FINANCIAL SETTLEMENT REPORT DOCUMENT
UML MODEL AND SCHEMA
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## Revision History

<table>
<thead>
<tr>
<th>Version</th>
<th>Release</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2020-09-21</td>
<td>First draft of the document.</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>2020-10-15</td>
<td>Comments from CIM EG were considered.</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>2020-11-04</td>
<td>Approved by MC.</td>
</tr>
</tbody>
</table>
1 Objective

The purpose of this document is to provide the contextual and assembly UML models and the schema of the FinancialSettlementReport _MarketDocument.

The schema of the FinancialSettlementReport _MarketDocument could be used in various business processes.

It is not the purpose of this document to describe all the use cases, sequence diagrams, business processes, etc. for which this schema is to be used.

This document shall only be referenced in an implementation guide of a specific business process. The content of the business process implementation guide shall be as follows:

- Description of the business process;
- Use case of the business process;
- Sequence diagrams of the business process;
- List of the schema (XSD) to be used in the business process and versions of the schema;
- For each schema, dependency tables providing the necessary information for the generation of the XML instances, i.e. when the optional attributes are to be used, which codes from which ENTSO-E codelist are to be used.
2 FinancialSettlementReport_MarketDocument

2.1 Financial Settlement Report contextual model

2.1.1 Overview of the model

Figure 1 shows the model.

Figure 1 - Financial Settlement Report contextual model
2.1.2 IsBasedOn relationships from the European style market profile

Table 1 shows the traceability dependency of the classes used in this package towards the upper level.

<table>
<thead>
<tr>
<th>Name</th>
<th>Complete IsBasedOn Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency_Unit</td>
<td>TC57CIM::IEC62325::MarketManagement::Unit</td>
</tr>
<tr>
<td>Domain</td>
<td>TC57CIM::IEC62325::MarketManagement::Domain</td>
</tr>
<tr>
<td>MarketParticipant</td>
<td>TC57CIM::IEC62325::MarketCommon::MarketParticipant</td>
</tr>
<tr>
<td>MarketRole</td>
<td>TC57CIM::IEC62325::MarketCommon::MarketRole</td>
</tr>
<tr>
<td>Measure_Unit</td>
<td>TC57CIM::IEC62325::MarketManagement::Unit</td>
</tr>
<tr>
<td>MonetaryValue_Quantity</td>
<td>TC57CIM::IEC62325::MarketManagement::Quantity</td>
</tr>
<tr>
<td>Point</td>
<td>TC57CIM::IEC62325::MarketManagement::Point</td>
</tr>
<tr>
<td>Process</td>
<td>TC57CIM::IEC62325::MarketManagement::Process</td>
</tr>
<tr>
<td>Reason</td>
<td>TC57CIM::IEC62325::MarketManagement::Reason</td>
</tr>
<tr>
<td>RegisteredResource</td>
<td>TC57CIM::IEC62325::MarketCommon::RegisteredResource</td>
</tr>
<tr>
<td>Series_Period</td>
<td>TC57CIM::IEC62325::MarketManagement::Period</td>
</tr>
<tr>
<td>Time_Period</td>
<td>TC57CIM::IEC62325::MarketManagement::Period</td>
</tr>
<tr>
<td>TimeSeries</td>
<td>TC57CIM::IEC62325::MarketManagement::TimeSeries</td>
</tr>
</tbody>
</table>
2.2 Financial Settlement Report assembly model

2.2.1 Overview of the model

Figure 2 shows the model.

![Financial Settlement Report assembly model diagram]

Figure 2 - Financial Settlement Report assembly model
IsBasedOn relationships from the European style market profile

Table 2 shows the traceability dependency of the classes used in this package towards the upper level.

