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# ENTSO-E CORRIGENDUM TO THE EMFIP IMPLEMENTATION GUIDES

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2014-11-19  
VERSION 5 RELEASE 0

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## Revision History

Version	Release	Date	Comments
1	0	2014-03-04	Corrigendum to correct the use of the attribute psrType in the Outage and Transmission implementation guides.
2	0	2014-03-13	Alignment of the XSD structure of Transmission and Outage with their assembly models. Correction of business types in the Configuration document.
3	0	2014-04-29	Modifications to: <ul style="list-style-type: none"> <li>Publication market document <ul style="list-style-type: none"> <li>section 4.1.1</li> <li>dependency table for article 12</li> <li>resolution section 4.3.1</li> </ul> </li> <li>Generation and load document, load dependency table 4.3.5.1</li> <li>Outage document, reason code use clarification in section 4.9</li> </ul> <p>Approved by Market Committee on 2014-05-15</p>
4	0	2014-06-06	Clarifications on: <ul style="list-style-type: none"> <li>XML schema to be used (IEC standards)</li> <li>Publication market document <ul style="list-style-type: none"> <li>dependency table for article 12</li> <li>Attribute price_Measure_Unit.name section 5.5.11</li> </ul> </li> </ul> <p>Modification of the Problem Statement Document, the attribute expected_MarketDocument.process.processType is optional and not mandatory.</p>
5	0	2014-11-19	Clarifications on: <ul style="list-style-type: none"> <li>Dependency table for article 12.1 (c) of publication market document</li> <li>XML instances rules.</li> </ul>

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**NOTE CONCERNING WORDING USED IN THIS DOCUMENT**

The force of the following words is modified by the requirement level of the document in which they are used.

- **MUST:** This word, or the terms “REQUIRED” or “SHALL”, means that the definition is an absolute requirement of the specification.
- **MUST NOT:** This phrase, or the phrase “SHALL NOT”, means that the definition is an absolute prohibition of the specification.
- **SHOULD:** This word, or the adjective “RECOMMENDED”, means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.
- **SHOULD NOT:** This phrase, or the phrase “NOT RECOMMENDED”, means that there may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behaviour described with this label.
- **MAY:** This word, or the adjective “OPTIONAL”, means that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor may omit the same item. An implementation which does not include a particular option **MUST** be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality. In the same vein an implementation which does include a particular option **MUST** be prepared to interoperate with another implementation which does not include the option (except, of course, for the feature the option provides.)
- **DEPRECATED:** this word means that a previously permitted entity should no longer be used in new implementations as in a future release the object in question may be suppressed.

## 1 OBJECTIVE

The objective of this corrigendum is to correct anomalies that have been identified during the course of the implementation of the EMFIP process.

This document will be updated to resolve error detection issues and to satisfy maintenance process until the end of the EMFIP site acceptance test.

All software developers shall therefore refer to the EMFIP implementation guides approved by the Market Committee in February 2014 and take into account the changes identified in this corrigendum.

With each update of this corrigendum a news flash will be published on the ENTSO-E web site providing all the information to enable access to the latest version of this document, and in particular the identification of any schemas that have evolved.

When the EMFIP site acceptance test has been successfully carried out, all the EMFIP implementation guides will be updated to comply with the final version of the corrigendum.

## 2 VERSION 1 RELEASE 0 – 1<sup>ST</sup> OF MARCH 2014

Following the approval by the Market Committee of the EMFIP Implementation Guides on the 24<sup>th</sup> of February 2014, an issue has been pointed out in the Outage and Transmission implementation guides.

The issue concerns the use of the attribute psrType that, in the original documents, were identified as mandatory. In fact this is contradictory to the dependency tables in the documents themselves which indicate that the attributes psrType in question were only mandatory for the transmission of information from the platform to a market participant. In the context of the upload of information to the platform the attribute is not required.

The related updated schema are available in the dedicated file named “20140301\_CIM.7zip”.

## 2.1 ENTSO-E OUTAGE TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

### 2.1.1 UPDATE OF THE CONTEXTUAL MODEL OF THE “OUTAGE DOCUMENT”

The relationship between the classes Asset\_RegisteredResource and Asset\_MktPSRType has its multiplicity changed from “1..1” to “0..1” in the Outage document contextual model as shown in Figure 1.

