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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>2017-01-10</td>
<td>First drafting of the document based on maintenance request from WG EDI.</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>2017-02-24</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 MeritOrderList_MarketDocument. The schema of the MeritOrderList_MarketDocument could be used in various business processes related to the balancing market.

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 MeritOrderList_MarketDocument

2.1 MeritOrderList contextual model

2.1.1 Overview of the model

Figure 1 shows the model.

Table 1 - IsBasedOn dependency

<table>
<thead>
<tr>
<th>Name</th>
<th>Complete IsBasedOn Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auction</td>
<td>TC57CIM::IEC62325::MarketManagement::Auction</td>
</tr>
<tr>
<td>BidTimeSeries</td>
<td>TC57CIM::IEC62325::MarketManagement::BidTimeSeries</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>MarketAgreement</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketAgreement</td>
</tr>
<tr>
<td>Name</td>
<td>Complete IsBasedOn Path</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>MarketObjectStatus</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketObjectStatus</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>MeritOrderList_MarketDocument</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketDocument</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>Process</td>
<td>TC57CIM::IEC62325::MarketManagement::Process</td>
</tr>
<tr>
<td>Quantity</td>
<td>TC57CIM::IEC62325::MarketManagement::Quantity</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>ResourceProvider_MarketParticipant</td>
<td>TC57CIM::IEC62325::MarketCommon::MarketParticipant</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>
</tbody>
</table>
2.2 MeritOrderList assembly model

2.2.1 Overview of the model

Figure 2 shows the 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>BidTimeSeries</td>
<td>TC57CIM::IEC62325::MarketManagement::BidTimeSeries</td>
</tr>
<tr>
<td>MeritOrderList_MarketDocument</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketDocument</td>
</tr>
<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>
</tbody>
</table>

2.2.3 Detailed MeritOrderList assembly model

2.2.3.1 MeritOrderList_MarketDocument root class

This document enables to exchange information about the merit order list for balance management process.

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

Table 3 shows all attributes of MeritOrderList_MarketDocument.

### Table 3 - Attributes of MeritOrderList assembly model::MeritOrderList_MarketDocument

<table>
<thead>
<tr>
<th>Order</th>
<th>mut.</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>[0..1]</td>
<td>process.processType            ProcessKind_String</td>
<td>The identification of the nature of process that the document addresses. --- The process dealt with in the 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. --- Document recipient. --- 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>9</td>
<td>[1..1]</td>
<td>period.timeInterval            ESMP_DateTimeInterval</td>
<td>The start and end date and time for a given interval. --- This information provides the start and end date and time of the time interval covered in this document.</td>
</tr>
</tbody>
</table>
Table 4 shows all association ends of MeritOrderList_MarketDocument with other classes.

Table 4 - Association ends of MeritOrderList assembly model::MeritOrderList_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>11</td>
<td>0..*</td>
<td>BiTimeSeries</td>
<td>The time series that is associated with an electronic document. Association Based On: MeritOrderList contextual model::BidTimeSeries.TimeSeries[0..*].....MeritOrderList contextual model::MeritOrderList_MarketDocument[]</td>
</tr>
</tbody>
</table>

2.2.3.2 BidTimeSeries

The formal specification of specific characteristics related to a bid.

If there is no BidTimeSeries, this means that there is no bid for the time interval.

Table 5 shows all attributes of BidTimeSeries.