### Table 2 - IsBasedOn dependency

<table>
<thead>
<tr>
<th>Name</th>
<th>Complete IsBasedOn Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point</td>
<td>TC57CIM::IEC62325::MarketManagement::Point</td>
</tr>
<tr>
<td>Reason</td>
<td>TC57CIM::IEC62325::MarketManagement::Reason</td>
</tr>
<tr>
<td>Series_Period</td>
<td>TC57CIM::IEC62325::MarketManagement::Period</td>
</tr>
<tr>
<td>TimeSeries</td>
<td>TC57CIM::IEC62325::MarketManagement::TimeSeries</td>
</tr>
</tbody>
</table>

Detailed Financial Settlement Report assembly model

#### 2.2.3.1 FinancialSettlementReport_MarketDocument root class

An electronic document containing the information necessary to satisfy the requirements of a given business process.

Table 3 shows all attributes of FinancialSettlementReport_MarketDocument.

### Table 3 - Attributes of Financial Settlement Report assembly model::FinancialSettlementReport_MarketDocument

<table>
<thead>
<tr>
<th>Order</th>
<th>multip.</th>
<th>Attribute name / Attribute type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>[1..1]</td>
<td>mRID ID_String</td>
<td>The unique identification of the document being exchanged within a business process flow.</td>
</tr>
<tr>
<td>1</td>
<td>[1..1]</td>
<td>revisionNumber ESMPVersion_String</td>
<td>The identification of the version that distinguishes one evolution of a document from another.</td>
</tr>
<tr>
<td>3</td>
<td>[1..1]</td>
<td>process.processType ProcessKind_String</td>
<td>The identification of the nature of process that the document addresses. --- The Process associated with an electronic document header that is valid for the whole document.</td>
</tr>
<tr>
<td>4</td>
<td>[1..1]</td>
<td>sender_MarketParticipant.mRID PartyID_String</td>
<td>The identification of a party in the energy market. --- Document owner.</td>
</tr>
<tr>
<td>5</td>
<td>[1..1]</td>
<td>sender_MarketParticipant.marketRole.type MarketRoleKind_String</td>
<td>The identification of the role played by a market player. --- Document owner. --- The role associated with a MarketParticipant.</td>
</tr>
<tr>
<td>6</td>
<td>[1..1]</td>
<td>receiver_MarketParticipant.mRID PartyID_String</td>
<td>The identification of a party in the energy market. --- Document recipient.</td>
</tr>
<tr>
<td>7</td>
<td>[1..1]</td>
<td>receiver_MarketParticipant.marketRole.type MarketRoleKind_String</td>
<td>The identification of the role played by a market player. --- The MarketParticipant associated with an electronic document header. --- The role associated with a MarketParticipant.</td>
</tr>
<tr>
<td>8</td>
<td>[1..1]</td>
<td>createdDateTime ESMP_DateTime</td>
<td>The date and time of the creation of the document.</td>
</tr>
<tr>
<td>Order</td>
<td>mult.</td>
<td>Attribute name / Attribute type</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>---------------------------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| 9     | [1..1]| period.timeInterval
ESMP_DateTimeInterval | The start and end date and time for a given interval. The time interval that is associated with an electronic document and which is valid for the whole document. |
| 10    | [0..1]| domain.mRID
AreaID_String      | The unique identification of the domain. The identification of the domain that is covered in the financial settlement report document. |
| 11    | [0..1]| docStatus
Action_Status      | The identification of the condition or position of the document with regard to its standing. |

Table 4 shows all association ends of FinancialSettlementReport_MarketDocument with other classes.

### Table 4 - Association ends of Financial Settlement Report assembly model::FinancialSettlementReport_MarketDocument with other classes

<table>
<thead>
<tr>
<th>Order</th>
<th>mult.</th>
<th>Class name / Role</th>
<th>Description</th>
</tr>
</thead>
</table>
| 12    | [1..*]| TimeSeries
| 13    | [0..*]| Reason

2.2.3.2 **Point**

The identification of the values being addressed within a specific interval of time.

Table 5 shows all attributes of Point.

