAuxiliaryLoad" type="sr:ResetAuxiliaryLoad"/>

 <xs:element name="AddAuxiliaryLoadToBoostButton"

 type="sr:AddAuxiliaryLoadToBoostButton"/>

 <xs:element name="RemoveAuxiliaryLoadFromBoostButton"

 type="sr:RemoveAuxiliaryLoadFromBoostButton"/>

 <xs:element name="ReadBoostButtonDetails" type="sr:ReadLogFutureDatable"/>

 <xs:element name="SetRandomisedOffsetLimit"

 type="sr:SetRandomisedOffsetLimit"/>

 <xs:element name="SetAuxiliaryControllerState"

 type="sr:SetAuxiliaryControllerState"/>

 <xs:element name="ReadAuxiliaryControllerConfigurationData"

 type="sr:ReadAuxiliaryControllerConfigurationData"/>

 <xs:element name="ReadAuxiliaryControllerOperationalData"

 type="sr:ReadAuxiliaryControllerOperationalData"/>

 <xs:element name="LimitAPCLevel" type="sr:LimitAPCLevel"/>

 <!-- Service Ref 8.x -->

 <xs:element name="CommissionDeviceSynchroniseClock"

 type="sr:SynchroniseClock"/>

 <xs:element name="ReadInventory" type="sr:ReadInventory"/>

 <xs:element name="DecommissionDevice" type="sr:DecommissionDevice"/>

 <xs:element name="UpdateInventory" type="sr:UpdateInventory"/>

 <xs:element name="ServiceOptOut" type="sr:ServiceOptOut"/>

 <xs:element name="ServiceOptIn" type="sr:ServiceOptIn"/>

 <xs:element name="JoinServiceCritical" type="sr:JoinOrUnjoinDevice"/>

 <xs:element name="JoinServiceNonCritical" type="sr:JoinOrUnjoinDevice"/>

 <xs:element name="UnjoinServiceCritical" type="sr:JoinOrUnjoinDevice"/>

 <xs:element name="UnjoinServiceNonCritical" type="sr:JoinOrUnjoinDevice"/>

 <xs:element name="ReadDeviceLog" type="sr:ReadDeviceLog"/>

 <xs:element name="UpdateHANDeviceLog" type="sr:UpdateHANDeviceLog"/>

 <xs:element name="RestoreHANDeviceLog" type="sr:RestoreHANDeviceLog"/>

 <xs:element name="RestoreGPFDeviceLog" type="sr:RestoreGPFDeviceLog"/>

 <xs:element name="ReturnLocalCommandResponse"

 type="sr:ReturnLocalCommandResponse"/>

 <xs:element name="CHFInstallSuccessSMWAN" type="sr:CHFInstallSuccessSMWAN"/>

 <xs:element name="CHFInstallSuccessNoSMWAN"

 type="sr:CHFInstallSuccessNoSMWAN"/>

 <xs:element name="CHFFaultReturn" type="sr:CHFFaultReturn"/>

 <xs:element name="CHFNoFaultReturn" type="sr:CHFNoFaultReturn"/>

 <!-- Service Ref 9.x -->

 <xs:element name="RequestCustomerIdentificationNumber"

 type="sr:RequestCustomerIdentificationNumber"/>

 <!-- Service Ref 11.x -->

 <xs:element name="UpdateFirmware" type="sr:UpdateFirmware"/>

 <xs:element name="ReadFirmwareVersion" type="sr:ReadFirmwareVersion"/>

 <xs:element name="ActivateFirmware" type="sr:ActivateFirmware"/>

 <xs:element name="UpdatePPMIDFirmware" type="sr:UpdatePPMIDFirmware"/>

 <!-- Service Ref 12.x -->

 <xs:element name="RequestWANMatrix" type="sr:RequestWANMatrix"/>

 <xs:element name="DevicePrenotification" type="sr:DevicePrenotification"/>

 <!-- Service Ref 14.x -->

 <xs:element name="RecordNetworkDataGAS" type="sr:RecordNetworkDataGAS"/>

 <!-- Signed Pre-Command -->

 <xs:element name="SignedPreCommand" type="sr:SignedPreCommand"/>

 </xs:choice>

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 </xs:simpleType>

 <!-- Responses -->

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 <xs:element name="CSPRegion" type="sr:CSPRegion"> </xs:element>

