European Network of
Transmission System Operators
for Electricity

STATUS REQUEST DOCUMENT
UML MODEL AND SCHEMA

2022-03-15
APPROVED DOCUMENT
VERSION 1.1

ENTSO-E Status request document – UML model and schema
VERSION 1.1

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This document is maintained by the ENTSO-E CIM EG. Comments or remarks are to be provided at cim@entsoe.eu

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Revision History

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Version	Release	Date	Comments
0	1	2019-12-23	First draft of the document.
0	2	2020-02-14	Second draft if the document. Comments from CIM EG were taken into account
1	0	2020-03-18	Approved by MC.
1	1	2022-03-15	Updates in XSD v4.1: mRID of Document, Series and Timeseries (ID_String type) was enlarged from 35 to 60 characters. Approved by MC.

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1. Objective

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55
The purpose of this document is to provide the contextual and assembly UML models and the schema of the StatusRequest_MarketDocument.

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57
The schema of the StatusRequest_MarketDocument could be used in various business processes.

58
59
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.

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61
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:

62
- Description of the business process;

63
- Use case of the business process;

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- Sequence diagrams of the business process;

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66
- List of the schema (XSD) to be used in the business process and versions of the schema;

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- 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.

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71 **2. StatusRequest_MarketDocument**

72 1.1   Status request contextual model

73 **1.1.1   Overview of the model**

74 Figure 1 shows the model.
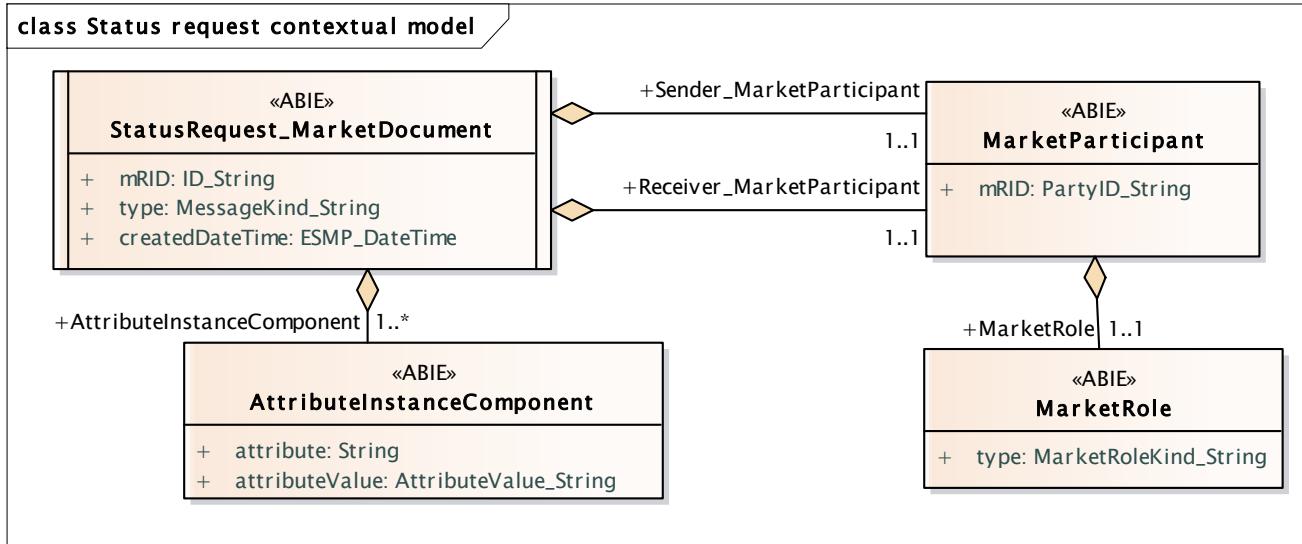
75

76   **Figure 1 - Status request contextual model**

77 **1.1.2   IsBasedOn relationships from the European style market profile**

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

80   **Table 1 - IsBasedOn dependency**

Name	Complete IsBasedOn Path
AttributeInstanceComponent	TC57CIM::IEC62325::MarketManagement::AttributeInstanceComponent
MarketParticipant	TC57CIM::IEC62325::MarketCommon::MarketParticipant
MarketRole	TC57CIM::IEC62325::MarketCommon::MarketRole
StatusRequest_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument

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82   1.2   Status request assembly model