### Table 5 - Attributes of Financial Settlement Report assembly model::Point

<table>
<thead>
<tr>
<th>Order</th>
<th>mult.</th>
<th>Attribute name / Attribute type</th>
<th>Description</th>
</tr>
</thead>
</table>
| 0     | [1..1]| position
Position_Integer | A sequential value representing the relative position within a given time interval. |
| 1     | [1..1]| quantity
Decimal | The principal quantity identified for a point. |
| 2     | [0..1]| monetaryValue_Quantity.quantity
Decimal | The quantity value. The association role provides the information about what is expressed. The Quantity information associated with a given Point. |

Table 6 shows all association ends of Point with other classes.
Table 6 - Association ends of Financial Settlement Report assembly model::Point with other classes

<table>
<thead>
<tr>
<th>Order</th>
<th>mult.</th>
<th>Class name / Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>[0..*]</td>
<td>Reason Reason</td>
<td>The Reason information associated with a Point providing motivation information. Association Based On: Financial Settlement Report contextual model::Reason.Reason[0..*] -------- Financial Settlement Report contextual model::Point.[]</td>
</tr>
</tbody>
</table>

2.2.3.3 Reason

The motivation of an act.

Table 7 shows all attributes of Reason.

Table 7 - Attributes of Financial Settlement Report assembly model::Reason

<table>
<thead>
<tr>
<th>Order</th>
<th>mult.</th>
<th>Attribute name / Attribute type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>[1..1]</td>
<td>code ReasonCode_String</td>
<td>The motivation of an act in coded form.</td>
</tr>
<tr>
<td>1</td>
<td>[0..1]</td>
<td>text ReasonText_String</td>
<td>The textual explanation corresponding to the reason code.</td>
</tr>
</tbody>
</table>

2.2.3.4 Series_Period

The identification of the period of time corresponding to a given time interval and resolution.

Table 8 shows all attributes of Series_Period.

Table 8 - Attributes of Financial Settlement Report assembly model::Series_Period

<table>
<thead>
<tr>
<th>Order</th>
<th>mult.</th>
<th>Attribute name / Attribute type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>[1..1]</td>
<td>timeInterval ESMP_DateTimeInterval</td>
<td>The start and end time of the period.</td>
</tr>
<tr>
<td>1</td>
<td>[1..1]</td>
<td>resolution Duration Duration</td>
<td>The definition of the number of units of time that compose an individual step within a period.</td>
</tr>
</tbody>
</table>

Table 9 shows all association ends of Series_Period with other classes.

Table 9 - Association ends of Financial Settlement Report assembly model::Series_Period with other classes

<table>
<thead>
<tr>
<th>Order</th>
<th>mult.</th>
<th>Class name / Role</th>
<th>Description</th>
</tr>
</thead>
</table>

2.2.3.5 TimeSeries

A set of time-ordered quantities being exchanged in relation to a product.
In the ESMP profile, the TimeSeries provides not only time-ordered quantities but also time-ordered information.

Table 10 shows all attributes of TimeSeries.

