



European Network of
Transmission System Operators
for Electricity

STATUS REQUEST DOCUMENT UML MODEL AND SCHEMA

2020-03-18
APPROVED DOCUMENT
VERSION 1.0

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Table of Contents

3	1	Objective	5
4	2	StatusRequest_MarketDocument.....	6
5	2.1	Status request contextual model	6
6	2.1.1	Overview of the model	6
7	2.1.2	IsBasedOn relationships from the European style market	
8		profile	6
9	2.2	Status request assembly model	7
10	2.2.1	Overview of the model	7
11	2.2.2	IsBasedOn relationships from the European style market	
12		profile	7
13	2.2.3	Detailed Status request assembly model	8
14	2.2.3.1	StatusRequest_MarketDocument root class	8
15	2.2.3.2	AttributeInstanceComponent	8
16	2.2.4	Datatypes	9
17	2.2.5	StatusRequest_MarketDocument XML schema structure	10
18	2.2.6	StatusRequest_MarketDocument XML schema	11
19	List of figures		
20		Figure 1 - Status request contextual model	6
21		Figure 2 - Status request assembly model	7
22		Figure 3 - StatusRequest_MarketDocument schema structure	10
23	List of tables		
24		Table 1 - IsBasedOn dependency	6
25		Table 2 - IsBasedOn dependency	7
26		Table 3 - Attributes of Status request assembly	
27		model::StatusRequest_MarketDocument.....	8
28		Table 4 - Association ends of Status request assembly	
29		model::StatusRequest_MarketDocument with other classes	8
30		Table 5 - Attributes of Status request assembly model::AttributeInstanceComponent	9
31			

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Revision History

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.