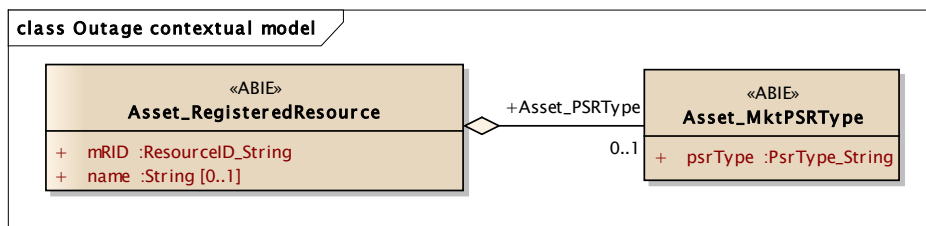


FIGURE 1: MULTIPLICITY CHANGE TO RELATION IN THE OUTAGE DOCUMENT

The resulting contextual model is outlined in Figure 2.

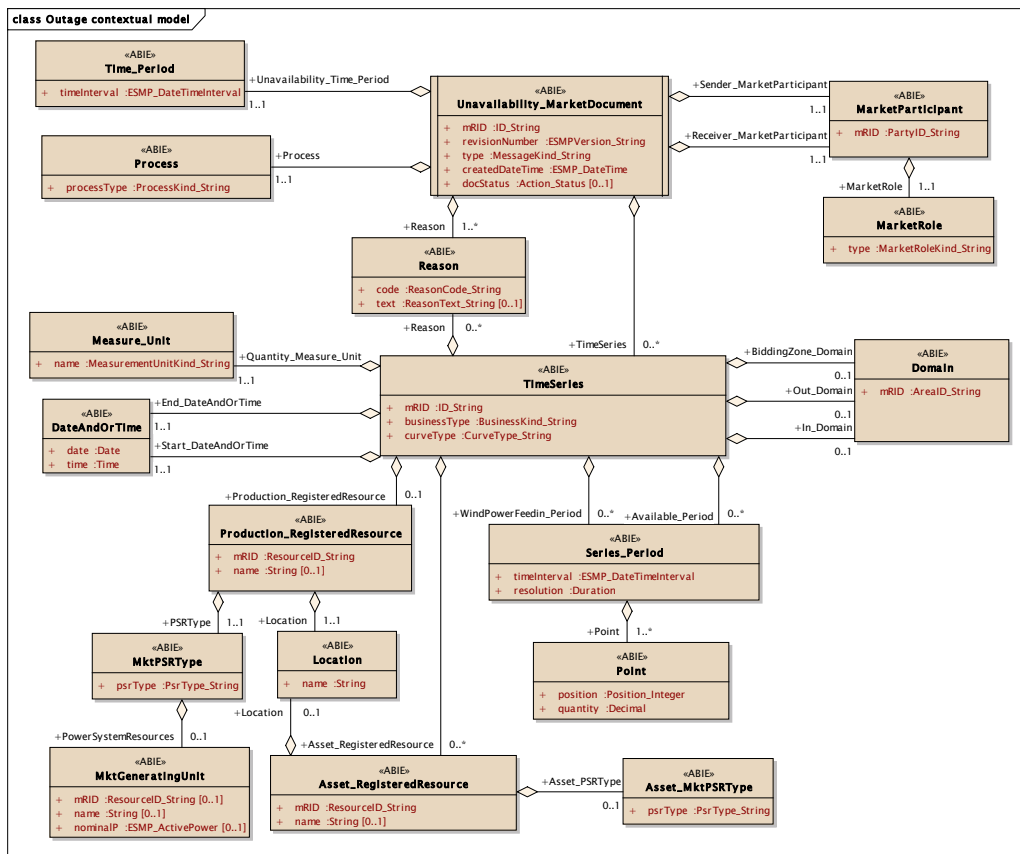


FIGURE 2: OUTAGE DOCUMENT CONTEXTUAL MODEL

## 2.1.2 UPDATE OF THE ASSEMBLY MODEL OF THE “OUTAGE DOCUMENT”

Consequently the resulting assembly has been generated as shown in Figure 3. The change can be seen in the class `Asset_RegisteredResource` where the attribute `asset_PSRTYPE.psrType` has become optional with the addition of `[0..1]`.