### Table 10 - Attributes of Financial Settlement Report assembly model::TimeSeries

<table>
<thead>
<tr>
<th>Order</th>
<th>mult.</th>
<th>Attribute name / Attribute type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>[1..1]</td>
<td>mRID ID_String</td>
<td>A unique identification of the time series.</td>
</tr>
<tr>
<td>1</td>
<td>[1..1]</td>
<td>businessType BusinessKind_String</td>
<td>The identification of the nature of the time series.</td>
</tr>
<tr>
<td>2</td>
<td>[1..1]</td>
<td>product EnergyProductKind_String</td>
<td>The identification of the nature of an energy product such as power, energy, reactive power, etc.</td>
</tr>
<tr>
<td>3</td>
<td>[1..1]</td>
<td>curveType CurveType_String</td>
<td>The identification of the coded representation of the type of curve being described.</td>
</tr>
<tr>
<td>4</td>
<td>[1..1]</td>
<td>measurement_Unit.name MeasurementUnitKind_String</td>
<td>The identification of the formal code for a measurement unit (UN/ECE Recommendation 20). --- The unit of measure associated with the quantities in a TimeSeries.</td>
</tr>
<tr>
<td>5</td>
<td>[0..1]</td>
<td>currency_Unit.name CurrencyCode_String</td>
<td>The identification of the formal code for a currency (ISO 4217). --- The currency associated with a TimeSeries.</td>
</tr>
<tr>
<td>6</td>
<td>[0..1]</td>
<td>in_Domain.mRID AreaID_String</td>
<td>The unique identification of the domain. --- The area where the product is being delivered.</td>
</tr>
<tr>
<td>7</td>
<td>[0..1]</td>
<td>out_Domain.mRID AreaID_String</td>
<td>The unique identification of the domain. --- The domain where the product is being extracted.</td>
</tr>
<tr>
<td>8</td>
<td>[0..1]</td>
<td>connectingLine_RegisteredResource.mRID ResourceID_String</td>
<td>The unique identification of a resource. In the ESMP context, the &quot;model authority&quot; is defined as an authorized issuing office that provides an agreed identification coding scheme for market participant, domain, measurement point, resources (generator, lines, substations, etc.) identification. Master resource identifier issued by a model authority. The mRID is globally unique within an exchange context. Global uniqueness is easily achieved by using a UUID for the mRID. It is strongly recommended to do this. For CIMXML data files in RDF syntax, the mRID is mapped to rdf:ID or rdf:about attributes that identify CIM object elements. --- The identification of a resource associated with a TimeSeries.</td>
</tr>
</tbody>
</table>

Table 11 shows all association ends of TimeSeries with other classes.

### Table 11 - Association ends of Financial Settlement Report assembly model::TimeSeries with other classes

<table>
<thead>
<tr>
<th>Order</th>
<th>mult.</th>
<th>Class name / Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order</td>
<td>mult.</td>
<td>Class name / Role</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>10</td>
<td>[0..*]</td>
<td>Reason Reason</td>
<td>The reason information associated with a TimeSeries providing motivation information. Association Based On: Financial Settlement Report contextual model::Reason.Reason[0..*]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 2.2.4 Datatypes

The list of datatypes used for the Financial Settlement Report assembly model is as follows:

- Action_Status compound
- ESMP_DateTimeInterval compound
- AreaID_String datatype, codelist CodingSchemeTypeList
- BusinessKind_String datatype, codelist BusinessTypeList
- CurrencyCode_String datatype, codelist CurrencyTypeList
- CurveType_String datatype, codelist CurveTypeList
- EnergyProductKind_String datatype, codelist EnergyProductTypeList
- ESMP_DateTime datatype
- ESMPVersion_String datatype
- ID_String datatype
- MarketRoleKind_String datatype, codelist RoleTypeList
- MeasurementUnitKind_String datatype, codelist UnitOfMeasureTypeList
- MessageKind_String datatype, codelist MessageTypeList
- PartyID_String datatype, codelist CodingSchemeTypeList
- Position_Integer datatype
- ProcessKind_String datatype, codelist ProcessTypeList
- ReasonCode_String datatype, codelist ReasonCodeTypeList
- ReasonText_String datatype
- ResourceID_String datatype, codelist CodingSchemeTypeList
- Status_String datatype, codelist StatusTypeList
- YMDHM_DateTime datatype
2.2.5 FinancialSettlementReport_MarketDocument XML schema structure

Figure 3 – Financial SettlementReport_MarketDocument schema structure
The schema to be used to validate XML instances is to be identified by:

```
urn:iec62325.351.tc57wg16:451-6:financialsettlementreportdocument:1:0
```

