European Network of
Transmission System Operators
for Electricity

EIC DOCUMENT
UML MODEL AND SCHEMA

2021-09-15
APPROVED DOCUMENT
VERSION 1.0

ENTSO-E EIC document – UML model and schema
VERSION 1.0

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

Revision History

52

Version	Release	Date	Comments
1	0	2021-09-15	First draft of the document. Updates in schema 'iec62325-451-n-eiccode_v1_1.xsd': maxLength of VATCode_String type was enlarged to 25 characters. Approved by MC.

53

54 **Objective**

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

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

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

60 This document shall only be referenced in an implementation guide of a specific business
61 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;

64 • Sequence diagrams of the business process;

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

67 • For each schema, dependency tables providing the necessary information for the
68   generation of the XML instances, i.e. when the optional attributes are to be used, which
69   codes from which ENTSO-E codelist are to be used.

70

71   **EIC_MarketDocument**

72   2.1   **EIC document contextual model**

73   **2.1.1   Overview of the model**

74   Figure 1 shows the model.
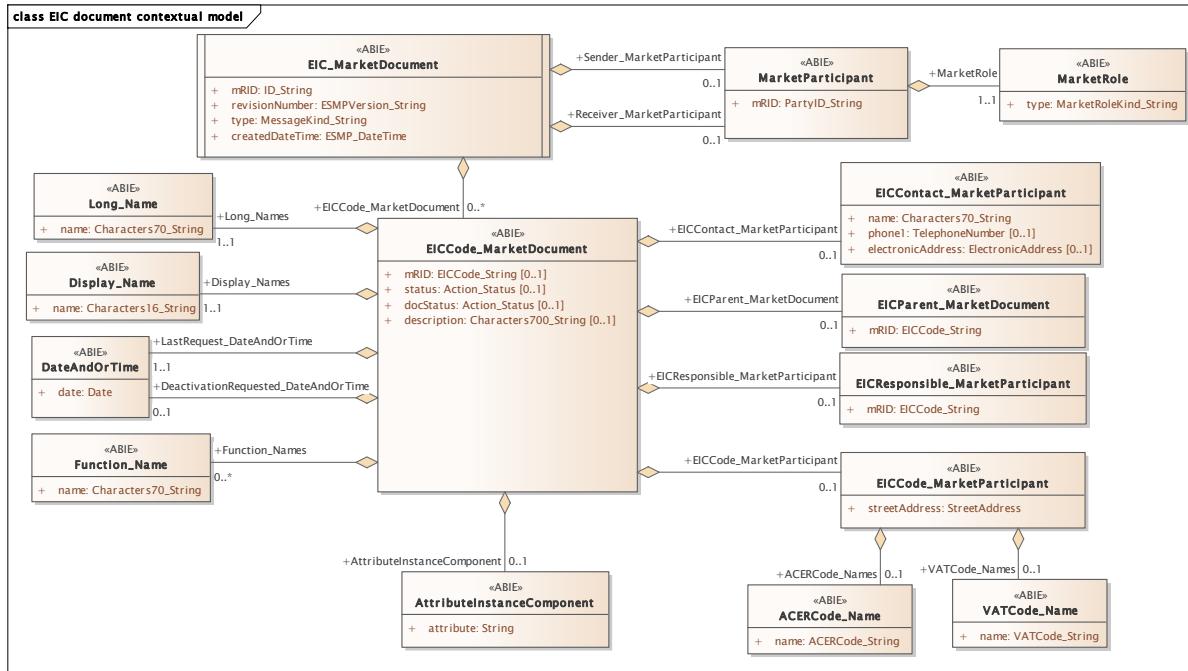
75

76   **Figure 1 - EIC document contextual model**

77

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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 1 - IsBasedOn dependency

Name	Complete IsBasedOn Path
ACERCode_Name	TC57CIM::IEC61970::Base::Core::Name
AttributeInstanceComponent	TC57CIM::IEC62325::MarketManagement::AttributeInstanceComponent
DateAndOrTime	TC57CIM::IEC62325::MarketManagement::DateAndOrTime
Display_Name	TC57CIM::IEC61970::Base::Core::Name
EIC_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument
EICCode_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument
EICCode_MarketParticipant	TC57CIM::IEC62325::MarketCommon::MarketParticipant
EICContact_MarketParticipant	TC57CIM::IEC62325::MarketCommon::MarketParticipant
EICParent_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument
EICResponsible_MarketParticipant	TC57CIM::IEC62325::MarketCommon::MarketParticipant
Function_Name	TC57CIM::IEC61970::Base::Core::Name
Long_Name	TC57CIM::IEC61970::Base::Core::Name
MarketParticipant	TC57CIM::IEC62325::MarketCommon::MarketParticipant
MarketRole	TC57CIM::IEC62325::MarketCommon::MarketRole
VATCode_Name	TC57CIM::IEC61970::Base::Core::Name