83   **1.2.1   Overview of the model**

84   Figure 2 shows the model.
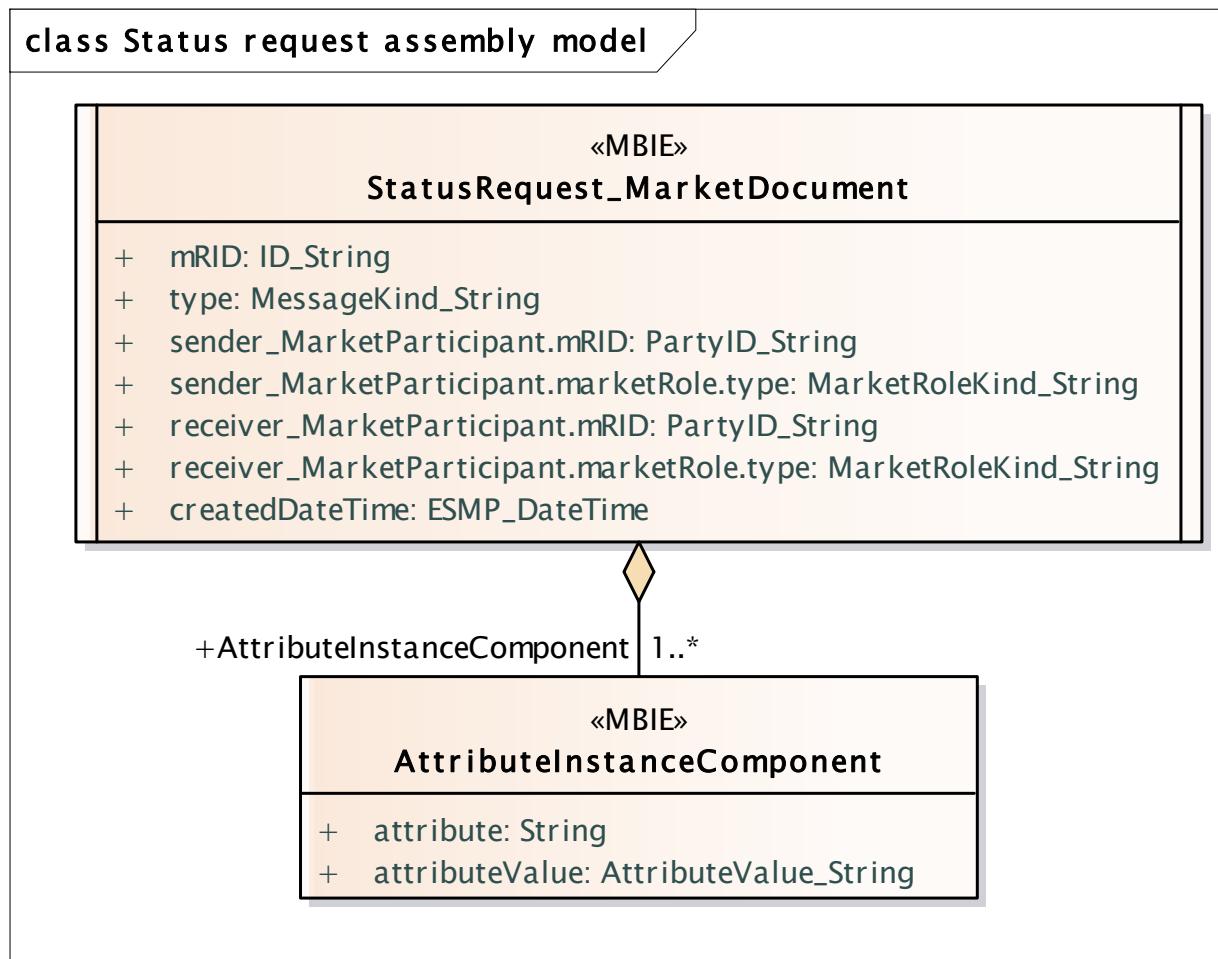
85

86   **Figure 2 - Status request assembly model**

87   **1.2.2   IsBasedOn relationships from the European style market profile**

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

90   **Table 2 - IsBasedOn dependency**

Name	Complete IsBasedOn Path
AttributeInstanceComponent	TC57CIM::IEC62325::MarketManagement::AttributeInstanceComponent
StatusRequest_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument

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92   **1.2.3   Detailed Status request assembly model**

93   **1.2.3.1   StatusRequest_MarketDocument root class**

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

96   Table 3 shows all attributes of StatusRequest_MarketDocument.

97   **Table 3 - Attributes of Status request assembly model::StatusRequest_MarketDocument**

Order	mult.	Attribute name / Attribute type	Description
0	[1..1]	mRID ID_String	The unique identification of the document being exchanged within a business process flow.
1	[1..1]	type MessageKind_String	The coded type of a document. The document type describes the principal characteristic of the document.
2	[1..1]	sender_MarketParticipant.mRID PartyID_String	The identification of a party in the energy market. --- Document owner.
3	[1..1]	sender_MarketParticipant.marketRole.type MarketRoleKind_String	The identification of the role played by a market player. --- Document owner.
4	[1..1]	receiver_MarketParticipant.mRID PartyID_String	The identification of a party in the energy market. --- Document recipient.
5	[1..1]	receiver_MarketParticipant.marketRole.type MarketRoleKind_String	The identification of the role played by a market player. --- Document recipient.
6	[1..1]	createdDateTime ESMP_DateTime	The date and time of the creation of the document.

98

99   Table 4 shows all association ends of StatusRequest_MarketDocument with other classes.

100   **Table 4 - Association ends of Status request assembly**
101   **model::StatusRequest_MarketDocument with other classes**

Order	mult.	Class name / Role	Description
7	[1..*]	AttributeInstanceComponent AttributeInstanceComponent	Association Based On: Status request contextual model::AttributeInstanceComponent.AttributeInstanceComponent[1..*] ----- Status request contextual model::StatusRequest_MarketDocument.[]

102

103   **1.2.3.2   AttributeInstanceComponent**

104   A class used to provide information about an attribute.

105   Table 5 shows all attributes of AttributeInstanceComponent.

106 **Table 5 - Attributes of Status request assembly model::AttributeInstanceComponent**

Order	mult.	Attribute name / Attribute type	Description
0	[1..1]	attribute String	The requested attribute identifies the significance of the content of the requested attribute value. It is a string value that represents a copy of the elementTag of the electronic document for which the status is being requested. In addition the following reserved names may be used. RequestedReturnDocumentType; Identification of a particular document that is expected as a reply, for example the merit order list document. DateAndOrTime; The requests can be made for a specific date, and or Date Time, for example, it can be used for the outage document. The identification of an attribute for a given request component.
1	[1..1]	attributeValue AttributeValue_String	Each requested attribute component has associated with it a value that is identified in the requested attribute value attribute. The value of a given component.

107

108 **1.2.4   Datatypes**

109 The list of datatypes used for the Status request assembly model is as follows:

110 • AttributeValue_String datatype, codelist CodingSchemeTypeList
111 • ESMP_DateTime datatype
112 • ID_String datatype
113 • MarketRoleKind_String datatype, codelist RoleTypeList
114 • MessageKind_String datatype, codelist MessageTypeList
115 • PartyID_String datatype, codelist CodingSchemeTypeList
116