The change to the assembly model has generated an equivalent change to the XML Schema (i.e. `asset_PSRTYPE.psrType` has become optional).

No other changes are required to be made to the documentation.

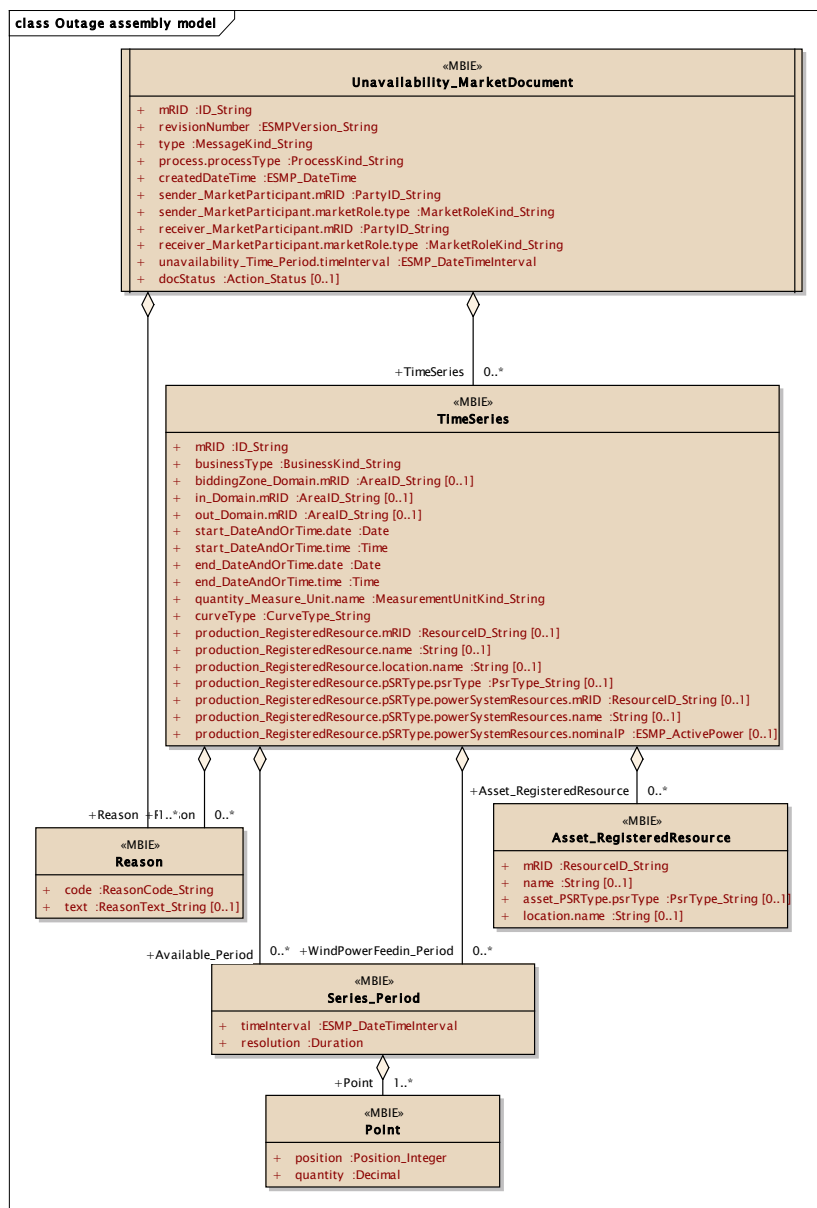


FIGURE 3: OUTAGE DOCUMENT ASSEMBLY MODEL



2.1.3 UNAVAILABILITY\_MARKETDOCUMENT - XML SCHEMA STRUCTURE

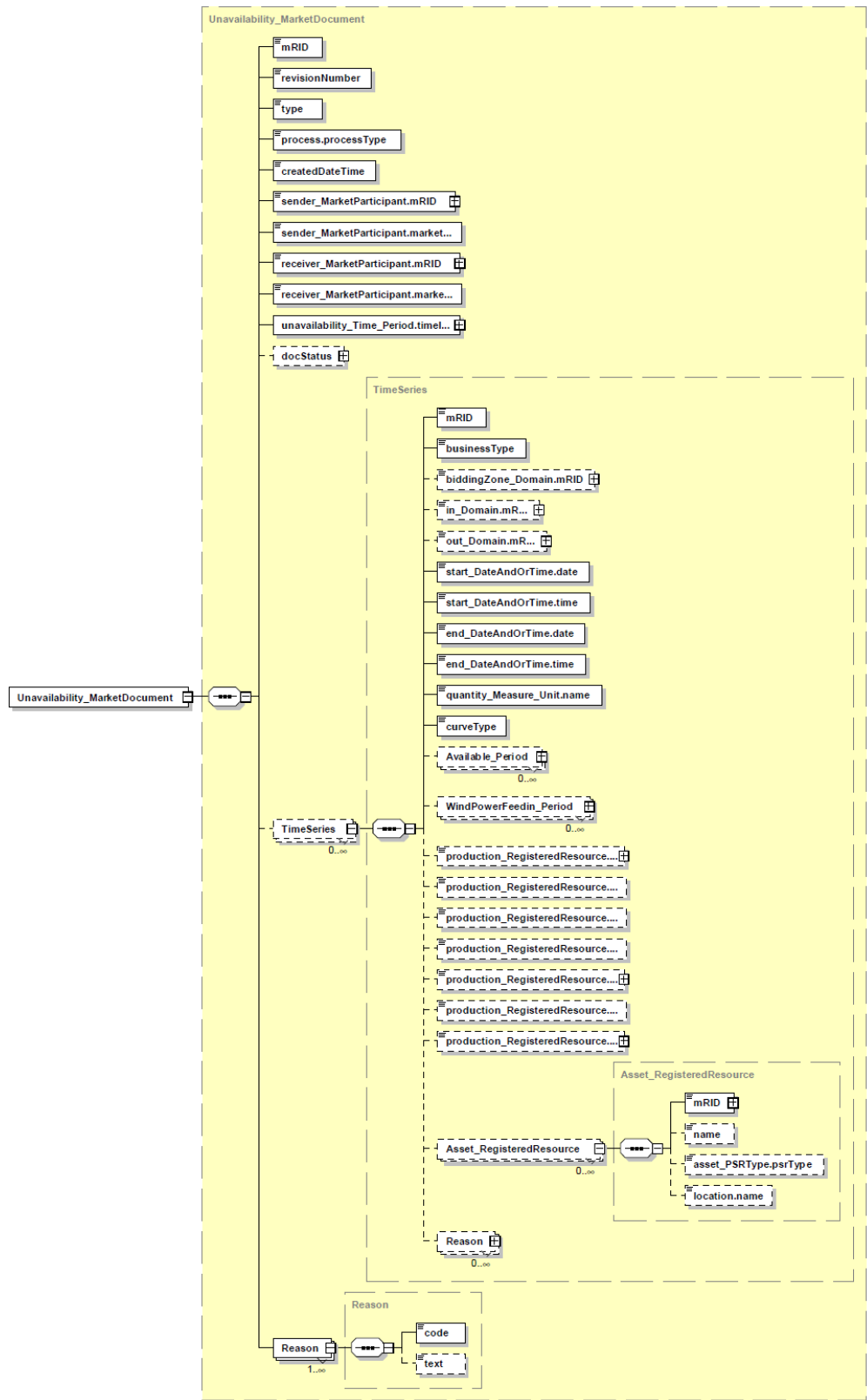


FIGURE 4: XML SCHEMA STRUCTURE

## 2.2 ENTSO-E TRANSMISSION TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

### 2.2.1 UPDATE OF THE CONTEXTUAL MODEL OF THE “TRANSMISSION NETWORK DOCUMENT”

The relationship between the classes Asset\_RegisteredResource and MktPSRType has its multiplicity changed from “1..1” to “0..1” in the Transmission document contextual model as shown in Figure 5:

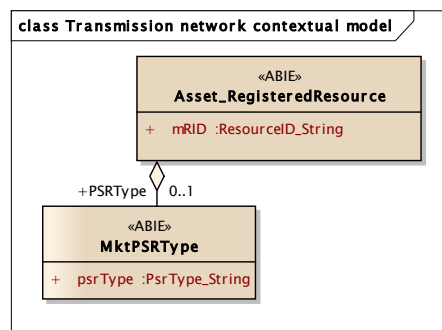


FIGURE 5: MULTIPLICITY CHANGE TO RELATION IN THE TRANSMISSION NETWORK DOCUMENT

The resulting contextual model is outlined in Figure 6.

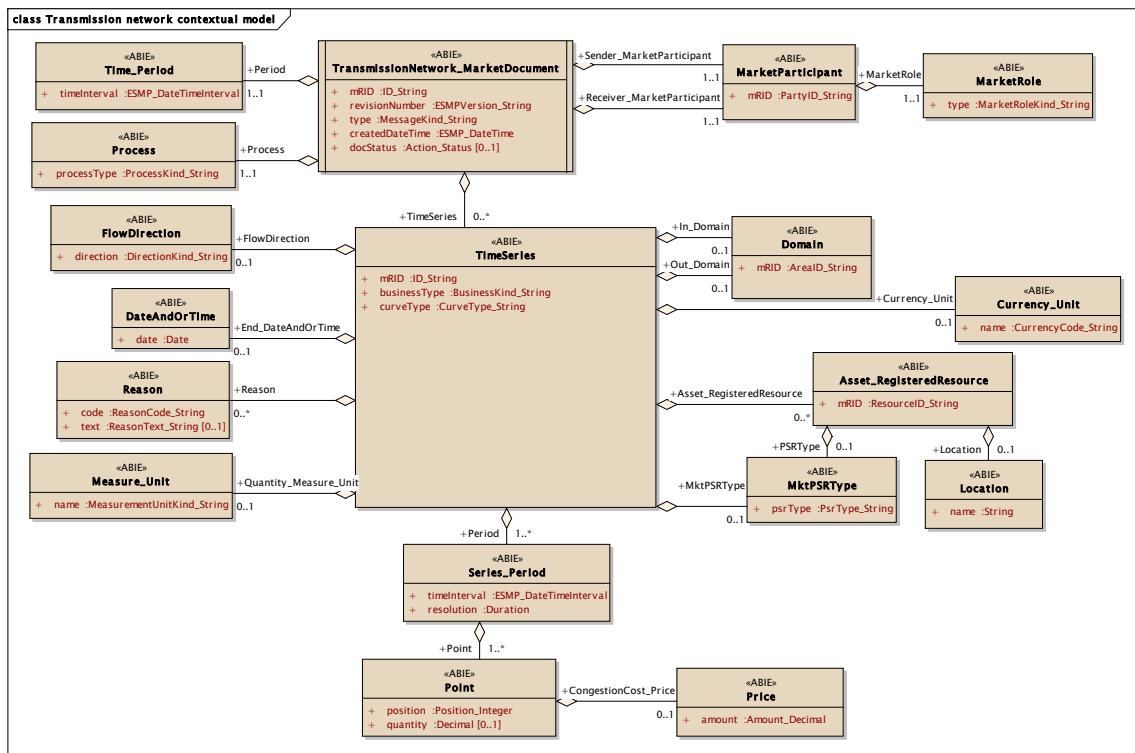


FIGURE 6: TRANSMISSION DOCUMENT CONTEXTUAL MODEL

## 2.2.1 UPDATE OF THE ASSEMBLY MODEL OF “TRANSMISSION NETWORK DOCUMENT”

Consequently the resulting assembly has been generated as shown in Figure 7. The change can be seen in the class Asset\_RegisteredResource where the attribute pSRTYPE.psrType has become optional with the addition of [0..1].