 <xs:element name="CoverageAvailability" type="xs:boolean"/>

 <xs:element minOccurs="0" name="AnticipatedCoverageDate" type="xs:date"> </xs:element>

 <xs:element name="WANTechnology" type="sr:WANTechnologyType" maxOccurs="1" minOccurs="1"/>

 <xs:element name="ConnectivityLikelihood">

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 <xs:enumeration value="High"/>

 <xs:enumeration value="Medium"/>

 <xs:enumeration value="Low"/>

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 <xs:element minOccurs="0" name="AdditionalInformation">

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 <xs:complexType name="DSPUpdateFirmwareWarning">

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 <xs:element maxOccurs="1" name="InvalidDeviceIDList" minOccurs="0"

 type="sr:DeviceIDList"> </xs:element>

 <xs:element maxOccurs="1" name="NotCommissionedDeviceIDList" minOccurs="0"

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 <xs:element maxOccurs="1" name="NotApplicableFirmwareDeviceIDList" minOccurs="0"

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 <xs:element maxOccurs="1" name="OtherRequestInProgressList" minOccurs="0"

 type="sr:DeviceIDList"> </xs:element>

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 <xs:element maxOccurs="1" minOccurs="1" name="DSPScheduledServiceReferenceVariant"

 type="sr:DSPScheduledServiceReferenceVariant"/>

 <xs:element maxOccurs="1" minOccurs="1" name="DeviceID" type="sr:EUI"/>

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 <xs:element name="DSPRetrieveImportDailyReadLog" type="sr:ReadLogPeriodOffset"/>

 <xs:element name="DSPRetrieveExportDailyReadLog" type="sr:ReadLogPeriodOffset"/>

 <xs:element name="DSPReadActiveImportProfileData" type="sr:ReadLogPeriodOffset"/>

 <xs:element name="DSPReadReactiveImportProfileData" type="sr:ReadLogPeriodOffset"/>

 <xs:element name="DSPReadExportProfileData" type="sr:ReadLogPeriodOffset"/>

 <xs:element name="DSPReadNetworkData" type="sr:ReadLogPeriodOffset"/>

 <xs:element name="DSPReadMaximumDemandImportRegisters" type="sr:DSPReadData"/>

 <xs:element name="DSPReadMaximumDemandExportRegisters" type="sr:DSPReadData"/>

 <xs:element name="DSPReadPrepaymentDailyReadLog" type="sr:ReadLogPeriodOffset"/>

 <xs:element name="DSPReadLoadLimitData" type="sr:DSPReadData"/>

 <xs:element name="DSPReadActivePowerImport" type="sr:DSPReadData"/>

 <xs:element name="DSPRetrieveDailyConsumptionLog" type="sr:ReadLogPeriodOffset"/>

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 <xs:element minOccurs="0" name="SMETSCHTSVersion" type="sr:SMETSCHTSVersion"> </xs:element>

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 <xs:element name="MPxN" type="sr:ImportMPxN"> </xs:element>

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 </xs:sequence>

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 <xs:enumeration value="ActivationSuccess"/>

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 <xs:complexType name="LimitedDutyCycleActionTaken">

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 <xs:enumeration value="GSMERequest"/>

 <xs:enumeration value="GSMEMissedItsCurfew"/>

 <xs:enumeration value="GSMEMissingForTheLastDay"/>

 <xs:enumeration value="CHDetectedMessageFailureProblems"/>

 <xs:enumeration value="CHDetectedMessageRetryProblems"/>

 <xs:enumeration value="SubGHzNon-GSMEDeviceRequest"/>

 <xs:enumeration value="SMHANFormation"/>

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 <xs:element name="StatusCode">

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 <xs:restriction base="xs:string">

 <xs:enumeration value="ScanRequestAccepted"/>

 <xs:enumeration value="HHTConnected"/>

 <xs:enumeration value="DutyCycleUsageIsTooHigh"/>

 <xs:enumeration value="JoiningIsCurrentlyPermitted"/>

 <xs:enumeration value="GSMEOTADistributionUnderway"/>

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 <xs:enumeration value="TooManyCommandsToday"/>