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117   **1.2.5   StatusRequest_MarketDocument XML schema structure**
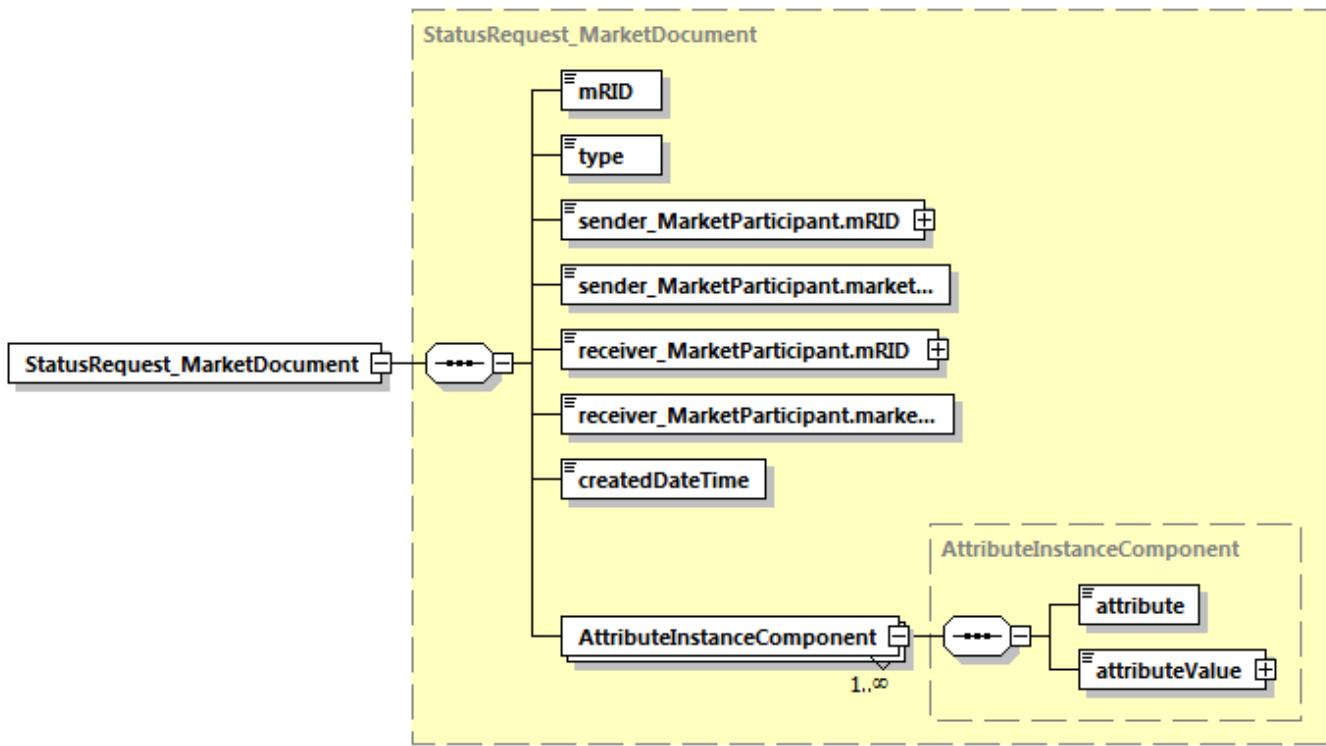
118
119   **Figure 3 - StatusRequest_MarketDocument schema structure**

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120   **1.2.6   StatusRequest_MarketDocument XML schema**

121

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

123   urn:iec62325.351:tc57wg16:451-5:statusrequestdocument:4:1

```
124    <?xml version="1.0" encoding="utf-8"?>
125    <xs:schema xmlns:ecl="urn:entsoe.eu:wgedi:codelists"
126    xmlns="urn:iec62325.351:tc57wg16:451-5:statusrequestdocument:4:1"
127    xmlns:sawsdl="http://www.w3.org/ns/sawsdl"
128    xmlns:cimp="http://www.iec.ch/cimprofile"
129    xmlns:xs="http://www.w3.org/2001/XMLSchema"
130    targetNamespace="urn:iec62325.351:tc57wg16:451-5:statusrequestdocument:4:1"
131    elementFormDefault="qualified" attributeFormDefault="unqualified">
132            <xs:import namespace="urn:entsoe.eu:wgedi:codelists" schemaLocation="urn-
133    entsoe-eu-wgedi-codelists.xsd"/>
134            <xs:element name="StatusRequest_MarketDocument"
135    type="StatusRequest_MarketDocument"/>
136            <xs:simpleType name="AttributeValue_String-base"
137    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
138                    <xs:restriction base="xs:string">
139                            <xs:maxLength value="150"/>
140                    </xs:restriction>
141            </xs:simpleType>
142            <xs:complexType name="AttributeValue_String"
143    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
144                    <xs:simpleContent>
145                            <xs:extension base="AttributeValue_String-base">
146                                    <xs:attribute name="codingScheme"
147    type="ecl:CodingSchemeTypeList"/>
148                            </xs:extension>
149                    </xs:simpleContent>
150            </xs:complexType>
151            <xs:complexType name="AttributeInstanceComponent"
152    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
153    cim16#AttributeInstanceComponent">
154                    <xs:sequence>
155                            <xs:element name="attribute" type="xs:string" minOccurs="1"
156    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
157    cim16#AttributeInstanceComponent.attribute"/>
158                            <xs:element name="attributeValue" type="AttributeValue_String"
159    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
160    schema-cim16#AttributeInstanceComponent.attributeValue"/>
161                    </xs:sequence>
162            </xs:complexType>
163            <xs:simpleType name="ID_String"
164    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
165                    <xs:restriction base="xs:string">
166                            <xs:maxLength value="60"/>
167                    </xs:restriction>
168            </xs:simpleType>
169            <xs:simpleType name="MessageKind_String"
170    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
171                    <xs:restriction base="ecl:MessageTypeList"/>
172            </xs:simpleType>
173            <xs:simpleType name="PartyID_String-base"
174    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
175                    <xs:restriction base="xs:string">
176                            <xs:maxLength value="16"/>
```