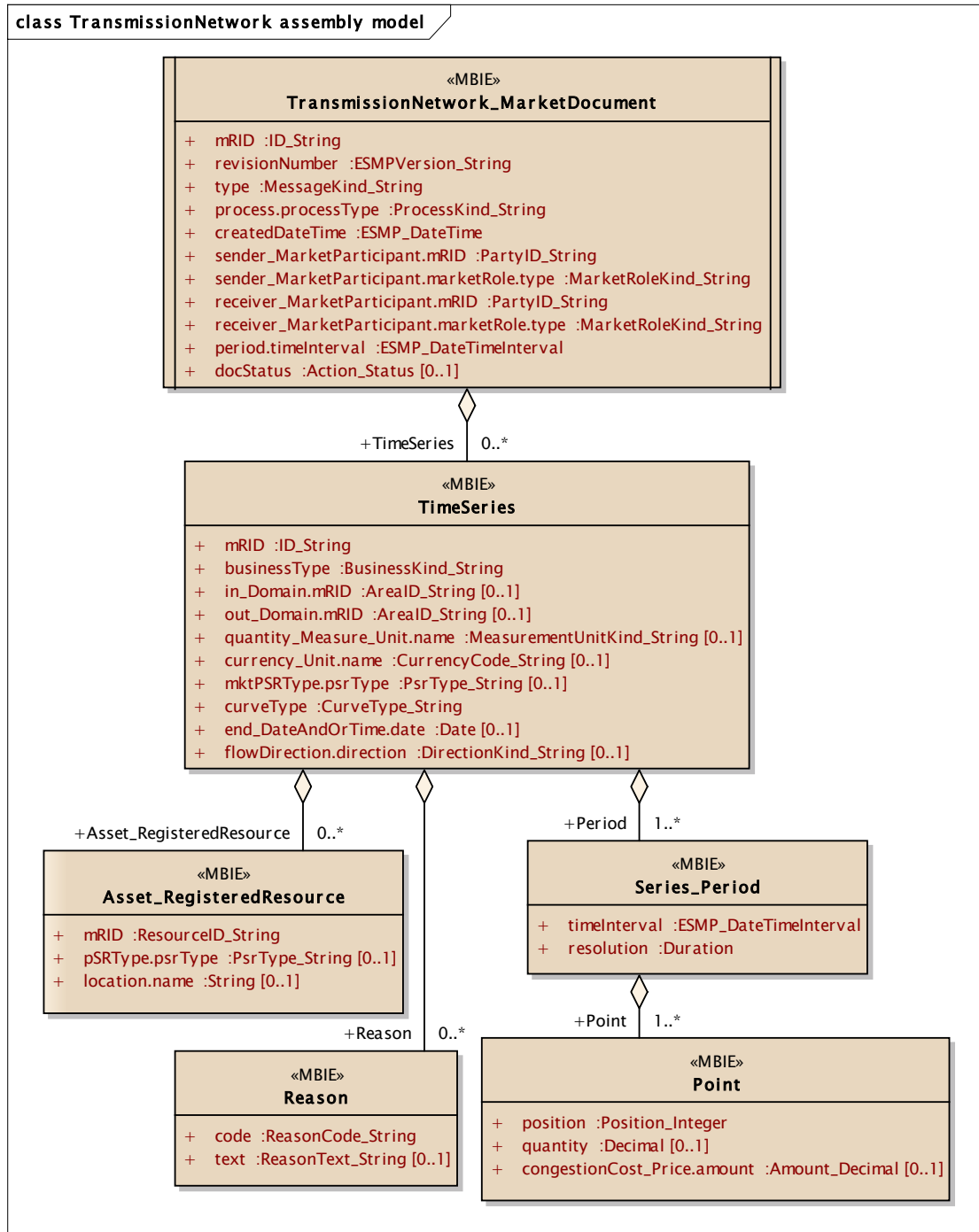


FIGURE 7: TRANSMISSION NETWORK DOCUMENT ASSEMBLY MODEL

The change to the assembly model has generated an equivalent change to the XML Schema (i.e. pSRType.psrType has become optional).

## 2.2.2 UPDATE OF THE TRANSMISSION TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

In the current documentation, definition of pSRType.psrType in section 4.6.2 the “Applicability” is mandatory, it shall be dependent. The section 4.6.2 is thus modified as indicated below:

ACTION	DESCRIPTION
<b>Definition of element</b>	The coded type of a power system resource. --- The classification for the asset.
<b>Description</b>	This represents the coded identification of the type of asset being described. Refer to the ENTSO-E codelist for the list of valid codes.
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	This information is dependent.
<b>Dependence requirements</b>	In the case of upload to the platform this information is not used. In the case of download from the platform this information is mandatory.