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 <xs:element name="CRAFlag" type="sr:CRAFlag"/>

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 <xs:complexType name="DeviceNotJoinedSubGHzSMHAN">

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 <xs:element name="SubGHzConfigurationChanged" type="sr:SubGHzConfiguration"/>

 <xs:element name="MessageDiscardedDueToDutyCycleManagement"

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 <xs:element name="NoMoreSubGHzDeviceCapacity" type="sr:DeviceNotJoinedSubGHzSMHAN"/>

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 <xs:enumeration value="UpdateRequested"/>

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 <xs:element name="TimeStamp" type="xs:dateTime"/>

 <xs:element name="CommsHubTransferStatus">

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 <xs:element name="AdditionalInformation" type="xs:string" minOccurs="0"/>

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 <xs:complexType name="CommsHubFirmwareActivation">

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 <xs:element name="DeviceID" type="sr:EUI"/>

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 <xs:element name="ServiceUserDUISVersion" type="xs:string"/>

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 type="sr:floorSequenceNumber" minOccurs="0"/>

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 <xs:enumeration value="DigitalSigning"/>

 <xs:enumeration value="KeyAgreement"/>

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 </xs:element>

 <xs:element name="NetworkOperatorCertificateType" maxOccurs="2" minOccurs="0">

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 <xs:enumeration value="DigitalSigning"/>

 <xs:enumeration value="KeyAgreement"/>

 </xs:restriction>

 </xs:simpleType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="RecoveryComplete"/>

 <xs:complexType name="ResponseMessage">

 <xs:sequence>

 <xs:element name="ServiceReference" type="sr:ServiceReference"/>

 <xs:element maxOccurs="1" minOccurs="1" name="ServiceReferenceVariant"

 type="sr:ServiceReferenceVariant"/>

 <xs:choice minOccurs="0">

 <xs:element name="CINMessage" type="sr:CINMessage"/>

 <xs:element name="DSPInventory" type="sr:DSPInventory"/>

 <xs:element name="DSPOptIn" type="sr:DSPOptIn"/>

 <xs:element name="DSPSchedulesRead" type="sr:DSPSchedulesRead" maxOccurs="1"/>

 <xs:element name="DSPScheduledMessage" type="sr:DSPScheduledMessage"/>

 <xs:element name="DSPScheduleID" type="sr:scheduleID"/>

 <xs:element name="DSPUpdateFirmwareWarning" type="sr:DSPUpdateFirmwareWarning"/>

 <xs:element name="DSPUpdatePPMIDFirmwareWarning"

 type="sr:DSPUpdatePPMIDFirmwareWarning"/>

 <xs:element name="DSPWANMatrix" type="sr:DSPWANMatrix"/>

 <xs:element name="FutureDatedDeviceAlertMessage"

 type="sr:FutureDatedDeviceAlertMessage"/>

 <xs:element name="GBCSPayload" type="xs:base64Binary"/>

 <xs:element name="LocalCommand" type="sr:LocalCommand"/>

 <xs:element name="PreCommand" type="sr:PreCommand"/>

 </xs:choice>

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="DCCAlert">

 <xs:choice>

 <xs:element name="PowerOutageEvent" type="sr:PowerOutageEvent"/>

 <xs:element name="DeviceStatusChangeEvent" type="sr:DeviceStatusChangeEvent"/>

 <xs:element name="DSPScheduleRemoval" type="sr:DSPScheduleRemoval"/>

 <xs:element name="CommandFailure" type="sr:CommandFailure"/>

 <xs:element name="FirmwareDistributionFailure" type="sr:FirmwareDistributionFailure"/>

 <xs:element name="UpdateHANDeviceLogResult" type="sr:UpdateHANDeviceLogResult"/>

 <xs:element name="ChangeOfSupplier" type="sr:ChangeOfSupplier"/>

 <xs:element name="DeviceLogRestored" type="sr:DeviceLogRestored"/>

 <xs:element name="PPMIDAlert" type="sr:PPMIDAlert"/>

 <xs:element name="SecurityCredentialsUpdated" type="sr:SecurityCredentialsUpdated"/>

