



European Network of  
Transmission System Operators  
for Electricity

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# OTHER TRANSPARENCY MARKET INFORMATION DOCUMENT UML MODEL AND SCHEMA

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2022-05-10  
APPROVED DOCUMENT  
VERSION 1.0

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## Revision History

Version	Release	Date	Comments
1	0	2022-05-10	First draft of the document. Approved by MC.

49

## 50 **1 Objective**

51 The purpose of this document is to provide the contextual and assembly UML models and the  
52 schema of the Other Transparency Market Information document.

53 The schema of the Other Transparency Market Information document could be used in various  
54 business processes.

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

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

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

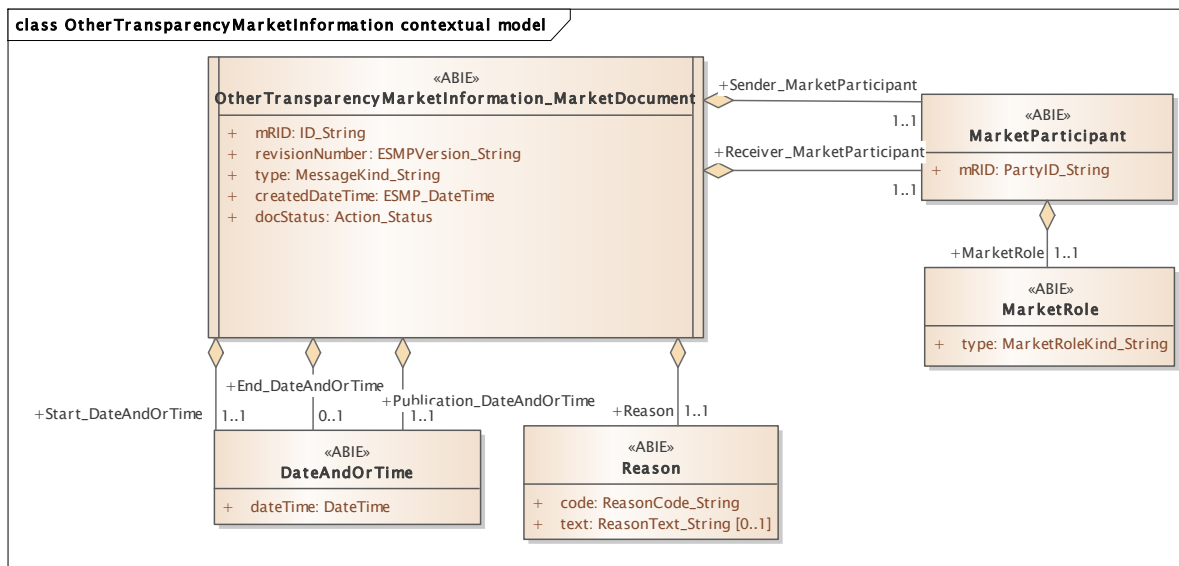
67

68 **2 Other Transparency Market Information model**

69 **2.1 OtherTransparencyMarketInformation contextual model**

70 **2.1.1 Overview of the model**

71 Figure 1 shows the model.



72

73 **Figure 1 - OtherTransparencyMarketInformation contextual model**

74 **2.1.2 IsBasedOn relationships from the European style market profile**

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

77 **Table 1 - IsBasedOn dependency**

Name	Complete IsBasedOn Path
DateAndOrTime	TC57CIM::IEC62325::MarketManagement::DateAndOrTime
MarketParticipant	TC57CIM::IEC62325::MarketCommon::MarketParticipant
MarketRole	TC57CIM::IEC62325::MarketCommon::MarketRole
OtherTransparencyMarketInformation_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument
Reason	TC57CIM::IEC62325::MarketManagement::Reason