50

51 **1 Objective**

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

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

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

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

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

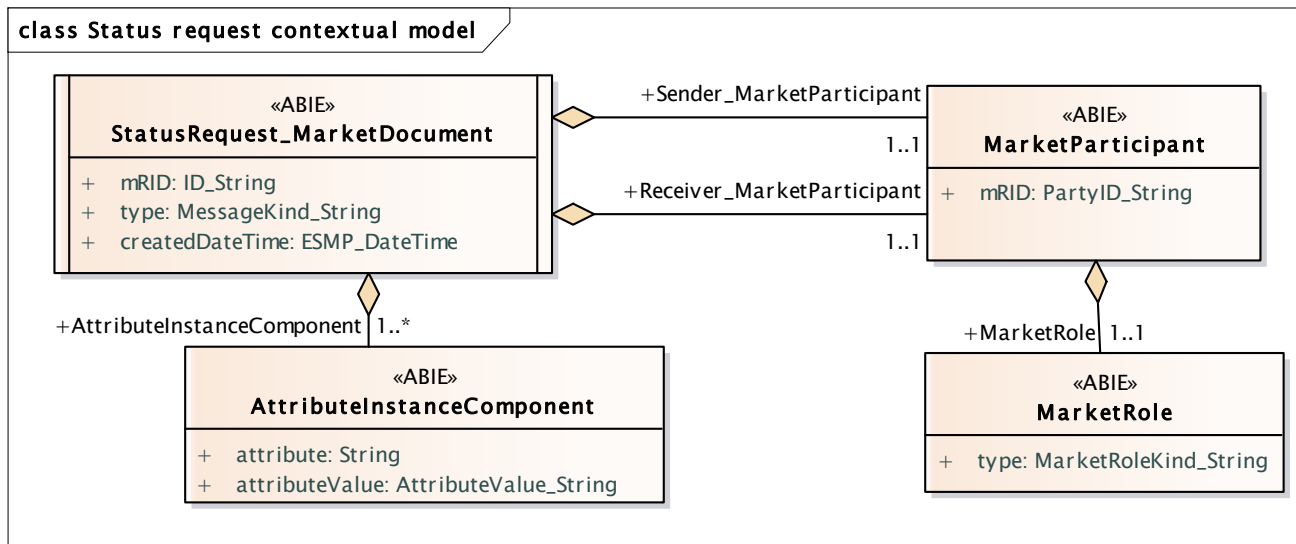
68

69 **2 StatusRequest_MarketDocument**

70 2.1 Status request contextual model

71 2.1.1 Overview of the model

72 Figure 1 shows the model.



73

74

Figure 1 - Status request contextual model

75 2.1.2 IsBasedOn relationships from the European style market profile

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

78

Table 1 - IsBasedOn dependency

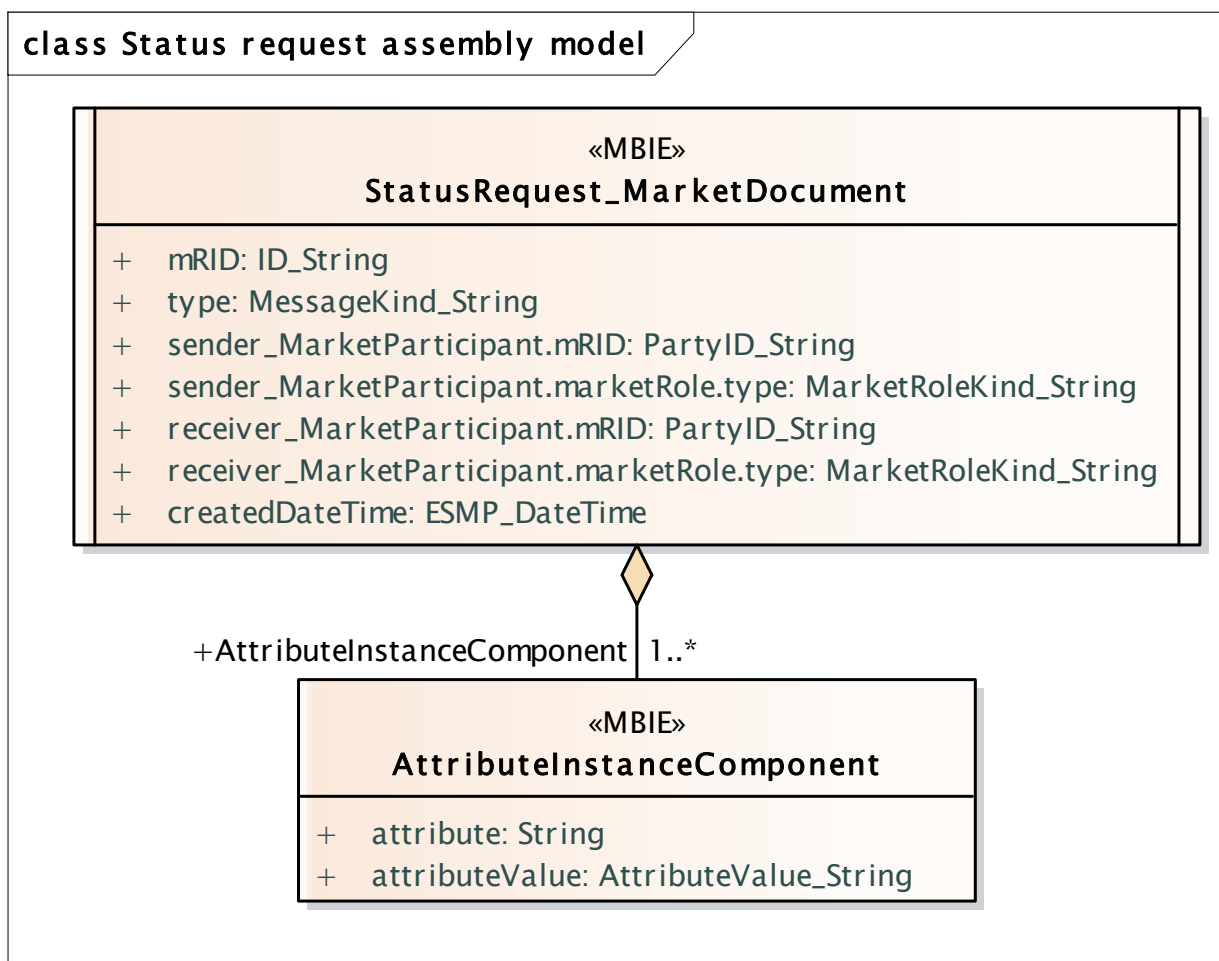
Name	Complete IsBasedOn Path
AttributeInstanceComponent	TC57CIM::IEC62325::MarketManagement::AttributeInstanceComponent
MarketParticipant	TC57CIM::IEC62325::MarketCommon::MarketParticipant
MarketRole	TC57CIM::IEC62325::MarketCommon::MarketRole
StatusRequest_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument

79

80 2.2 Status request assembly model

81 2.2.1 Overview of the model

82 Figure 2 shows the model.



83

84

Figure 2 - Status request 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
AttributeInstanceComponent	TC57CIM::IEC62325::MarketManagement::AttributeInstanceComponent
StatusRequest_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument

89

90 **2.2.3 Detailed Status request assembly model**

91 **2.2.3.1 StatusRequest_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 StatusRequest_MarketDocument.

95 **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.

96

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

98 **Table 4 - Association ends of Status request assembly
99 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.[]

100

101 **2.2.3.2 AttributeInstanceComponent**

102 A class used to provide information about an attribute.

103 Table 5 shows all attributes of AttributeInstanceComponent.

104 **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.

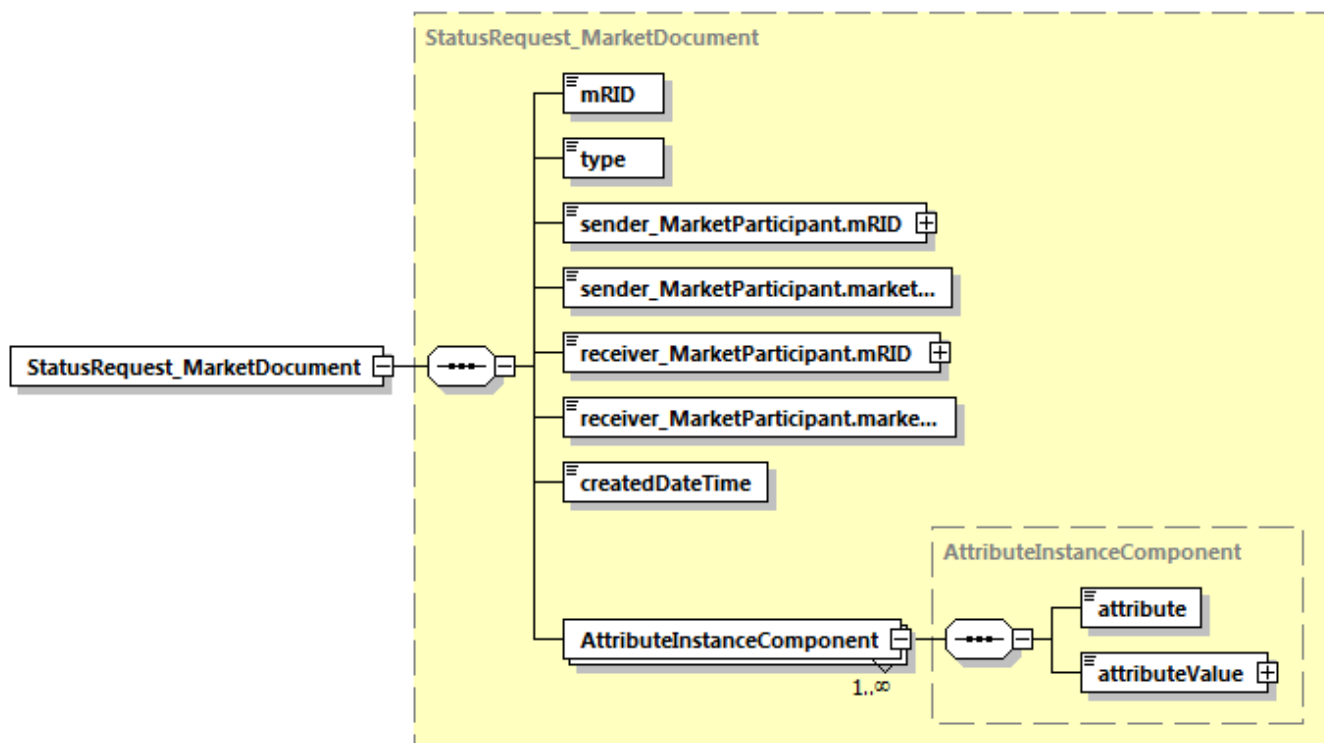
105

106 2.2.4 Datatypes

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

- 108 • AttributeValue_String datatype, codelist CodingSchemeTypeList
- 109 • ESMP_DateTime datatype
- 110 • ID_String datatype
- 111 • MarketRoleKind_String datatype, codelist RoleTypeList
- 112 • MessageKind_String datatype, codelist MessageTypeList
- 113 • PartyID_String datatype, codelist CodingSchemeTypeList
- 114

115 2.2.5 StatusRequest_MarketDocument XML schema structure



116
117

Generated by XMLSpy

www.altova.com

Figure 3 - StatusRequest_MarketDocument schema structure

118 2.2.6 StatusRequest_MarketDocument XML schema

119

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

121 urn:iec62325.351:tc57wg16:451-5:statusrequestdocument:4:0

```
122 <?xml version="1.0" encoding="utf-8"?>
123 <xs:schema xmlns:cl="urn:entsoe.eu:wgedi:codelists"
124 xmlns:sawsdl="http://www.w3.org/ns/sawsdl" xmlns="urn:iec62325.351:tc57wg16:451-
125 5:statusrequestdocument:4:0" xmlns:cimp="http://www.iec.ch/cimprofile"
126 xmlns:xs="http://www.w3.org/2001/XMLSchema"
127 targetNamespace="urn:iec62325.351:tc57wg16:451-5:statusrequestdocument:4:0"