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2.2 **EIC document assembly model**

2.2.1 **Overview of the model**

88 Figure 2 shows the model.

89
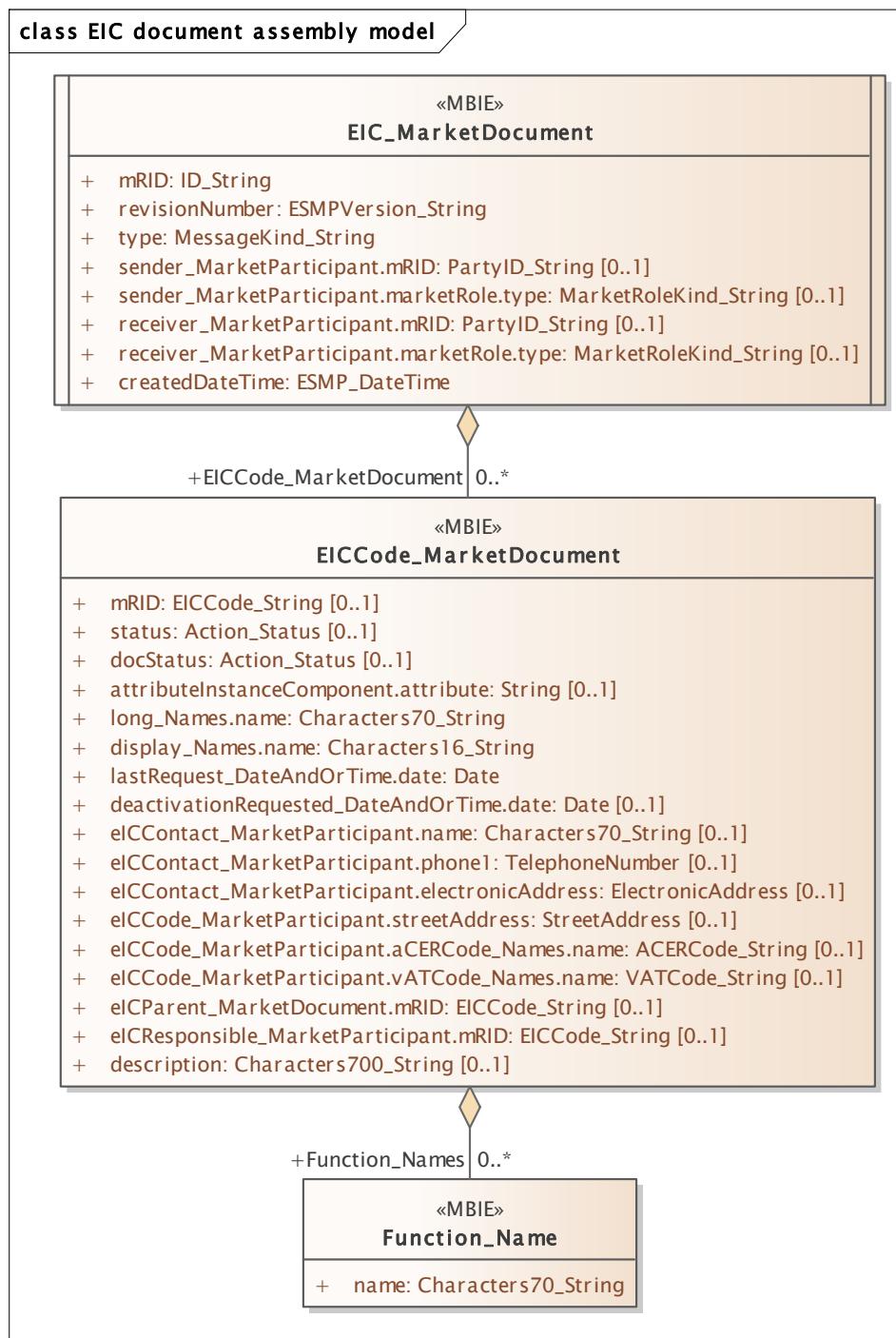
Figure 2 - EIC document assembly model