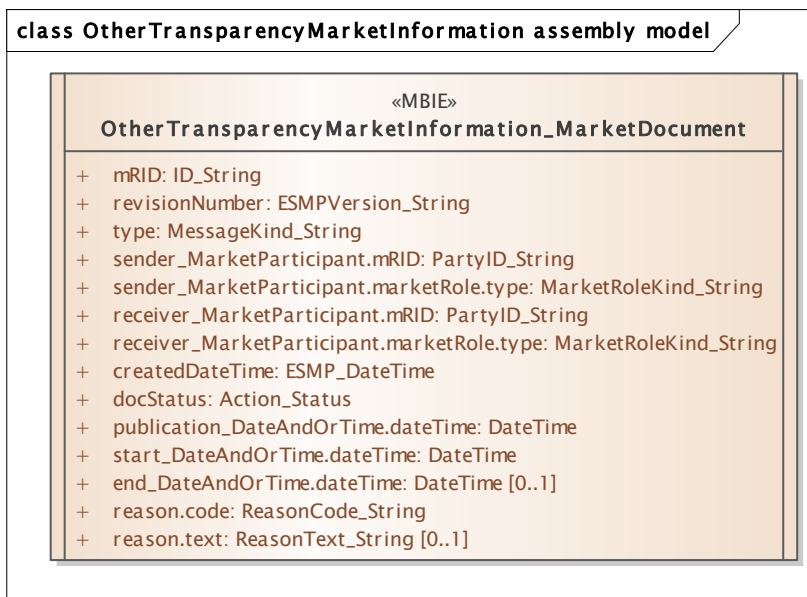
78

79

80 **2.2 OtherTransparencyMarketInformation assembly model**

81 **2.2.1 Overview of the model**

82 Figure 2 shows the model.



83

84 **Figure 2 - OtherTransparencyMarketInformation assembly model**

85 **2.2.2 IsBasedOn relationships from the European style market profile**

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

88 **Table 2 - IsBasedOn dependency**

Name	Complete IsBasedOn Path
OtherTransparencyMarketInformation_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument

89

90 **2.2.3 Detailed OtherTransparencyMarketInformation assembly model**

91 **2.2.3.1 OtherTransparencyMarketInformation\_MarketDocument root class**

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

94 Table 3 shows all attributes of OtherTransparencyMarketInformation\_MarketDocument.

95 **Table 3 - Attributes of OtherTransparencyMarketInformation assembly  
96 model::OtherTransparencyMarketInformation\_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.

Order	mult.	Attribute name / Attribute type	Description
1	[1..1]	revisionNumber ESMPVersion_String	The identification of the version that distinguishes one evolution of a document from another.
2	[1..1]	type MessageKind_String	The coded type of a document. The document type describes the principal characteristic of the document.
3	[1..1]	sender_MarketParticipant.mRID PartyID_String	The identification of a party in the energy market. --- The document owner.
4	[1..1]	sender_MarketParticipant.marketRole.type MarketRoleKind_String	The identification of the role played by a market player. --- The document owner. --- The role associated with a MarketParticipant.
5	[1..1]	receiver_MarketParticipant.mRID PartyID_String	The identification of a party in the energy market. --- The document recipient.
6	[1..1]	receiver_MarketParticipant.marketRole.type MarketRoleKind_String	The identification of the role played by a market player. --- The document recipient. --- The role associated with a MarketParticipant.
7	[1..1]	createdDateTime ESMP_DateTime	The date and time of the creation of the document.
8	[1..1]	docStatus Action_Status	The identification of the condition or position of the document with regard to its standing.
9	[1..1]	publication_DateAndOrTime.dateTime DateTime	Date and time as per ISO 8601 YYYY-MM-DDThh:mm:ss.sssZ.
10	[1..1]	start_DateAndOrTime.dateTime DateTime	Date and time as per ISO 8601 YYYY-MM-DDThh:mm:ss.sssZ.
11	[0..1]	end_DateAndOrTime.dateTime DateTime	Date and time as per ISO 8601 YYYY-MM-DDThh:mm:ss.sssZ.
12	[1..1]	reason.code ReasonCode_String	The motivation of an act in coded form. --- The Reason associated with the electronic document header providing different motivations for the creation of the document.
13	[0..1]	reason.text ReasonText_String	The textual explanation corresponding to the reason code. --- The Reason associated with the electronic document header providing different motivations for the creation of the document.



