European Network of Transmission System Operators for Electricity

OTHER TRANSPARENCY MARKET INFORMATION DOCUMENT
UML MODEL AND SCHEMA

2022-05-10
APPROVED DOCUMENT
VERSION 1.0
Table of Contents

1 Objective .......................................................................................................................... 5
2 Other Transparency Market Information model ............................................................... 6
  2.1 OtherTransparencyMarketInformation contextual model ............................................. 6
    2.1.1 Overview of the model ......................................................................................... 6
    2.1.2 IsBasedOn relationships from the European style market profile ......................... 6
  2.2 OtherTransparencyMarketInformation assembly model ............................................. 7
    2.2.1 Overview of the model ......................................................................................... 7
    2.2.2 IsBasedOn relationships from the European style market profile ......................... 7
    2.2.3 Detailed OtherTransparencyMarketInformation assembly model ....................... 7
      2.2.3.1 OtherTransparencyMarketInformation_MarketDocument root class ......................... 7
    2.2.4 Datatypes .............................................................................................................. 9
    2.2.5 OtherTransparencyMarketInformation_MarketDocument XML schema .......... 10
    2.2.6 Other Transparency Market Information XML schema ...................................... 11

List of figures
1 Figure 1 - OtherTransparencyMarketInformation contextual model .............................. 6
2 Figure 2 - OtherTransparencyMarketInformation assembly model ............................... 7
3 Figure 3 - OtherTransparencyMarketInformation_MarketDocument schema structure ...... 10

List of tables
1 Table 1 - IsBasedOn dependency ...................................................................................... 6
2 Table 2 - IsBasedOn dependency ...................................................................................... 7
3 Table 3 - Attributes of OtherTransparencyMarketInformation assembly model:: OtherTransparencyMarketInformation_MarketDocument .................................................. 7
Copyright notice:

This document and its whole translations may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this paragraph are included on all such copies and derivative works. However, this document itself may not be modified in any way, except for literal and whole translation into languages other than English and under all circumstances, the copyright notice or references to ENTSO-E may not be removed.

This document and the information contained herein is provided on an "as is" basis.

ENTSO-E DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Maintenance notice:

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

<table>
<thead>
<tr>
<th>Version</th>
<th>Release</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>2022-05-10</td>
<td>First draft of the document. Approved by MC.</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 Other Transparency Market Information document.

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

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 Other Transparency Market Information model

2.1 OtherTransparencyMarketInformation contextual model

2.1.1 Overview of the model

Figure 1 shows the model.

Figure 1 - OtherTransparencyMarketInformation contextual model

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>
<thead>
<tr>
<th>Name</th>
<th>Complete IsBasedOn Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>DateAndOrTime</td>
<td>TC57CIM::IEC62325::MarketManagement::DateAndOrTime</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>OtherTransparencyMarketInformation_MarketDocument</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketDocument</td>
</tr>
<tr>
<td>Reason</td>
<td>TC57CIM::IEC62325::MarketManagement::Reason</td>
</tr>
</tbody>
</table>
### 2.2 OtherTransparencyMarketInformation 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.

#### 2.2.3 Detailed OtherTransparencyMarketInformation assembly model

##### 2.2.3.1 OtherTransparencyMarketInformation_MarketDocument root class

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

Table 3 shows all attributes of OtherTransparencyMarketInformation_MarketDocument.

#### Table 3 - Attributes of OtherTransparencyMarketInformation_MarketDocument model::OtherTransparencyMarketInformation_MarketDocument

<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>mRID</td>
<td>The unique identification of the document being exchanged within a business process flow.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Complete IsBasedOn Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>OtherTransparencyMarketInformation_MarketDocument</td>
<td>TC57CIM::IEC62325::MarketManagement::MarketDocument</td>
</tr>
<tr>
<td>Order</td>
<td>mult.</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>1</td>
<td>[1..1]</td>
</tr>
<tr>
<td>3</td>
<td>[1..1]</td>
</tr>
<tr>
<td>4</td>
<td>[1..1]</td>
</tr>
<tr>
<td>5</td>
<td>[1..1]</td>
</tr>
<tr>
<td>6</td>
<td>[1..1]</td>
</tr>
<tr>
<td>7</td>
<td>[1..1]</td>
</tr>
<tr>
<td>8</td>
<td>[1..1]</td>
</tr>
<tr>
<td>9</td>
<td>[1..1]</td>
</tr>
<tr>
<td>10</td>
<td>[1..1]</td>
</tr>
<tr>
<td>11</td>
<td>[0..1]</td>
</tr>
<tr>
<td>12</td>
<td>[1..1]</td>
</tr>
<tr>
<td>13</td>
<td>[0..1]</td>
</tr>
</tbody>
</table>
2.2.4 Datatypes