Table 5 - Attributes of MeritOrderList assembly model::BidTimeSeries

<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>marketAgreement.mRID ID_String</td>
<td>The unique identification of the agreement. --- The identification of an agreement associated with a TimeSeries.</td>
</tr>
<tr>
<td>1</td>
<td>0..1</td>
<td>marketAgreement.createdDateTime ESMP_DateTime</td>
<td>The date and time of the creation of the agreement. --- The identification of an agreement associated with a TimeSeries.</td>
</tr>
<tr>
<td>2</td>
<td>0..1</td>
<td>priority Integer</td>
<td>The numeric local priority given to a bid. Lower numeric values will have higher priority.</td>
</tr>
<tr>
<td>3</td>
<td>0..1</td>
<td>resourceProvider_MarketParticipant.mRID PartyID_String</td>
<td>The identification of a party in the energy market. --- The identification of the party that supplied the reserve. The identification of a market participant associated with a TimeSeries.</td>
</tr>
<tr>
<td>4</td>
<td>0..1</td>
<td>registeredResource.mRID ResourceID_String</td>
<td>The unique identification of a resource. --- This is the resource used to provide the reserve. The identification of a resource associated with a TimeSeries.</td>
</tr>
<tr>
<td>5</td>
<td>1..1</td>
<td>acquiring_Domain.mRID AreaID_String</td>
<td>The unique identification of the domain. --- The area where the product is being delivered. The domain associated with a TimeSeries.</td>
</tr>
<tr>
<td>6</td>
<td>1..1</td>
<td>connecting_Domain.mRID AreaID_String</td>
<td>The unique identification of the domain. --- The area where the resource is located. The domain associated with a TimeSeries.</td>
</tr>
<tr>
<td>7</td>
<td>1..1</td>
<td>auction.mRID ID_String</td>
<td>The unique identification of the auction. --- The auction characteristics that are associated with a TimeSeries.</td>
</tr>
<tr>
<td>8</td>
<td>1..1</td>
<td>businessType BusinessKind_String</td>
<td>The identification of the nature of the time series.</td>
</tr>
</tbody>
</table>
### Table 6 - Association ends of MeritOrderList assembly model::BidTimeSeries 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>18</td>
<td>[1..*]</td>
<td>Series_Period.Period</td>
<td>The time interval and resolution for a period associated with a TimeSeries. Association Based On: MeritOrderList contextual model::Series_Period.Period[1..*] MeritOrderList contextual model::BidTimeSeries[].</td>
</tr>
<tr>
<td>19</td>
<td>[0..*]</td>
<td>Reason.Reason</td>
<td>The reason information associated with a TimeSeries providing motivation information. Association Based On: MeritOrderList contextual model::Reason.Reason[0..*] MeritOrderList contextual model::BidTimeSeries[].</td>
</tr>
</tbody>
</table>

#### 2.2.3.3 Point

The identification of the values being addressed within a specific interval of time.
Table 7 shows all attributes of Point.

### Table 7 - Attributes of MeritOrderList 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>[1..1]</td>
<td>quantity.quantity Decimal</td>
<td>The quantity value. --- The quantity that is tendered for the interval in question. The Quantity information associated with a given 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. --- This is the power price for each unit of quantity.</td>
</tr>
<tr>
<td>3</td>
<td>[0..1]</td>
<td>energy_Price.amount Amount_Decimal</td>
<td>A number of monetary units specified in a unit of currency. --- The price of energy that is used.</td>
</tr>
<tr>
<td>4</td>
<td>[0..1]</td>
<td>activated_Quantity.quantity Decimal</td>
<td>The quantity value. --- The quantity that has been activated for the interval in question.</td>
</tr>
</tbody>
</table>

2.2.3.4 **Reason**

The motivation of an act.

Table 8 shows all attributes of Reason.

### Table 8 - Attributes of MeritOrderList 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>

2.2.3.5 **Series_Period**

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

Table 9 shows all attributes of Series_Period.

### Table 9 - Attributes of MeritOrderList 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</td>
<td>The definition of the number of units of time that compose an individual step within a period.</td>
</tr>
</tbody>
</table>

Table 10 shows all association ends of Series_Period with other classes.
## 2.2.4 Datatypes

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

- ESMP_DateTimeInterval compound
- Amount.Decimal datatype
- AreaID.String datatype, codelist CodingSchemeTypeList
- BusinessKind.String datatype, codelist BusinessTypeList
- CurrencyCode.String datatype, codelist CurrencyTypeList
- DirectionKind.String datatype, codelist DirectionTypeList
- 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

### Table 10 - Association ends of MeritOrderList 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</td>
<td>The Point information associated with a given Series_Period.within a TimeSeries. Association Based On: MeritOrderList contextual model::Series_Period[]. ---- MeritOrderList contextual model::Point.Point[1..*]</td>
</tr>
</tbody>
</table>
2.3 MeritOrderList_MarketDocument XML schema

2.3.1 MeritOrderList_MarketDocument XML schema structure

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

Figure 3 - MeritOrderList_MarketDocument schema structure 1/3
Figure 5 - MeritOrderList_MarketDocument schema structure 3/3

2.3.2 MeritOrderList_MarketDocument XML schema

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

```
urn:iec62325.351:tc57wg16:451-7:moldocument:7:1
```