98

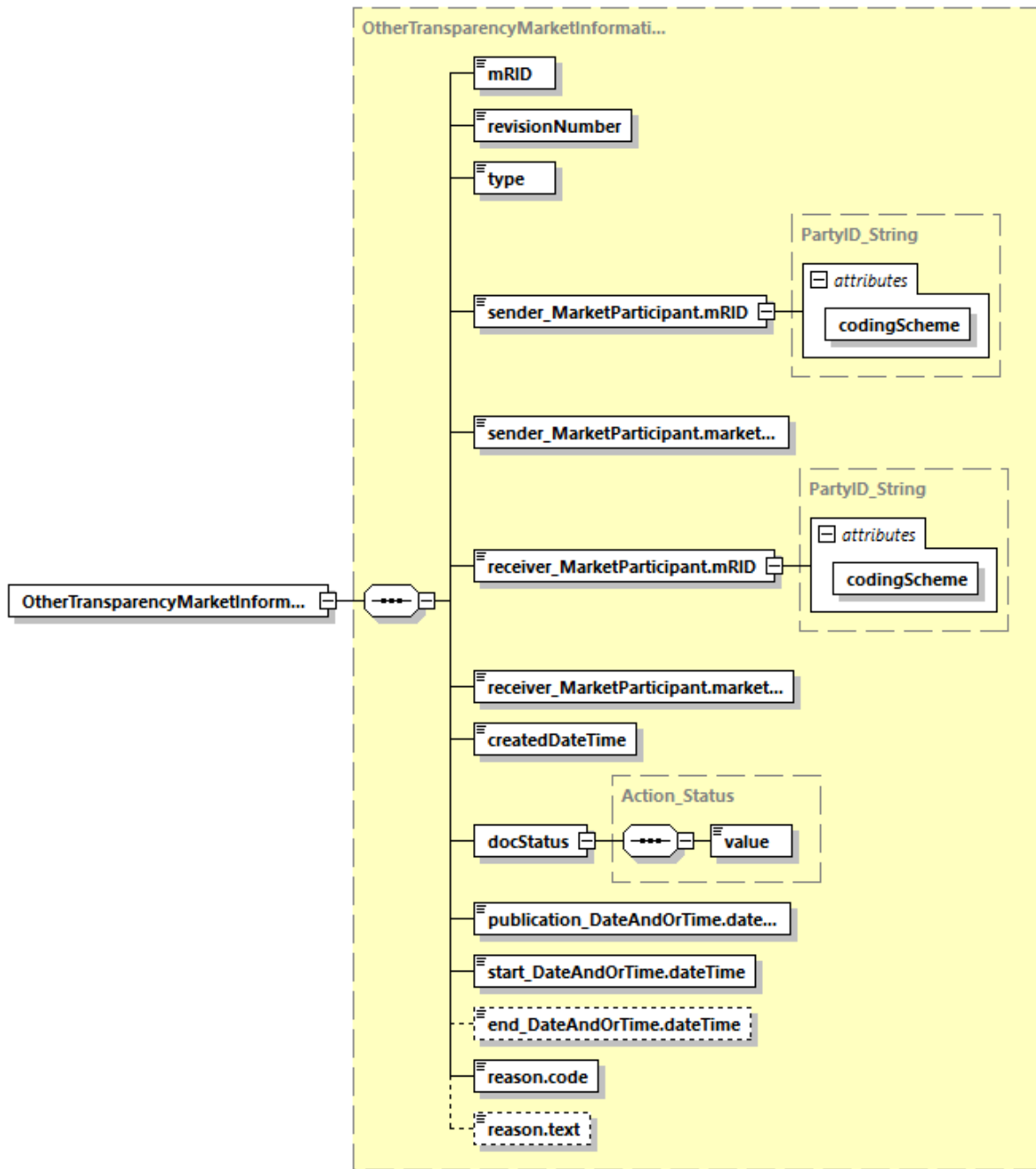
#### 99 **2.2.4 Datatypes**

100 The list of datatypes used for the OtherTransparencyMarketInformation assembly model is as  
101 follows:

- 102 • Action\_Status compound
- 103 • ESMP\_DateTime datatype
- 104 • ESMPVersion\_String datatype
- 105 • ID\_String datatype
- 106 • MarketRoleKind\_String datatype, codelist RoleTypeList
- 107 • MessageKind\_String datatype, codelist MessageTypeList
- 108 • PartyID\_String datatype, codelist CodingSchemeTypeList
- 109 • ReasonCode\_String datatype, codelist ReasonCodeTypeList
- 110 • ReasonText\_String datatype
- 111 • Status\_String datatype, codelist StatusTypeList

112

113 2.2.5 OtherTransparencyMarketInformation\_MarketDocument XML schema



114

Generated by XMLSpy

www.altova.com

115 Figure 3 - OtherTransparencyMarketInformation\_MarketDocument schema structure

## 116 2.2.6 Other Transparency Market Information XML schema

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

118 urn:iec62325.351:tc57wg16:451-n:otmidocument:1:0

119

```
120 <?xml version="1.0" encoding="utf-8"?>
```

```
121 <xs:schema xmlns:ecl="urn:entsoe.eu:wgedi:codelists"
```

```
122 xmlns="urn:iec62325.351:tc57wg16:451-n:otmidocument:1:0"
```

```
123 xmlns:sawsdl="http://www.w3.org/ns/sawsdl"
```

```
124 xmlns:cimp="http://www.iec.ch/cimprofile"
```

```