91

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92

2.2.2 IsBasedOn relationships from the European style market profile

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

96 **Table 2 - IsBasedOn dependency**

Name	Complete IsBasedOn Path
EIC_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument
EICCode_MarketDocument	TC57CIM::IEC62325::MarketManagement::MarketDocument
Function_Name	TC57CIM::IEC61970::Base::Core::Name

97

2.2.3 Detailed EIC document assembly model

2.2.3.1 EIC_MarketDocument root class

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

102 Table 3 shows all attributes of EIC_MarketDocument.

103 **Table 3 - Attributes of EIC document assembly model::EIC_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]	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	[0..1]	sender_MarketParticipant.mRID PartyID_String	The identification of a party in the energy market. --- The sender of the document.
4	[0..1]	sender_MarketParticipant.marketRole.type MarketRoleKind_String	The identification of the role played by a market player. --- The sender of the document.
5	[0..1]	receiver_MarketParticipant.mRID PartyID_String	The identification of a party in the energy market. --- The recipient of the document.
6	[0..1]	receiver_MarketParticipant.marketRole.type MarketRoleKind_String	The identification of the role played by a market player. --- The recipient of the document.
7	[1..1]	createdDateTime ESMP_DateTime	The date and time of the creation of the document.

104

105 Table 4 shows all association ends of EIC_MarketDocument with other classes.

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106
107 **Table 4 - Association ends of EIC document assembly model::EIC_MarketDocument
with other classes**

Order	mult.	Class name / Role	Description
8	[0..*]	EICCode_MarketDocument EICCode_MarketDocument	The information on the EIC code. Association Based On: EIC document contextual model::EICCode_MarketDocument.EICCode_MarketDocument[0..*] ----- EIC document contextual model::EIC_MarketDocument.[]

108

109 **2.2.3.2   EICCode_MarketDocument**

110 A document describing the EIC code, which identification is provided in the mRID attribute.

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

113 Table 5 shows all attributes of EICCode_MarketDocument.

114 **Table 5 - Attributes of EIC document assembly model::EICCode_MarketDocument**

Order	mult.	Attribute name / Attribute type	Description
0	[0..1]	mRID EICCode_String	The EIC code that is managed in the process (creation, update, deactivation, reactivation, publication).
1	[0..1]	status Action_Status	The action requested to be carried out, e.g. creation of the EIC code, update, deactivation, reactivation. Status of subject matter (e.g., Agreement, Work) this document represents. For status of the document itself, use 'docStatus' attribute.
2	[0..1]	docStatus Action_Status	The status of the EIC code document, i.e. active or inactive. This status is for publication information. The identification of the condition or position of the document with regard to its standing.
3	[0..1]	attributeInstanceComponent.attribute String	The identification of an EIC code either as local EIC code or international EIC code in order to keep either locally or to send to the central registry. The identification of an attribute for a given request component. --- This attribute states if the EIC code is either a local EIC code or an international EIC code. The default value is that the EIC code is a local EIC code; thus "no value" attribute means that the code is a local EIC code.
4	[1..1]	long_Names.name Characters70_String	Any free text that name the object. --- The long name or the "full" name of the EIC party or object being identified by the EIC code.
5	[1..1]	display_Names.name Characters16_String	Any free text that name the object. --- The display name or short name to be used on displays.
6	[1..1]	lastRequest_DateAndOrTime.date Date	The date as "YYYY-MM-DD", which conforms with ISO 8601. --- Date of the request