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:cim="http://www.iec.ch/cimprofile"
  xmlns:ecl="http://iec.ch/TC57/2013/CIM"
  targetNamespace="urn:entsoe.eu:wgedi:codelists.xsd"
  attributeFormDefault="qualified"
  elementFormDefault="qualified"
  schemaLocation="urn:entsoe.eu:wgedi:codelists.xsd">
  <xs:import namespace="urn:entsoe.eu:wgedi:codelists" schemaLocation="urn-entsoe-eu-wgedi-codelists.xsd"/>
</xs:schema>
```
<xs:simpleType name="ESMP_DateTime"
    sawsd:ModelProperty="http://iec.ch/TC57/2013/CIM-schema-cim16#DateTime">
    <xs:restriction base="xs:dateTime">
        <xs:pattern value="(((0-9)\{4\})[-](0[13578]|1[02])[-](0[1-2-3456789])\{4\})\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="AreaID_String-base"
    sawsd:ModelProperty="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="xs:string">
        <xs:maxLength value="18"/>
    </xs:restriction>
</xs:simpleType>

<xs:complexType name="AreaID_String">
    <xs:simpleContent>
        <xs:extension base="AreaID_String-base">
            <xs:attribute name="codingScheme" type="ecl:CodingScheme" use="required"/>
        </xs:extension>
    </xs:simpleContent>
</xs:complexType>

<xs:simpleType name="Name_string"
    sawsd:ModelProperty="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="xs:string">
        <xs:maxLength value="18"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="AreaID_Status">
    <xs:restriction base="AreaID_String">
        <xs:attribute name="name" type="Name_string" minOccurs="1" maxOccurs="1"/>
    </xs:restriction>
</xs:simpleType>

<xs:simpleType name="YMDHM_DateTime"
    sawsd:ModelProperty="http://iec.ch/TC57/2013/CIM-schema-cim16#DateTime">
    <xs:restriction base="xs:string">
        <xs:pattern value="(((0-9)\{4\})[-](0[13578]|1[02])[-](0[1-2-3456789])\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}\{4\}"/>
    </xs:restriction>
</xs:simpleType>
<xs:complexType name="ESMP_DateTimeInterval">
  <xs:sequence>
    <xs:element name="start" type="YMDHM_DateTime" minOccurs="1" maxOccurs="1"/>
    <xs:element name="end" type="YMDHM_DateTime" minOccurs="1" maxOccurs="1"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="FinancialSettlementReport_MarketDocument">
  <xs:sequence>
    <xs:element name="mRID" type="ID_String" minOccurs="1" maxOccurs="1"/>
    <xs:element name="messageKind" type="MessageKind_String" minOccurs="1" maxOccurs="1"/>
    <xs:element name="reason" type="Reason" minOccurs="1" maxOccurs="1"/>
    <xs:element name="timeSeries" type="TimeSeries" minOccurs="0" maxOccurs="unbounded"/>
    <xs:element name="ESMP_DateTimeInterval" minOccurs="0" maxOccurs="1"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Position_Integer">
  <xs:simpleType name="Position_Integer">
    <xs:restriction base="xs:integer">
      <xs:maxInclusive value="999999"/>
      <xs:minInclusive value="1"/>
    </xs:restriction>
  </xs:simpleType>
</xs:complexType>


<xs:complexType name="Point">
  <xs:simpleType name="Point">
    <xs:element name="position" type="Position_Integer" minOccurs="1" maxOccurs="1"/>
    <xs:element name="quantity" type="xs:decimal" minOccurs="1" maxOccurs="1"/>
    <xs:element name="monetaryValue_Quantity.quantity" type="xs:decimal" minOccurs="0" maxOccurs="1"/>
    <xs:element name="Reason" type="Reason" minOccurs="0" maxOccurs="unbounded"/>
  </xs:simpleType>
</xs:complexType>

<sawsdl:modelReference>http://iec.ch/TC57/2013/CIM-schema-cim16#Point</sawsdl:modelReference>

<xs:complexType name="Reason">
  <xs:simpleType name="Reason">
    <xs:element name="code" type="ReasonCode_String" minOccurs="1"/>
    <xs:element name="text" type="ReasonText_String" minOccurs="0" maxOccurs="1"/>
  </xs:simpleType>
</xs:complexType>


<xs:complexType name="Series_Period">
  <xs:simpleType name="Series">
    <xs:element name="timeInterval" type="ESMP_DateTimeInterval" minOccurs="1" maxOccurs="1"/>
  </xs:simpleType>
</xs:complexType>


<xs:complexType name="ESMP_DateTimeInterval">
  <xs:simpleType name="ESMP_DateTimeInterval">
    <xs:element name="resolution" type="xs:duration" minOccurs="1" maxOccurs="1"/>