### 2.2.3 TRANSMISSIONNETWORK\_MARKETDOCUMENT - XML SCHEMA STRUCTURE

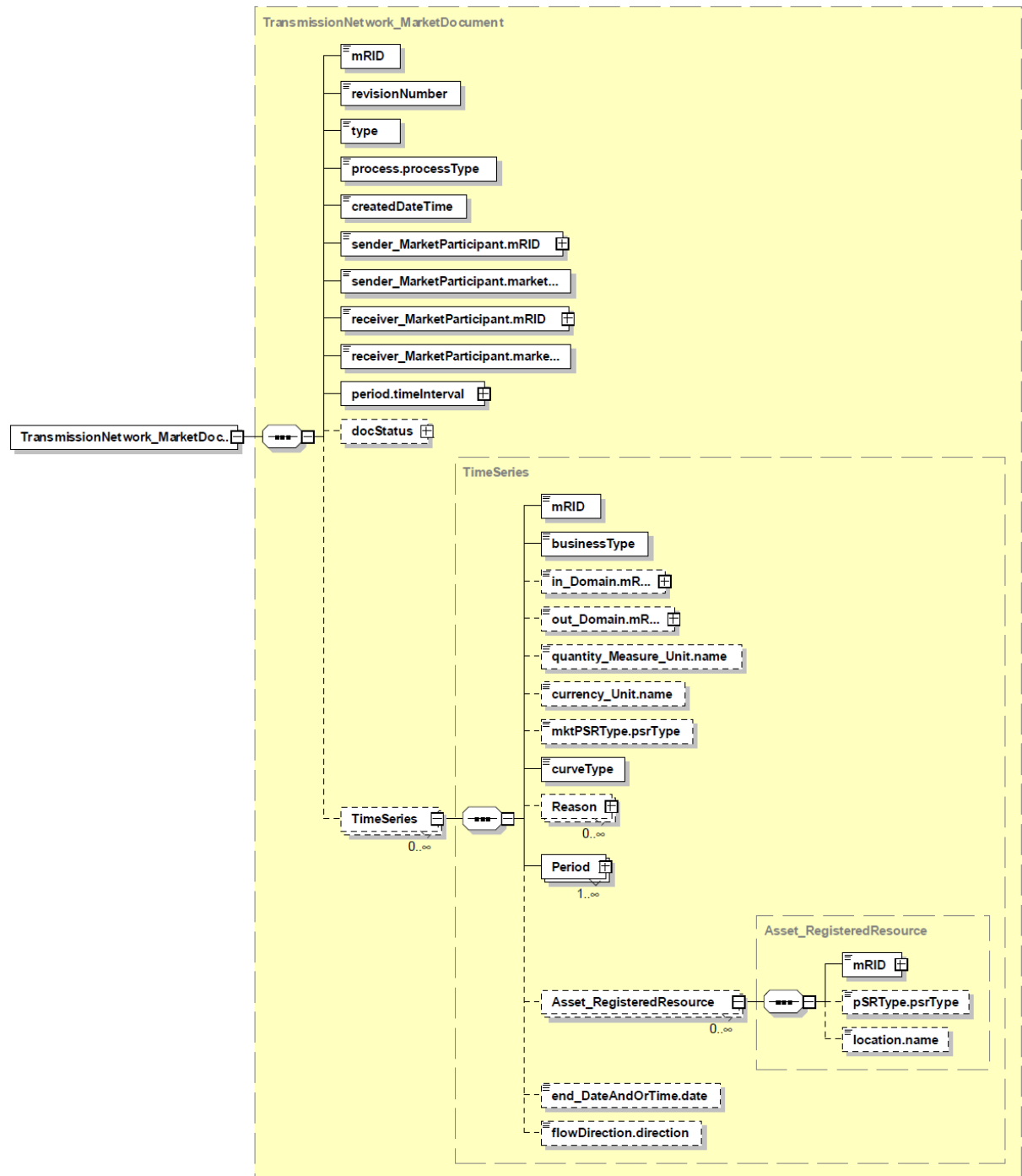


FIGURE 8: TRANSMISSION DOCUMENT XML SCHEMA

## 3 VERSION 2 RELEASE 0 – 13<sup>TH</sup> OF MARCH 2014

This version of the corrigendum:

- Induces no additional change to the EMFIP Transmission Network and Outage implementation guides, i.e; only the XSD schema are updated.
- Requires a change to the EMFIP Configuration implementation guide.