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Order	mult.	Attribute name / Attribute type	Description
7	[0..1]	deactivationRequested_DateAndOrTime.date Date	The date as "YYYY-MM-DD", which conforms with ISO 8601. --- Date when the deactivation will be done.
8	[0..1]	eICContact_MarketParticipant.name Characters70_String	The name is any free human readable and possibly non unique text naming the object. --- The information about the contact person for the EIC code.
9	[0..1]	eICContact_MarketParticipant.phone1 TelephoneNumber	Phone number. --- The information about the contact person for the EIC code.
10	[0..1]	eICContact_MarketParticipant.electronicAddress ElectronicAddress	Electronic address. --- The information about the contact person for the EIC code.
11	[0..1]	eICCode_MarketParticipant.streetAddress StreetAddress	Street address when the EIC code is the one of a market participant, i.e. company.. --- Additional information when the EIC code is the one of a market participant, such as company address, ACER code, VAT number, identification code.
12	[0..1]	eICCode_MarketParticipant.aCERCode_Names.name ACERCode_String	Any free text that name the object. The other codes that may be used to identify an entity. --- Additional information when the EIC code is the one of a market participant, such as company address, ACER code, VAT number, identification code. --- The ACER code associated to the EIC code of the market participant.
13	[0..1]	eICCode_MarketParticipant.vATCode_Names.name VATCode_String	Any free text that name the object. --- Additional information when the EIC code is the one of a market participant, such as company address, ACER code, VAT number, identification code. --- The VAT number or identification code associated with the EIC code of the market participant.
14	[0..1]	eICParent_MarketDocument.mRID EICCode_String	The identification of the parent for the EIC code (hierarchical description). For a market participant, the parent is the mother company. For the areas, the parent provides information about aggregation, e.g. a control block is composed of control areas, etc. --- The EIC code of the parent (market participant, area, resource object, etc.) of the EIC code.
15	[0..1]	eICResponsible_MarketParticipant.mRID EICCode_String	The identification of a party in the energy market. --- The party responsible of the object identified by the EIC code (mRID attribute).
16	[0..1]	description Characters700_String	The description of the EIC code. The description is a free human readable text describing or naming the object. It may be non unique and may not correlate to a naming hierarchy.

115

116 Table 6 shows all association ends of EICCode_MarketDocument with other classes.

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**Table 6 - Association ends of EIC document assembly
model::EICCode_MarketDocument with other classes**

Order	mult.	Class name / Role	Description
17	[0..*]	Function_Name Function_Names	All function names of this identified object. Association Based On: EIC document contextual model::Function_Name.Function_Names[0..*] ----- EIC document contextual model::EICCode_MarketDocument.[]

119

2.2.3.3   Function_Name

121 The Name class provides the means to define any number of human readable names for an
122 object. A name is **not** to be used for defining inter-object relationships. For inter-object
123 relationships instead use the object identification 'mRID'.

124 Table 7 shows all attributes of Function_Name.

125 **Table 7 - Attributes of EIC document assembly model::Function_Name**

Order	mult.	Attribute name / Attribute type	Description
0	[1..1]	name Characters70_String	For the EIC code, the list of functions. Any free text that name the object.