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```
177                    </xs:restriction>
178                </xs:simpleType>
179            <xs:complexType name="PartyID_String"
180    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
181                    <xs:simpleContent>
182                        <xs:extension base="PartyID_String-base">
183                            <xs:attribute name="codingScheme"
184    type="ecl:CodingSchemeTypeList" use="required"/>
185                        </xs:extension>
186                    </xs:simpleContent>
187            </xs:complexType>
188            <xs:simpleType name="MarketRoleKind_String"
189    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
190                    <xs:restriction base="ecl:RoleTypeList"/>
191            </xs:simpleType>
192            <xs:simpleType name="ESMP_DateTime"
193    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#DateTime">
194                    <xs:restriction base="xs:dateTime">
195                        <xs:pattern value="((([0-9]{4})[\-](0[13578]|1[02])[\-](0[1-
196    9]|[12][0-9]|3[01])|([0-9]{4})[\-]((0[469])|(11))[\-](0[1-9]|[12][0-
197    9]|30))T(([01][0-9]|2[0-3]):[0-5][0-9]:[0-5][0-
198    9])Z)|(([13579][26][02468][048]|[13579][01345789](0)[48]|[13579][01345789][2468][0
199    48]|[02468][048][02468][048]|[02468][1235679](0)[48]|[02468][1235679][2468][048]|[
200    0-9][0-9][13579][26])[\-](02)[\-](0[1-9]|1[0-9]|2[0-9])T(([01][0-9]|2[0-3]):[0-
201    5][0-9]:[0-5][0-
202    9])Z)|(([13579][26][02468][1235679]|[13579][01345789](0)[01235679]|[13579][0134578
203    9][2468][1235679]|[02468][048][02468][1235679]|[02468][1235679](0)[01235679]|[0246
204    8][1235679][2468][1235679]|[0-9][0-9][13579][01345789])[\-](02)[\-](0[1-9]|1[0-
205    9]|2[0-8])T(([01][0-9]|2[0-3]):[0-5][0-9]:[0-5][0-9])Z)"/>
206                    </xs:restriction>
207            </xs:simpleType>
208            <xs:complexType name="StatusRequest_MarketDocument"
209    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketDocument">
210                    <xs:sequence>
211                        <xs:element name="mRID" type="ID_String" minOccurs="1"
212    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
213    cim16#IdentifiedObject.mRID"/>
214                        <xs:element name="type" type="MessageKind_String"
215    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
216    schema-cim16#Document.type"/>
217                        <xs:element name="sender_MarketParticipant.mRID"
218    type="PartyID_String" minOccurs="1" maxOccurs="1"
219    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
220    cim16#IdentifiedObject.mRID"/>
221                        <xs:element name="sender_MarketParticipant.marketRole.type"
222    type="MarketRoleKind_String" minOccurs="1" maxOccurs="1"
223    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketRole.type"/>
224                        <xs:element name="receiver_MarketParticipant.mRID"
225    type="PartyID_String" minOccurs="1" maxOccurs="1"
226    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
227    cim16#IdentifiedObject.mRID"/>
228                        <xs:element name="receiver_MarketParticipant.marketRole.type"
229    type="MarketRoleKind_String" minOccurs="1" maxOccurs="1"
230    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketRole.type"/>
231                        <xs:element name="createdDateTime" type="ESMP_DateTime"
232    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
233    schema-cim16#Document.createdDateTime"/>
234                        <xs:element name="AttributeInstanceComponent"
235    type="AttributeInstanceComponent" minOccurs="1" maxOccurs="unbounded"
```

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```
236     sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
237     cim16#MarketDocument.AttributeInstanceComponent"/>
238                 </xs:sequence>
239            </xs:complexType>
240     </xs:schema>
241
```