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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>0</td>
<td>2017-01-27</td>
<td>First drafting of the document.</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>2017-01-30</td>
<td>Version to be submitted to Market Committee following WG EDI meeting in March 2017.</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 Publication_MarketDocument.

The schema of the Publication_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 Publication_MarketDocument

2.1 Publication contextual model

2.1.1 Overview of the model

Figure 1 shows the 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>AttributeInstanceComponent</td>
<td>TC57CIM::IEC62325::MarketManagement::AttributeInstanceComponent</td>
</tr>
<tr>
<td>Auction</td>
<td>TC57CIM::IEC62325::MarketManagement::Auction</td>
</tr>
<tr>
<td>Contract_MarketAgreement</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketAgreement</td>
</tr>
<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>Point</td>
<td>TC57CIM::IEC62325::MarketManagement::Point</td>
</tr>
<tr>
<td>Price</td>
<td>TC57CIM::IEC62325::MarketManagement::Price</td>
</tr>
<tr>
<td>Publication_MarketDocument</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketDocument</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>Time_Period</td>
<td>TC57CIM::IEC62325::MarketManagement::Period</td>
</tr>
<tr>
<td>TimeSeries</td>
<td>TC57CIM::IEC62325::MarketManagement::TimeSeries</td>
</tr>
<tr>
<td>Winners_MarketParticipant</td>
<td>TC57CIM::IEC62325::MarketCommon::MarketParticipant</td>
</tr>
</tbody>
</table>
2.2 Publication assembly model

2.2.1 Overview of the model

Figure 2 shows the model.

Figure 2 - Publication assembly model
2.2.2 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>Publication_MarketDocument</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketDocument</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>
<tr>
<td>Winners_MarketParticipant</td>
<td>TC57CIM::IEC62325::MarketCommon::MarketParticipant</td>
</tr>
</tbody>
</table>

2.2.3 Detailed Publication assembly model

2.2.3.1 Publication_MarketDocument root class

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

A publication document is issued by the transmission capacity allocator at the end of a specific auctioning cycle or by the system operator once the NTC values have been agreed.

Table 3 shows all attributes of Publication_MarketDocument.

Table 3 - Attributes of Publication assembly model::Publication_MarketDocument

<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>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>sender_MarketParticipant.mRID PartyID_String</td>
<td>The identification of a party in the energy market. Document owner.</td>
</tr>
<tr>
<td>4</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.</td>
</tr>
<tr>
<td>5</td>
<td>[0..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>6</td>
<td>[0..1]</td>
<td>receiver_MarketParticipant.marketRole.type MarketRoleKind_String</td>
<td>The identification of the role played by a market player. Document recipient.</td>
</tr>
<tr>
<td>7</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>8</td>
<td>[1..1]</td>
<td>period.timeInterval ESMP_DateTimeInterval</td>
<td>The start and end date and time for a given interval. The beginning and ending date and time of the period that the publication document is covering.</td>
</tr>
<tr>
<td>9</td>
<td>[0..1]</td>
<td>domain.mRID AreaID_String</td>
<td>The unique identification of the domain. The domain covered within the publication document.</td>
</tr>
</tbody>
</table>
Table 4 shows all association ends of Publication_MarketDocument 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>10</td>
<td></td>
<td>TimeSeries TimeSeries</td>
<td>Association Based On: Publication contextual model::TimeSeries[1..*]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Publication contextual model::Publication_MarketDocument[].</td>
</tr>
</tbody>
</table>

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 Publication assembly model::Point

<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>position Position_Integer</td>
<td>A sequential value representing the relative position within a given time interval.</td>
</tr>
<tr>
<td>1</td>
<td>[0..1]</td>
<td>quantity Decimal</td>
<td>The quantity auctioned for the interval in question. The principal quantity identified for a point.</td>
</tr>
<tr>
<td>2</td>
<td>[0..1]</td>
<td>price.amount Amount_Decimal</td>
<td>A number of monetary units specified in a unit of currency. The price expressed per currency per unit of price measure. This information defines the price expressed in the unit of measurement of price per unit of quantity in compliance with the pricing scheme based on local market rules. The price is mandatory in the case of capacity auctions and shall not be provided in the case of rule based allocations depending on local market rules.</td>
</tr>
</tbody>
</table>

Table 6 shows all association ends of Point with other classes.

Table 6 - Association ends of Publication 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>Association Based On: Publication contextual model::Reason.Reason[0..*]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Publication 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 Publication 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>
</tbody>
</table>
### 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 Publication 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 / EMP_DateTimeInterval</td>
<td>The start and end time of the period.</td>
</tr>
<tr>
<td>1</td>
<td>[1..1]</td>
<td>resolution / 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 Publication 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>
<tbody>
<tr>
<td>2</td>
<td>[1..*]</td>
<td>Point / Point</td>
<td>Association Based On: Publication contextual model::Point.Point[1..*] Publication contextual model::Series_Period[]</td>
</tr>
</tbody>
</table>

### TimeSeries

A set of time-ordered quantities being exchanged in relation to a product.

Table 10 shows all attributes of TimeSeries.