126

2.2.4   Datatypes

128 The list of datatypes used for the EIC document assembly model is as follows:

129 • Action_Status compound

130 • ElectronicAddress compound

131 • StreetAddress compound

132 • StreetDetail compound

133 • TelephoneNumber compound

134 • TownDetail compound

135 • ACERCode_String datatype

136 • Characters10_String datatype

137 • Characters15_String datatype

138 • Characters16_String datatype

139 • Characters2_String datatype

140 • Characters35_String datatype

141 • Characters70_String datatype

142 • Characters700_String datatype

143 • EICCode_String datatype

144 • ESMP_DateTime datatype

145 • ESMPVersion_String datatype

146 • ID_String datatype

147 • MarketRoleKind_String datatype, codelist RoleTypeList

148 • MessageKind_String datatype, codelist MessageTypeList

149 • PartyID_String datatype, codelist CodingSchemeTypeList

150 • Status_String datatype, codelist StatusTypeList

151 • VATCode_String datatype

152

153 **2.2.5 EIC_MarketDocument XML schema structure**
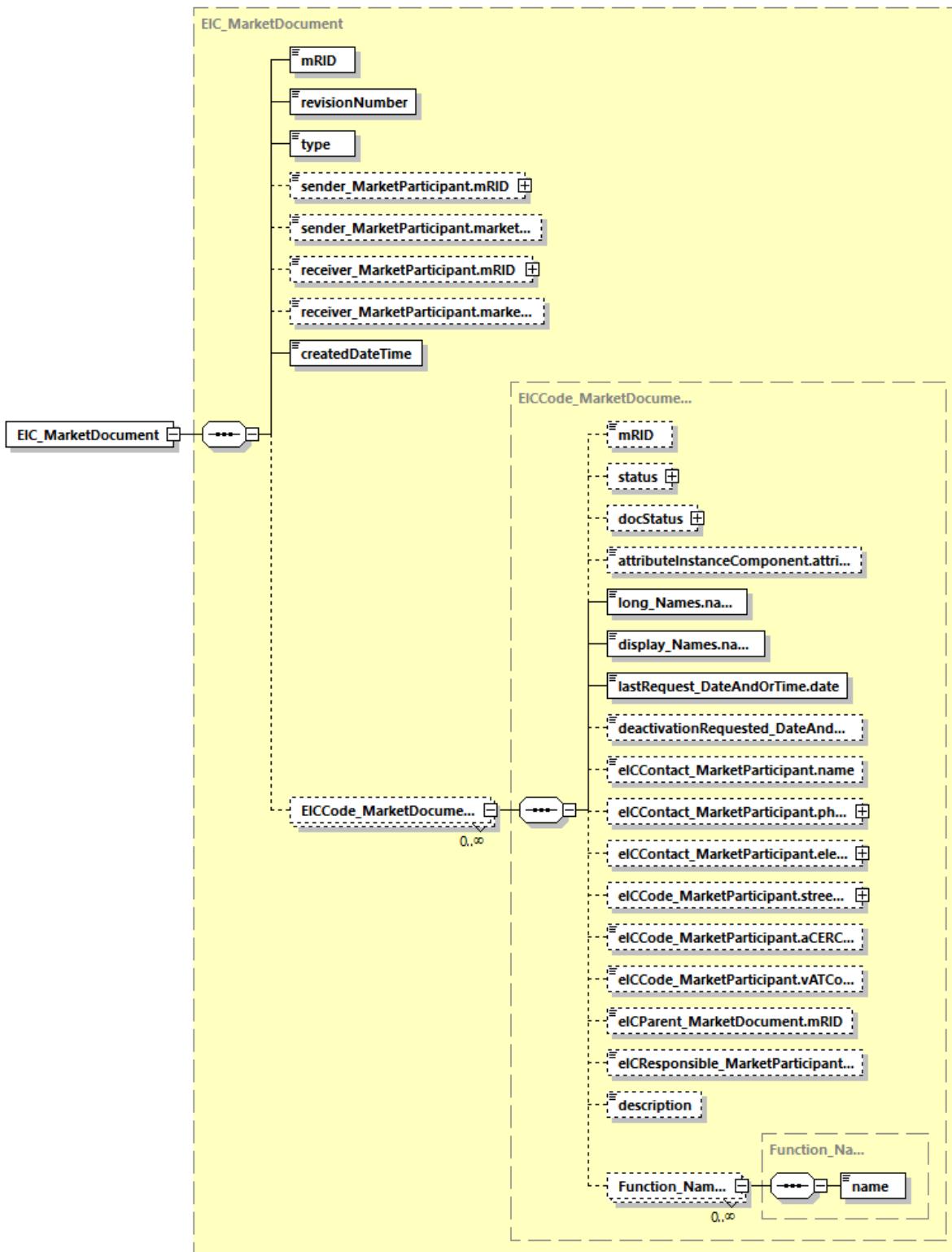
154
155 **Figure 3 - EIC_MarketDocument schema structure**

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2.2.6   EIC_MarketDocument XML schema