 <xs:element name="PPMIDRemoval" type="sr:PPMIDRemoval"/>

 <xs:element name="QuarantinedRequest" type="sr:QuarantinedRequest"/>

 <xs:element name="FirmwareVersionMismatch" type="sr:FirmwareVersionMismatch"/>

 <xs:element name="DualBandCHAlert" type="sr:DualBandCHAlert"/>

 <xs:element name="S1SPAlertDSP" type="sr:S1SPAlertDSP"/>

 <xs:element name="SMETS1CHFirmwareNotification" type="sr:SMETS1CHFirmwareNotification"/>

 <xs:element name="ALCSHCALCSConfigurationChange" type="sr:ALCSHCALCSConfigurationChange"/>

 <xs:element name="FirmwareUpgradeRequested" type="sr:FirmwareUpgradeRequested"/>

 <xs:element name="CSPFirmwareDeliveryStatus" type="sr:CSPFirmwareDeliveryStatus"/>

 <xs:element name="CommsHubAlert" type="sr:CommsHubAlert"/>

 <xs:element name="ECoSAlert" type="sr:ECoSAlert"/>

 <xs:element name="CommsHubFirmwareActivation" type="sr:CommsHubFirmwareActivation"/>

 <xs:element name="CoSCertificateAlert" type="sr:CoSCertificateAlert"/>

 <xs:element name="DUISVersionMismatch" type="sr:DUISVersionMismatch"/>

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 </xs:complexType>

 <xs:complexType name="DCCAlertMessage">

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 <xs:element name="DCCAlertCode">

 <xs:simpleType>

 <xs:restriction base="xs:string">

 <xs:enumeration value="AD1"/>

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 <xs:enumeration value="N2"/>

 <xs:enumeration value="N3"/>

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 <xs:element name="ThrottledAlertSequenceId" type="xs:unsignedInt" minOccurs="0"

 maxOccurs="1"/>

 <xs:element name="ThrottledAlertCount" type="xs:unsignedInt" minOccurs="0" maxOccurs="1"/>

 <xs:element name="DCCAlert" type="sr:DCCAlert"/>

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 <xs:complexType name="Response">

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 <xs:element name="Header">

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 <xs:element maxOccurs="1" name="ResponseID" type="sr:ResponseIDType"

 minOccurs="0"/>

 <xs:element name="ResponseCode" type="sr:ResponseCode"/>

 <xs:element name="ResponseDateTime" type="xs:dateTime"/>

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 </xs:complexType>

 </xs:element>

 <xs:element name="Body">

 <xs:complexType>

 <xs:choice minOccurs="1">

 <xs:element name="ResponseMessage" type="sr:ResponseMessage"> </xs:element>

 <xs:element name="DeviceAlertMessage" type="sr:DeviceAlertMessage"/>

 <xs:element name="DCCAlertMessage" type="sr:DCCAlertMessage"/>

 <xs:element name="SMETS1ResponseMessage" type="sr:SMETS1ResponseMessage"/>

 </xs:choice>

 </xs:complexType>

 </xs:element>

 <xs:element ref="ds:Signature" minOccurs="0"/>

 </xs:sequence>

 <xs:attribute name="schemaVersion" type="xs:decimal" use="required"/>

 </xs:complexType>

 <!-- SMETS1 Definitions -->

 <xs:complexType name="SMETS1SignedResponse">

 <xs:sequence>

 <xs:element name="SMETS1Response" type="sr:SMETS1ResponseType"/>

 <xs:element ref="ds:Signature"/>

 </xs:sequence>

 <xs:attribute name="schemaVersion" type="xs:decimal" use="required"/>

 </xs:complexType>

 <xs:complexType name="SMETS1ResponseType">

 <xs:sequence>

 <xs:element name="Header" type="ra:HeaderType"/>

 <xs:element name="Body">

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 <xs:choice>

 <xs:element name="ResponseMessage" type="ra:ResponsePayload"/>

 <xs:element name="DeviceAlertMessage" type="ra:DeviceAlertMessageType"/>

 </xs:choice>

 </xs:complexType>

 </xs:element>

 </xs:sequence>

 </xs:complexType>

</xs:schema>