#### Table 10 - Attributes of Publication 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>[0..1]</td>
<td>auction.mRID / ID_String</td>
<td>The unique identification of the auction. Association Based On: Publication contextual model::Point.Point[1..*] Publication contextual model::Series_Period[]</td>
</tr>
<tr>
<td>2</td>
<td>[0..1]</td>
<td>auction.type / AuctionKind_String</td>
<td>The kind of the auction (e.g. implicit, explicit, ...). Association Based On: Publication contextual model::Point.Point[1..*] Publication contextual model::Series_Period[]</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>
<tr>
<td>3</td>
<td>[0..1]</td>
<td>auction.category Category_String</td>
<td>The product category of an auction. --- A unique identification of the set of specifications that clearly defines the allocation process to which the time series is addressed.</td>
</tr>
<tr>
<td>4</td>
<td>[1..1]</td>
<td>businessType BusinessKind_String</td>
<td>The identification of the nature of the time series.</td>
</tr>
<tr>
<td>5</td>
<td>[1..1]</td>
<td>in_Domain.mRID AreaID_String</td>
<td>The unique identification of the domain. --- The area where the energy is to be out.</td>
</tr>
<tr>
<td>6</td>
<td>[1..1]</td>
<td>out_Domain.mRID AreaID_String</td>
<td>The unique identification of the domain. --- The area where the energy is coming from.</td>
</tr>
<tr>
<td>7</td>
<td>[0..1]</td>
<td>contract MarketAgreement.type CapacityContractKind_String</td>
<td>The specification of the kind of the agreement, e.g. long term, daily contract. --- The contract type defines the conditions under which the capacity was allocated and handled, e.g.: daily auction, weekly auction, monthly auction, yearly auction, long term contract, etc. The significance of this type is dependent on the in area and out area specific coded working methods.</td>
</tr>
<tr>
<td>8</td>
<td>[0..1]</td>
<td>quantity Measure_Unit.name MeasurementUnitKind_String</td>
<td>The identification of the formal code for a measurement unit (UN/ECE Recommendation 20). --- The unit of measure in which the quantities in the times eries are expressed., e.g. MAW.</td>
</tr>
<tr>
<td>9</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 in which the monetary amount is expressed.</td>
</tr>
<tr>
<td>10</td>
<td>[0..1]</td>
<td>price Measure_Unit.name MeasurementUnitKind_String</td>
<td>The identification of the formal code for a measurement unit (UN/ECE Recommendation 20). --- The unit of measure in which the price in the time series is expressed per unit of currency (MW per unit, MWh per unit, etc.).</td>
</tr>
<tr>
<td>11</td>
<td>[0..1]</td>
<td>classificationSequence_AttributeInstanceComponent.position Position_Integer</td>
<td>A sequential value representing a relative sequence number. --- The sequence of a time series within a given auction category and contract type. A classification sequence is only provided in the case where there are several auctions in the same category and contract type.</td>
</tr>
<tr>
<td>12</td>
<td>[0..1]</td>
<td>participantNumber_AttributeInstanceComponent.position Position_Integer</td>
<td>A sequential value representing a relative sequence number. --- The number of parties that participated in the auction. It is only provided if the auction rules permit it.</td>
</tr>
</tbody>
</table>
Table 11 shows all association ends of TimeSeries with other classes.

### Table 11 - Association ends of Publication 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>15</td>
<td>[0..*]</td>
<td>Series_Period_Period</td>
<td>Association Based On: Publication contextual model::Series_Period.Period[0..*] Publication contextual model::TimeSeries[]</td>
</tr>
<tr>
<td>16</td>
<td>[0..*]</td>
<td>Reason_Reason</td>
<td>Association Based On: Publication contextual model::Reason.Reason[0..*] Publication contextual model::TimeSeries[]</td>
</tr>
<tr>
<td>17</td>
<td>[0..*]</td>
<td>Winners_MarketParticipant_Winners_MarketParticipant</td>
<td>The identification of the market participants who get something at the auction. Association Based On: Publication contextual model::Winners_MarketParticipant.Winners_MarketParticipant[0..*] Publication contextual model::TimeSeries[]</td>
</tr>
</tbody>
</table>

#### 2.2.3.6 Winners_MarketParticipant

The identification of the party participating in energy market business processes.

Table 12 shows all attributes of Winners_MarketParticipant.