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

urn:iec62325.351:tc57wg16:451-n:eicdocument:1:1

```xml
156
157
158
159
160   <?xml version="1.0" encoding="utf-8"?>
161   <xs:schema xmlns:ecl="urn:entsoe.eu:wgedi:codelists"
162   xmlns="urn:iec62325.351:tc57wg16:451-n:eicdocument:1:1"
163   xmlns:sawsdl="http://www.w3.org/ns/sawsdl"
164   xmlns:cimp="http://www.iec.ch/cimprofile"
165   xmlns:xs="http://www.w3.org/2001/XMLSchema"
166   targetNamespace="urn:iec62325.351:tc57wg16:451-n:eicdocument:1:1"
167   elementFormDefault="qualified" attributeFormDefault="unqualified">
168          <xs:import namespace="urn:entsoe.eu:wgedi:codelists" schemaLocation="urn-
169   entsoe-eu-wgedi-codelists.xsd"/>
170          <xs:element name="EIC_MarketDocument" type="EIC_MarketDocument"/>
171          <xs:simpleType name="ID_String"
172   sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
173                 <xs:restriction base="xs:string">
174                        <xs:maxLength value="60"/>
175                 </xs:restriction>
176          </xs:simpleType>
177          <xs:simpleType name="ESMPVersion_String"
178   sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
179                 <xs:restriction base="xs:string">
180                        <xs:pattern value="[1-9]([0-9]){0,2}"/>
181                 </xs:restriction>
182          </xs:simpleType>
183          <xs:simpleType name="MessageKind_String"
184   sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
185                 <xs:restriction base="ecl:MessageTypeList"/>
186          </xs:simpleType>
187          <xs:simpleType name="PartyID_String-base"
188   sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
189                 <xs:restriction base="xs:string">
190                        <xs:maxLength value="16"/>
191                 </xs:restriction>
192          </xs:simpleType>
193          <xs:complexType name="PartyID_String"
194   sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
195                 <xs:simpleContent>
196                        <xs:extension base="PartyID_String-base">
197                               <xs:attribute name="codingScheme"
198   type="ecl:CodingSchemeTypeList" use="required"/>
199                        </xs:extension>
200                 </xs:simpleContent>
201          </xs:complexType>
202          <xs:simpleType name="MarketRoleKind_String"
203   sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
204                 <xs:restriction base="ecl:RoleTypeList"/>
205          </xs:simpleType>
206          <xs:simpleType name="ESMP_DateTime"
207   sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#DateTime">
208                 <xs:restriction base="xs:dateTime">
```

```
209    <xs:pattern value="((([0-9]{4})[\-](0[13578]|1[02])[\-](0[1-
210    9]|[12][0-9]|3[01])|([0-9]{4})[\-]((0[469])|(11))[\-](0[1-9]|[12][0-
211    9]|30))T(([01][0-9]|2[0-3]):[0-5][0-9]:[0-5][0-
212    9])Z)|(([13579][26][02468][048]|[13579][01345789](0)[48]|[13579][01345789][2468][0
213    48]|[02468][048][02468][048]|[02468][1235679](0)[48]|[02468][1235679][2468][048]|[
214    0-9][0-9][13579][26])[\-](02)[\-](0[1-9]|1[0-9]|2[0-9])T(([01][0-9]|2[0-3]):[0-
215    5][0-9]:[0-5][0-
216    9])Z)|(([13579][26][02468][1235679]|[13579][01345789](0)[01235679]|[13579][0134578
217    9][2468][1235679]|[02468][048][02468][1235679]|[02468][1235679](0)[01235679]|[0246
218    8][1235679][2468][1235679]|[0-9][0-9][13579][01345789])[\-](02)[\-](0[1-9]|1[0-
219    9]|2[0-8])T(([01][0-9]|2[0-3]):[0-5][0-9]:[0-5][0-9])Z)"/>
220                </xs:restriction>
221        </xs:simpleType>
222        <xs:complexType name="EIC_MarketDocument"
223    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketDocument">
224                <xs:sequence>
225                    <xs:element name="mRID" type="ID_String" minOccurs="1"
226    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
227    cim16#IdentifiedObject.mRID"/>
228                    <xs:element name="revisionNumber" type="ESMPVersion_String"
229    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
230    schema-cim16#Document.revisionNumber"/>
231                    <xs:element name="type" type="MessageKind_String" minOccurs="1"
232    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
233    cim16#Document.type"/>
234                    <xs:element name="sender_MarketParticipant.mRID"
235    type="PartyID_String" minOccurs="0" maxOccurs="1"
236    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
237    cim16#IdentifiedObject.mRID"/>
238                    <xs:element name="sender_MarketParticipant.marketRole.type"
239    type="MarketRoleKind_String" minOccurs="0" maxOccurs="1"
240    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketRole.type"/>
241                    <xs:element name="receiver_MarketParticipant.mRID"
242    type="PartyID_String" minOccurs="0" maxOccurs="1"
243    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
244    cim16#IdentifiedObject.mRID"/>
245                    <xs:element name="receiver_MarketParticipant.marketRole.type"
246    type="MarketRoleKind_String" minOccurs="0" maxOccurs="1"
247    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketRole.type"/>
248                    <xs:element name="createdDateTime" type="ESMP_DateTime"
249    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
250    schema-cim16#Document.createdDateTime"/>
251                    <xs:element name="EICCode_MarketDocument"
252    type="EICCode_MarketDocument" minOccurs="0" maxOccurs="unbounded"
253    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
254    cim16#MarketDocument.EICCode_MarketDocument"/>
255                </xs:sequence>
256        </xs:complexType>
257        <xs:simpleType name="EICCode_String"
258    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
259            <xs:restriction base="xs:string">
260                <xs:length value="16"/>
261                <xs:pattern value="([A-Z0-9]{2}(([A-Z0-9]|[-]){13})[A-Z0-9])"/>
262            </xs:restriction>
263        </xs:simpleType>
```