128 elementFormDefault="qualified" attributeFormDefault="unqualified">
129   <xs:import namespace="urn:entsoe.eu:wgedi:codelists" schemaLocation="urn-
130 entsoe-eu-wgedi-codelists.xsd"/>
131   <xs:element name="StatusRequest_MarketDocument"
132 type="StatusRequest_MarketDocument"/>
133   <xs:simpleType name="AttributeValue_String-base"
134 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
135     <xs:restriction base="xs:string">
136       <xs:maxLength value="150"/>
137     </xs:restriction>
138   </xs:simpleType>
139   <xs:complexType name="AttributeValue_String"
140 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
141     <xs:simpleContent>
142       <xs:extension base="AttributeValue_String-base">
143         <xs:attribute name="codingScheme"
144 type="cl:CodingSchemeTypeList"/>
145       </xs:extension>
146     </xs:simpleContent>
147   </xs:complexType>
148   <xs:complexType name="AttributeInstanceComponent"
149 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
150 cim16#AttributeInstanceComponent">
151     <xs:sequence>
152       <xs:element name="attribute" type="xs:string" minOccurs="1"
153 maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
154 cim16#AttributeInstanceComponent.attribute"/>
155       <xs:element name="attributeValue" type="AttributeValue_String"
156 minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
157 schema-cim16#AttributeInstanceComponent.attributeValue"/>
158     </xs:sequence>
159   </xs:complexType>
160   <xs:simpleType name="ID_String"
161 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
162     <xs:restriction base="xs:string">
163       <xs:maxLength value="35"/>
164     </xs:restriction>
165   </xs:simpleType>
166   <xs:simpleType name="MessageKind_String"
167 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
168     <xs:restriction base="cl:MessageTypeList"/>
169   </xs:simpleType>
170   <xs:simpleType name="PartyID_String-base"
171 sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
172     <xs:restriction base="xs:string">
173       <xs:maxLength value="16"/>
174     </xs:restriction>
```

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

```

```
235         </xs:sequence>  
236     </xs:complexType>  
237 </xs:schema>  
238
```