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:ecl="urn:entsoe.eu:wgedi:codelists"
    xmlns:sawsdl="http://www.w3.org/ns/sawsdl"
    xmlns="urn:iec62325.351:tc57wg16:451-7:moldocument:7:1"
    xmlns:cimp="http://www.iec.ch/cimprofile"
    attributeFormDefault="unqualified"
    elementFormDefault="qualified"
    targetNamespace="urn:iec62325.351:tc57wg16:451-7:moldocument:7:1"
    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="MeritOrderList_MarketDocument"
    type="MeritOrderList_MarketDocument" />
  <xs:restriction base="xs:string">
    <xs:maxLength value="35" />
  </xs:restriction>
  <xs:complexType name="ID_String"
    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="xs:string">
      <xs:maxLength value="35" />
    </xs:restriction>
  </xs:complexType>
  <xs:complexType name="ESMP_DateTime"
    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#DateTime">
    <xs:restriction base="xs:string">
      <xs:pattern value="(((\[0-9]{4})\[\-\]0[1-9][0-9]?)\[\-\]0[1-9][0-9]?)\[0-9]\
        [0-9]?):(0[1-9]|1[0-2]):(0[0-9]|1[0-5]):(0[0-5])Z" />
    </xs:restriction>
  </xs:complexType>
</xs:schema>
```
<xs:simpleType name="PartyID_String-base">
  <xs:restriction base="xs:string">
    <xs:maxLength value="16"/>
  </xs:restriction>
</xs:simpleType>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="PartyID_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:simpleContent>
      <xs:extension base="PartyID_String-base">
        <xs:attribute name="codingScheme" type="ecl:CodingSchemeTypeList" use="required"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</sawsdl:modelReference>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="ResourceID_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:simpleContent>
      <xs:extension base="ResourceID_String-base">
        <xs:attribute name="codingScheme" type="ecl:CodingSchemeTypeList" use="required"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</sawsdl:modelReference>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="AreaID_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:simpleContent>
      <xs:extension base="AreaID_String-base">
        <xs:attribute name="codingScheme" type="ecl:CodingSchemeTypeList" use="required"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</sawsdl:modelReference>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="BusinessKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="ecl:BusinessTypeList"/>
  </xs:complexType>
</sawsdl:modelReference>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="MeasurementUnitKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="ecl:UnitOfMeasureTypeList"/>
  </xs:complexType>
</sawsdl:modelReference>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="CurrencyCode_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="ecl:CurrencyTypeList"/>
  </xs:complexType>
</sawsdl:modelReference>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="DirectionKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="ecl:DirectionTypeList"/>
  </xs:complexType>
</sawsdl:modelReference>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="Status_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="ecl:StatusTypeList"/>
  </xs:complexType>
</sawsdl:modelReference>

<sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
  <xs:complexType name="YMDHM_DateTime" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
    <xs:restriction base="xs:string"/>
  </xs:complexType>
</sawsdl:modelReference>
<xs:element minOccurs="1" maxOccurs="1" name="quantity_Measurement_Unit.name" type="MeasurementUnitKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Unit.name"/>
</xs:element>

<xs:element minOccurs="0" maxOccurs="1" name="currency_Unit.name" type="CurrencyCode_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Unit.name"/>
</xs:element>

<xs:element minOccurs="0" maxOccurs="1" name="price_Measurement_Unit.name" type="MeasurementUnitKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Unit.name"/>
</xs:element>

<xs:element minOccurs="0" maxOccurs="1" name="energyPrice_Measurement_Unit.name" type="MeasurementUnitKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Unit.name"/>
</xs:element>

<xs:element minOccurs="1" maxOccurs="1" name="direction" type="DirectionKind_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#BidTimeSeries.direction"/>
</xs:element>

<xs:element minOccurs="0" maxOccurs="1" name="minimumActivation_Quantity.quantity" type="xs:decimal" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Quantity.quantity"/>
</xs:element>

<xs:element minOccurs="0" maxOccurs="1" name="stepIncrement_Quantity.quantity" type="xs:decimal" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Quantity.quantity"/>
</xs:element>

<xs:element minOccurs="1" maxOccurs="1" name="marketObjectStatus.status" type="Status_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketObjectStatus.status"/>
</xs:element>

</xs:element>

<xs:element minOccurs="0" maxOccurs="unbounded" name="Reason" type="Reason" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#BidTimeSeries.Reason"/>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:simpleType>
</xs:complexType>
<xs:element minOccurs="1" maxOccurs="1" name="revisionNumber"
  type="ESMPVersion_String" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Document.revisionNumber">
  <xs:element>
    <xs:element minOccurs="1" maxOccurs="1" name="type" type="MessageKind_String"
    </xs:element>
  </xs:element>
</xs:complexType>

<xs:complexType name="Position_Integer"
                 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Integer">
  <xs:restriction base="xs:integer">
    <xs:maxInclusive value="999999" />
    <xs:minInclusive value="1" />
  </xs:restriction>
</xs:simpleType>

<xs:complexType 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>
    <xs:element minOccurs="1" maxOccurs="1" name="quantity.quantity" type="xs:decimal"
                 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Quantity.quantity">
    </xs:element>
  </xs:sequence>
</xs:complexType>