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```
264         <xs:simpleType name="Characters70_String"
265    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
266             <xs:restriction base="xs:string">
267                 <xs:maxLength value="70"/>
268             </xs:restriction>
269         </xs:simpleType>
270         <xs:simpleType name="Characters16_String"
271    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
272             <xs:restriction base="xs:string">
273                 <xs:maxLength value="16"/>
274                 <xs:pattern value="([A-Z\-\+_0-9]+)"/>
275             </xs:restriction>
276         </xs:simpleType>
277         <xs:simpleType name="ACERCode_String"
278    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
279             <xs:restriction base="xs:string">
280                 <xs:length value="12"/>
281                 <xs:pattern value="([A-Za-z0-9_]+\.[A-Z][A-Z])"/>
282             </xs:restriction>
283         </xs:simpleType>
284         <xs:simpleType name="VATCode_String"
285    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
286             <xs:restriction base="xs:string">
287                 <xs:maxLength value="25"/>
288                 <xs:pattern value="([A-Z0-9]+)"/>
289             </xs:restriction>
290         </xs:simpleType>
291         <xs:simpleType name="Characters700_String"
292    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
293             <xs:restriction base="xs:string">
294                 <xs:maxLength value="700"/>
295             </xs:restriction>
296         </xs:simpleType>
297         <xs:simpleType name="Status_String"
298    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
299             <xs:restriction base="ecl:StatusTypeList"/>
300         </xs:simpleType>
301         <xs:complexType name="Action_Status"
302    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Status">
303             <xs:sequence>
304                 <xs:element name="value" type="Status_String" minOccurs="1"
305    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
306    cim16#Status.value"/>
307             </xs:sequence>
308         </xs:complexType>
309         <xs:complexType name="StreetDetail"
310    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#StreetDetail">
311             <xs:sequence>
312                 <xs:element name="addressGeneral" type="Characters70_String"
313    minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
314    schema-cim16#StreetDetail.addressGeneral"/>
315                 <xs:element name="addressGeneral2" type="Characters70_String"
316    minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
317    schema-cim16#StreetDetail.addressGeneral2"/>
```

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```
318                    <xs:element name="addressGeneral3" type="Characters70_String"
319    minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
320    schema-cim16#StreetDetail.addressGeneral3"/>
321                    <xs:element name="floorIdentification" type="xs:string"
322    minOccurs="1" maxOccurs="1"/>
323                </xs:sequence>
324        </xs:complexType>
325        <xs:simpleType name="Characters10_String"
326    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
327                <xs:restriction base="xs:string">
328                    <xs:maxLength value="10"/>
329                </xs:restriction>
330        </xs:simpleType>
331        <xs:simpleType name="Characters35_String"
332    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
333                <xs:restriction base="xs:string">
334                    <xs:maxLength value="35"/>
335                </xs:restriction>
336        </xs:simpleType>
337        <xs:simpleType name="Characters2_String"
338    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
339                <xs:restriction base="xs:string">
340                    <xs:length value="2"/>
341                    <xs:pattern value="[A-Z]*"/>
342                </xs:restriction>
343        </xs:simpleType>
344        <xs:complexType name="TownDetail"
345    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#TownDetail">
346                <xs:sequence>
347                    <xs:element name="name" type="Characters35_String"
348    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
349    schema-cim16#TownDetail.name"/>
350                    <xs:element name="country" type="Characters2_String"
351    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
352    schema-cim16#TownDetail.country"/>
353                </xs:sequence>
354        </xs:complexType>
355        <xs:complexType name="StreetAddress"
356    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#StreetAddress">
357                <xs:sequence>
358                    <xs:element name="streetDetail" type="StreetDetail"
359    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
360    schema-cim16#StreetAddress.streetDetail"/>
361                    <xs:element name="postalCode" type="Characters10_String"
362    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
363    schema-cim16#StreetAddress.postalCode"/>
364                    <xs:element name="townDetail" type="TownDetail" minOccurs="1"
365    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
366    cim16#StreetAddress.townDetail"/>
367                    <xs:element name="language" type="xs:string" minOccurs="0"
368    maxOccurs="1"/>
369                </xs:sequence>
370        </xs:complexType>
371        <xs:complexType name="ElectronicAddress"
372    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
373    cim16#ElectronicAddress">
```