### Table 12 - Attributes of Publication assembly model::Winners_MarketParticipant

<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_PartyID_String</td>
<td>The identification of a party in the energy market.</td>
</tr>
</tbody>
</table>

#### 2.2.4 Datatypes

The list of datatypes used for the Publication assembly model is as follows:

- ESMP_DateTimeInterval compound
- Amount.Decimal datatype
- AreaID_String datatype, codelist CodingSchemeTypeList
- AuctionKind_String datatype, codelist AuctionTypeList
- BusinessKind_String datatype, codelist BusinessTypeList
159  • CapacityContractKind_String datatype, codelist ContractTypeList
160  • Category_String datatype, codelist CategoryTypeList
161  • CurrencyCode_String datatype, codelist CurrencyTypeList
162  • CurveType_String datatype, codelist CurveTypeList
163  • ESMP_DateTime datatype
164  • ESMPVersion_String datatype
165  • ID_String datatype
166  • MarketRoleKind_String datatype, codelist RoleTypeList
167  • MeasurementUnitKind_String datatype, codelist UnitOfMeasureTypeList
168  • MessageKind_String datatype, codelist MessageTypeList
169  • PartyID_String datatype, codelist CodingSchemeTypeList
170  • Position_Integer datatype
171  • ReasonCode_String datatype, codelist ReasonCodeTypeList
172  • ReasonText_String datatype
173  • YMDHM_DateTime datatype
2.3 Publication_MarketDocument XML schema

2.3.1 Publication_MarketDocument XML schema structure

Figure 3 to Figure 5 provide the structure of the schema.

Figure 3 - Publication_MarketDocument schema structure 1/3
Figure 4 - Publication_MarketDocument schema structure 2/3
The schema to be used to validate XML instances is to be identified by:

urn:iec62325.351:tc57wg16:451-3:publicationdocument:7:0

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:cl="urn:entsoe.eu:wgedi:codelists"
           xmlns:sawsdl="http://www.w3.org/ns/sawsdl"
           xmlns="urn:iec62325.351:tc57wg16:451-3:publicationdocument:7:0"
           xmlns:cimp="http://www.iec.ch/cimprofile"
           attributeFormDefault="unqualified"
           elementFormDefault="qualified"
           targetNamespace="urn:iec62325.351:tc57wg16:451-3:publicationdocument:7:0"
           xmlns:xs="http://www.w3.org/2001/XMLSchema">

<xs:import schemaLocation="urn:entsoe-eu-wgedi-codelists.xsd" namespace="urn:entsoe.eu:wgedi:codelists" />
<xs:element name="Publication_MarketDocument" type="Publication_MarketDocument" />
<xs:simpleType name="Position_Integer"
sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Integer">
<xs:restriction base="xs:integer">
<xs:minInclusive value="1" />
<xs:maxInclusive value="999999" />
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Amount_Decimal"
sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Decimal">
<xs:restriction base="xs:decimal">
<xs:totalDigits value="17" />
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Point"
sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Point">
<xs:sequence>
<xs:element minOccurs="1" maxOccurs="1" name="position" type="Position_Integer"
sawsdl:modelReference="http://iec/ch/TC57/2013/CIM-schema-cim16#Point.position" />
<xs:element minOccurs="0" maxOccurs="1" name="quantity" type="xs:decimal"
sawsdl:modelReference="http://iec/ch/TC57/2013/CIM-schema-cim16#Point.quantity" />
</xs:sequence>
</xs:complexType>
```

---

**Figure 5 - Publication_MarketDocument schema structure 3/3**

### 2.3.2 Publication_MarketDocument XML schema

The schema to be used to validate XML instances is to be identified by:

urn:iec62325.351:tc57wg16:451-3:publicationdocument:7:0
<xs:element minOccurs="1" maxOccurs="1" name="period.timeInterval" type="ESMP_DateTimeInterval" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Period.timeInterval">
  </xs:element>
</xs:sequence>
</xs:complexType>
</xs:simpleType>
<xs:simpleType name="ReasonCode_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:restriction base="cl:ReasonCodeTypeList" />
</xs:simpleType>
<xs:simpleType name="ReasonText_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:restriction base="xs:string">
    <xs:maxLength value="512"/>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="Reason" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Reason">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="code" type="ReasonCode_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Reason.code"/>
    <xs:element minOccurs="0" maxOccurs="1" name="text" type="ReasonText_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Reason.text"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Series_Period" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Period">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="timeInterval" type="ESMP_DateTimeInterval" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Period.timeInterval"/>
    <xs:element minOccurs="1" maxOccurs="1" name="resolution" type="xs:duration" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Period.resolution"/>
    <xs:element minOccurs="1" maxOccurs="unbounded" name="Point" type="Point" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Period.Point"/>
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AuctionKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:restriction base="cl:AuctionTypeList" />
</xs:simpleType>
<xs:simpleType name="Category_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:restriction base="cl:CategoryTypeList" />
</xs:simpleType>
<xs:simpleType name="BusinessKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:restriction base="cl:BusinessTypeList" />
</xs:simpleType>
<xs:simpleType name="CapacityContractKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:restriction base="cl:ContractTypeList" />
</xs:simpleType>
<xs:simpleType name="MeasurementUnitKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:restriction base="cl:UnitOfMeasureTypeList" />
</xs:simpleType>
sawSDL:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#AttributeInstanceComponent.position">
  </xs:element>
  <xs:element minOccurs="0" maxOccurs="1" name="curveType" type="CurveType_String" sawSDL:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#TimeSeries.curveType">
    </xs:element>
    </xs:element>
  <xs:element minOccurs="0" maxOccurs="unbounded" name="Reason" type="Reason" sawSDL:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#TimeSeries.Reason">
    </xs:element>
    </xs:element>
  </xs:complexType>
</xs:schema>