125 xmlns:xs="http://www.w3.org/2001/XMLSchema"
```

```
126 targetNamespace="urn:iec62325.351:tc57wg16:451-n:otmidocument:1:0"
```

```
127 elementFormDefault="qualified" attributeFormDefault="unqualified"
```

```
128 <xs:import namespace="urn:entsoe.eu:wgedi:codelists" schemaLocation="urn-  
129 entsoe-eu-wgedi-codelists.xsd"/>
```

```
130 <xs:element name="OtherTransparencyMarketInformation_MarketDocument"
```

```
131 type="OtherTransparencyMarketInformation_MarketDocument"/>
```

```
132 <xs:simpleType name="ID_String"
```

```
133 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
```

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

```
135 <xs:maxLength value="60"/>
```

```
136 </xs:restriction>
```

```
137 </xs:simpleType>
```

```
138 <xs:simpleType name="ESMPVersion_String"
```

```
139 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
```

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

```
141 <xs:pattern value="[1-9]([0-9]){0,2}"/>
```

```
142 </xs:restriction>
```

```
143 </xs:simpleType>
```

```
144 <xs:simpleType name="MessageKind_String"
```

```
145 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
```

```
146 <xs:restriction base="ecl:MessageTypeList"/>
```

```
147 </xs:simpleType>
```

```
148 <xs:simpleType name="PartyID_String-base"
```

```
149 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
```