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374                    <xs:sequence>
375                            <xs:element name="email1" type="Characters70_String"
376    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
377    schema-cim16#ElectronicAddress.email1"/>
378                    </xs:sequence>
379            </xs:complexType>
380            <xs:simpleType name="Characters15_String"
381    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#String">
382                    <xs:restriction base="xs:string">
383                            <xs:maxLength value="15"/>
384                    </xs:restriction>
385            </xs:simpleType>
386            <xs:complexType name="TelephoneNumber"
387    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#TelephoneNumber">
388                    <xs:sequence>
389                            <xs:element name="ituPhone" type="Characters15_String"
390    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
391    schema-cim16#TelephoneNumber.ituPhone"/>
392                    </xs:sequence>
393            </xs:complexType>
394            <xs:complexType name="EICCode_MarketDocument"
395    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketDocument">
396                    <xs:sequence>
397                            <xs:element name="mRID" type="EICCode_String" minOccurs="0"
398    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
399    cim16#IdentifiedObject.mRID"/>
400                            <xs:element name="status" type="Action_Status" minOccurs="0"
401    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
402    cim16#Document.status"/>
403                            <xs:element name="docStatus" type="Action_Status" minOccurs="0"
404    maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
405    cim16#Document.docStatus"/>
406                            <xs:element name="attributeInstanceComponent.attribute"
407    type="xs:string" minOccurs="0" maxOccurs="1"
408    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
409    cim16#AttributeInstanceComponent.attribute"/>
410                            <xs:element name="long_Names.name" type="Characters70_String"
411    minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
412    schema-cim16#Name.name"/>
413                            <xs:element name="display_Names.name"
414    type="Characters16_String" minOccurs="1" maxOccurs="1"
415    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Name.name"/>
416                            <xs:element name="lastRequest_DateAndOrTime.date"
417    type="xs:date" minOccurs="1" maxOccurs="1"
418    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
419    cim16#DateAndOrTime.date"/>
420                            <xs:element name="deactivationRequested_DateAndOrTime.date"
421    type="xs:date" minOccurs="0" maxOccurs="1"
422    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
423    cim16#DateAndOrTime.date"/>
424                            <xs:element name="eICContact_MarketParticipant.name"
425    type="Characters70_String" minOccurs="0" maxOccurs="1"
426    sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
427    cim16#IdentifiedObject.name"/>
428                            <xs:element name="eICContact_MarketParticipant.phone1"
429    type="TelephoneNumber" minOccurs="0" maxOccurs="1"
```

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430  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
431  cim16#Organisation.phone1"/>
432                      <xs:element
433  name="eICContact_MarketParticipant.electronicAddress" type="ElectronicAddress"
434  minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
435  schema-cim16#Organisation.electronicAddress"/>
436                      <xs:element name="eICCode_MarketParticipant.streetAddress"
437  type="StreetAddress" minOccurs="0" maxOccurs="1"
438  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
439  cim16#Organisation.streetAddress"/>
440                      <xs:element
441  name="eICCode_MarketParticipant.aCERCode_Names.name" type="ACERCode_String"
442  minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
443  schema-cim16#Name.name"/>
444                      <xs:element name="eICCode_MarketParticipant.vATCode_Names.name"
445  type="VATCode_String" minOccurs="0" maxOccurs="1"
446  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Name.name"/>
447                      <xs:element name="eICParent_MarketDocument.mRID"
448  type="EICCode_String" minOccurs="0" maxOccurs="1"
449  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
450  cim16#IdentifiedObject.mRID"/>
451                      <xs:element name="eICResponsible_MarketParticipant.mRID"
452  type="EICCode_String" minOccurs="0" maxOccurs="1"
453  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
454  cim16#IdentifiedObject.mRID"/>
455                      <xs:element name="description" type="Characters700_String"
456  minOccurs="0" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
457  schema-cim16#IdentifiedObject.description"/>
458                      <xs:element name="Function_Names" type="Function_Name"
459  minOccurs="0" maxOccurs="unbounded"
460  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-
461  cim16#MarketDocument.Function_Names"/>
462              </xs:sequence>
463          </xs:complexType>
464          <xs:complexType name="Function_Name"
465  sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Name">
466              <xs:sequence>
467                      <xs:element name="name" type="Characters70_String"
468  minOccurs="1" maxOccurs="1" sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-
469  schema-cim16#Name.name"/>
470              </xs:sequence>
471          </xs:complexType>
472  </xs:schema>
473
```