  </xs:simpleType>
</xs:complexType>

<sawsdl:modelReference>http://iec.ch/TC57/2013/CIM-schema-cim16#ESMP_DateTimeInterval</sawsdl:modelReference>

<xs:complexType name="ESMP_Point">
  <xs:simpleType name="ESMP_Point">
    <xs:element name="Point" type="Point" maxOccurs="1" minOccurs="0"/>
  </xs:simpleType>
</xs:complexType>

ENTSO-E Financial settlement report document – UML
model and schema

ENTSO-E Financial settlement report document – UML
model and schema

VERSION 1.0

ENTSO-E Financial settlement report document – UML
model and schema

417  </xs:sequence>
418  </xs:complexType>
419  <xs:simpleType name="BusinessKind_String"
420  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
421    <xs:restriction base="ecl:BusinessTypeList"/>
422  </xs:simpleType>
423  <xs:simpleType name="EnergyProductKind_String"
424  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
425    <xs:restriction base="ecl:EnergyProductTypeList"/>
426  </xs:simpleType>
427  <xs:simpleType name="CurveType_String"
428  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
429    <xs:restriction base="ecl:CurveTypeList"/>
430  </xs:simpleType>
431  <xs:simpleType name="MeasurementUnitKind_String"
432  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
433    <xs:restriction base="ecl:UnitOfMeasureTypeList"/>
434  </xs:simpleType>
435  <xs:simpleType name="CurrencyCode_String"
436  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
437    <xs:restriction base="ecl:CodingSchemeTypeList"/>
438  </xs:simpleType>
439  <xs:simpleType name="ResourceID_String-base"
440  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
441    <xs:restriction base="xs:string">
442      <xs:maxlength value="60"/>
443    </xs:restriction>
444  </xs:simpleType>
445  <xs:simpleType name="ResourceID_String"
446  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
447    <xs:restriction base="ResourceID_String-base">
448      <xs:extension base="ResourceID_String-base">
449        <xs:attribute name="codingScheme"
450          type="ecl:CodingSchemeTypeList" use="required"/>
451      </xs:extension>
452    </xs:simpleContent>
453  </xs:simpleType>
454  <xs:complexType name="TimeSeries"
456    <xs:sequence>
457      <xs:element name="mRID" type="ID_String" minOccurs="1">
458        <xs:restriction base="cim16#IdentifiedObject.mRID"/>
459      </xs:element>
460      <xs:element name="businessType" type="BusinessKind_String"
461        minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#TimeSeries.businessType"/>
462      <xs:element name="product" type="EnergyProductKind_String"
463        minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#TimeSeries.product"/>
464      <xs:element name="curveType" type="CurveType_String"
465        minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#TimeSeries.curveType"/>
466      <xs:element name="measurement_Unit.name"
467        type="MeasurementUnitKind_String" minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Unit.name"/>
468      <xs:element name="currency_Unit.name"
469        type="CurrencyCode_String" minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Unit.name"/>
470    </xs:sequence>
471  </xs:complexType>
<xs:element name="in_Domain.mRID" type="AreaID_String"
minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
schema-cim16#IdentifiedObject.mRID"/>
<xs:element name="out_Domain.mRID" type="AreaID_String"
minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
schema-cim16#IdentifiedObject.mRID"/>
<xs:element name="connectingLine_RegisteredResource.mRID"
type="ResourceID_String" minOccurs="0" maxOccurs="1"
sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
cim16#IdentifiedObject.mRID"/>
<xs:element name="Period" type="Series_Period" minOccurs="1"
maxOccurs="unbounded" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
cim16#TimeSeries.Period"/>
<xs:element name="Reason" type="Reason" minOccurs="0"
maxOccurs="unbounded" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
cim16#TimeSeries.Reason"/>
</xs:sequence>
</xs:complexType>
</xs:schema>