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

```
151 <xs:maxLength value="16"/>
```

```
152 </xs:restriction>
```

```
153 </xs:simpleType>
```

```
154 <xs:complexType name="PartyID_String"
```

```
155 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
```

```
156 <xs:simpleContent>
```

```
157 <xs:extension base="PartyID_String-base">
```

```
158 <xs:attribute name="codingScheme"
```

```
159 type="ecl:CodingSchemeTypeList" use="required"/>
```

```
160 </xs:extension>
```

```
161 </xs:simpleContent>
```

```
162 </xs:complexType>
```

```
163 <xs:simpleType name="MarketRoleKind_String"
```

```
164 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
```

```
165 <xs:restriction base="ecl:RoleTypeList"/>
```

```
166 </xs:simpleType>
```

```
167 <xs:simpleType name="ESMP_DateTime"
```

```
168 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#DateTime">
```

```
169 <xs:restriction base="xs:dateTime">
```

```
170         <xs:pattern value="((([0-9]{4})[\-](0[13578]|1[02]))[\-](0[1-
171 9]|[12][0-9]|3[01])|([0-9]{4})[\-]((0[469])|(11))[\-](0[1-9]|12)[0-
172 9]|30))T((([01][0-9]|2[0-3]):[0-5][0-9]:[0-5][0-
173 9])Z)|((([13579][26][02468][048]|13579][01345789](0)[48]|13579][01345789][2468][0
174 48]|02468][048][02468][048]|02468][1235679](0)[48]|02468][1235679][2468][048]|
175 0-9][0-9][13579][26])[\-](02)[\-](0[1-9]|1[0-9]|2[0-9])T((([01][0-9]|2[0-3]):[0-
176 5][0-9]:[0-5][0-
177 9])Z)|((([13579][26][02468][1235679]|13579][01345789](0)[01235679]|13579][0134578
178 9][2468][1235679]|02468][048][02468][1235679]|02468][1235679](0)[01235679]|0246
179 8][1235679][2468][1235679]|0-9][0-9][13579][01345789])[\-](02)[\-](0[1-9]|1[0-
180 9]|2[0-8])T((([01][0-9]|2[0-3]):[0-5][0-9]:[0-5][0-9])Z)"/>
181     </xs:restriction>
182 </xs:simpleType>
183 <xs:simpleType name="ReasonCode_String"
184 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
185     <xs:restriction base="ecl:ReasonCodeTypeList"/>
186 </xs:simpleType>
187 <xs:simpleType name="ReasonText_String"
188 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
189     <xs:restriction base="xs:string">
190         <xs:maxLength value="512"/>
191     </xs:restriction>
192 </xs:simpleType>
193 <xs:simpleType name="Status_String"
194 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
195     <xs:restriction base="ecl:StatusTypeList"/>
196 </xs:simpleType>
197 <xs:complexType name="Action_Status"
198 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Status">
199     <xs:sequence>
200         <xs:element name="value" type="Status_String" minOccurs="1"
201 maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
202 cim16#Status.value"/>
203     </xs:sequence>
204 </xs:complexType>
205 <xs:complexType name="OtherTransparencyMarketInformation_MarketDocument"
206 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketDocument">
207     <xs:sequence>
208         <xs:element name="mRID" type="ID_String" minOccurs="1"
209 maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
210 cim16#IdentifiedObject.mRID"/>
211         <xs:element name="revisionNumber" type="ESMPVersion_String"
212 minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
213 schema-cim16#Document.revisionNumber"/>
214         <xs:element name="type" type="MessageKind_String" minOccurs="1"
215 maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
216 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="docStatus" type="Action_Status" minOccurs="1"
235 maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
236 cim16#Document.docStatus"/>
237     <xs:element name="publication_DateAndOrTime.dateTime"
238 type="xs:dateTime" minOccurs="1" maxOccurs="1"
239 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
240 cim16#DateAndOrTime.dateTime"/>
241     <xs:element name="start_DateAndOrTime.dateTime"
242 type="xs:dateTime" minOccurs="1" maxOccurs="1"
243 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
244 cim16#DateAndOrTime.dateTime"/>
245     <xs:element name="end_DateAndOrTime.dateTime"
246 type="xs:dateTime" minOccurs="0" maxOccurs="1"
247 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
248 cim16#DateAndOrTime.dateTime"/>
249     <xs:element name="reason.code" type="ReasonCode_String"
250 minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
251 schema-cim16#Reason.code"/>
252     <xs:element name="reason.text" type="ReasonText_String"
253 minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
254 schema-cim16#Reason.text"/>
255     </xs:sequence>
256 </xs:complexType>
257 </xs:schema>
258
```