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

- Action_Status compound
- ESMP_DateTime datatype
- ESMPVersion_String datatype
- ID_String datatype
- MarketRoleKind_String datatype, codelist RoleTypeList
- MessageKind_String datatype, codelist MessageTypeList
- PartyID_String datatype, codelist CodingSchemeTypeList
- ReasonCode_String datatype, codelist ReasonCodeTypeList
- ReasonText_String datatype
- Status_String datatype, codelist StatusTypeList
2.2.5 OtherTransparencyMarketInformation_MarketDocument XML schema

Figure 3 - OtherTransparencyMarketInformation_MarketDocument schema structure
2.2.6 Other Transparency Market Information XML schema

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

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:ecl="http://iec.ch/TC57/2013/CIM"
  xmlns:cim="http://www.iec.ch/cimprofile"
  xmlns:sawsdl="http://www.w3.org/ns/sawsdl"
  targetNamespace="urn:iec62325.351:tc57wg16:451">
  <xs:import
    namespace="urn:entsoe.eu:wgedi:codelists" schemaLocation="urn-entsoe-eu-wgedi-codelists.xsd"/>
  <xs:element name="OtherTransparencyMarketInformation_MarketDocument" type="OtherTransparencyMarketInformation_MarketDocument"/>
  <xs:complexType name="ID_String">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:maxLength value="60"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:complexType>
  <xs:complexType name="ESMPVersion_String">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:pattern value="[1-9][0-9]{0,2}"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:complexType>
  <xs:complexType name="MessageKind_String">
    <xs:simpleType>
      <xs:restriction base="ecl:MessageTypeList"/>
    </xs:simpleType>
  </xs:complexType>
  <xs:complexType name="PartyID_String">
    <xs:simpleType>
      <xs:restriction base="ecl:CharacterList"/>
    </xs:simpleType>
  </xs:complexType>
  <xs:complexType name="PartyID_String-base">
    <xs:simpleContent>
      <xs:extension base="PartyID_String-base" type="ecl:CodingSchemeTypeList" use="required"/>
    </xs:extension>
  </xs:complexType>
  <xs:complexType name="MarketRoleKind_String">
    <xs:simpleType>
      <xs:restriction base="ecl:RoleTypeList"/>
    </xs:simpleType>
  </xs:complexType>
  <xs:complexType name="ESMP_DateTime">
    <xs:simpleType>
      <xs:restriction base="xs:dateTime">
        <xs:pattern value="([\d]{4})-([\d]{2})-([\d]{2})T([\d]{2})\:[\d]{2}Z"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:complexType>
</xs:schema>
```
ENTSO-E Other Transparency Market Information document – UML model and schema

VERSION 1.0
sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#IdentifiedObject.mRID"/>
228  <xs:element name="receiver_MarketParticipant.marketRole.type" type="MarketRoleKind_String" minOccurs="1" maxOccurs="1"/>
229  <sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#MarketRole.type"/>
230  <xs:element name="createdDateTime" type="ESMP_DateTime" minOccurs="1" maxOccurs="1"/>
231  <sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#Document.createdDateTime"/>
232  <xs:element name="docStatus" type="Action_Status" minOccurs="1" maxOccurs="1"/>
234  <xs:element name="publication_DateAndOrTime.dateTime" type="xs:dateTime" minOccurs="1" maxOccurs="1"/>
235  <sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#DateAndOrTime.dateTime"/>
236  <xs:element name="start_DateAndOrTime.dateTime" type="xs:dateTime" minOccurs="1" maxOccurs="1"/>
237  <sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#DateAndOrTime.dateTime"/>
238  <xs:element name="end_DateAndOrTime.dateTime" type="xs:dateTime" minOccurs="0" maxOccurs="1"/>
239  <sawsdl:modelReference="http://iec.ch/TC57/2013/CIM-schema-cim16#DateAndOrTime.dateTime"/>
240  <xs:element name="reason.code" type="ReasonCode_String" minOccurs="1" maxOccurs="1"/>
242  <xs:element name="reason.text" type="ReasonText_String" minOccurs="0" maxOccurs="1"/>
244  </xs:sequence>
245  </xs:complexType>
246  </xs:schema>