All the schema and the related updated schema are available in the dedicated file named “20140313\_CIM.zip”.

### 3.1 TRANSMISSION NETWORK AND OUTAGE DOCUMENTS

When reviewing test data for the Transmission Network and Outage documents, an error was identified in the IEC XSD generation which makes the XSD incompatible with the UML assembly model. The error concerns the sequencing of the attributes of the time series class. To demonstrate this, the transmission network assembly model time series is used as an example.

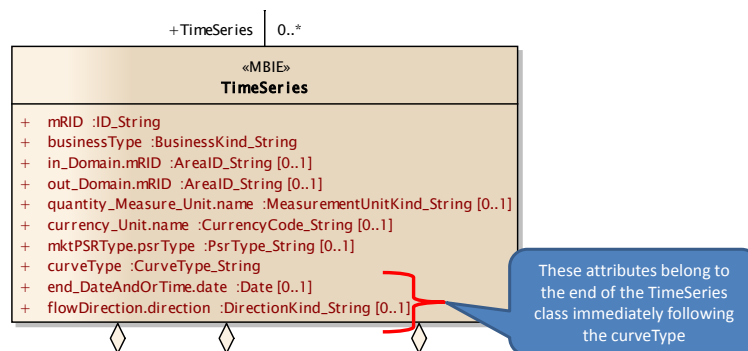


FIGURE 9: ASSEMBLY MODEL STRUCTURE

The assembly model time series as shown in Figure 9 had two attributes added through a maintenance request to the end of the time series (end\_DateAndOrTime.date and flowDirection.direction). During the XSD generation these had inadvertently been left after the three classes that depend on the time series thus producing a different model as indicated in figure.

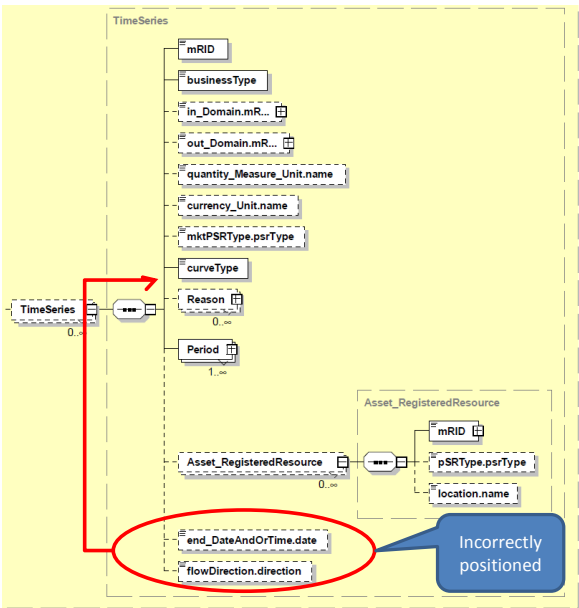


FIGURE 10: CURRENT XSD STRUCTURE

The current XSD as shown in Figure 10 presents the two time series attributes following the dependent classes Reason, Period and Asset\_RegisteredResource which does not correspond to the assembly model design.

The reason that these were incorrectly positioned is due to the attribute ordering function that placed them where they are. Attribute ordering is an important function of the UML assembly model as it ensures that the attributes in each class is consistently positioned thus enabling consistent XSD schema generation. The position of an attribute in an XML Schema is critical during its validity verification phase. It should always be consistent with assembly model.

A similar problem has occurred in the Outage document XSD generation.

## 3.2 ENTSO-E OUTAGE TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

### 3.2.1 UNAVAILABILITY\_MARKETDOCUMENT - XML SCHEMA STRUCTURE

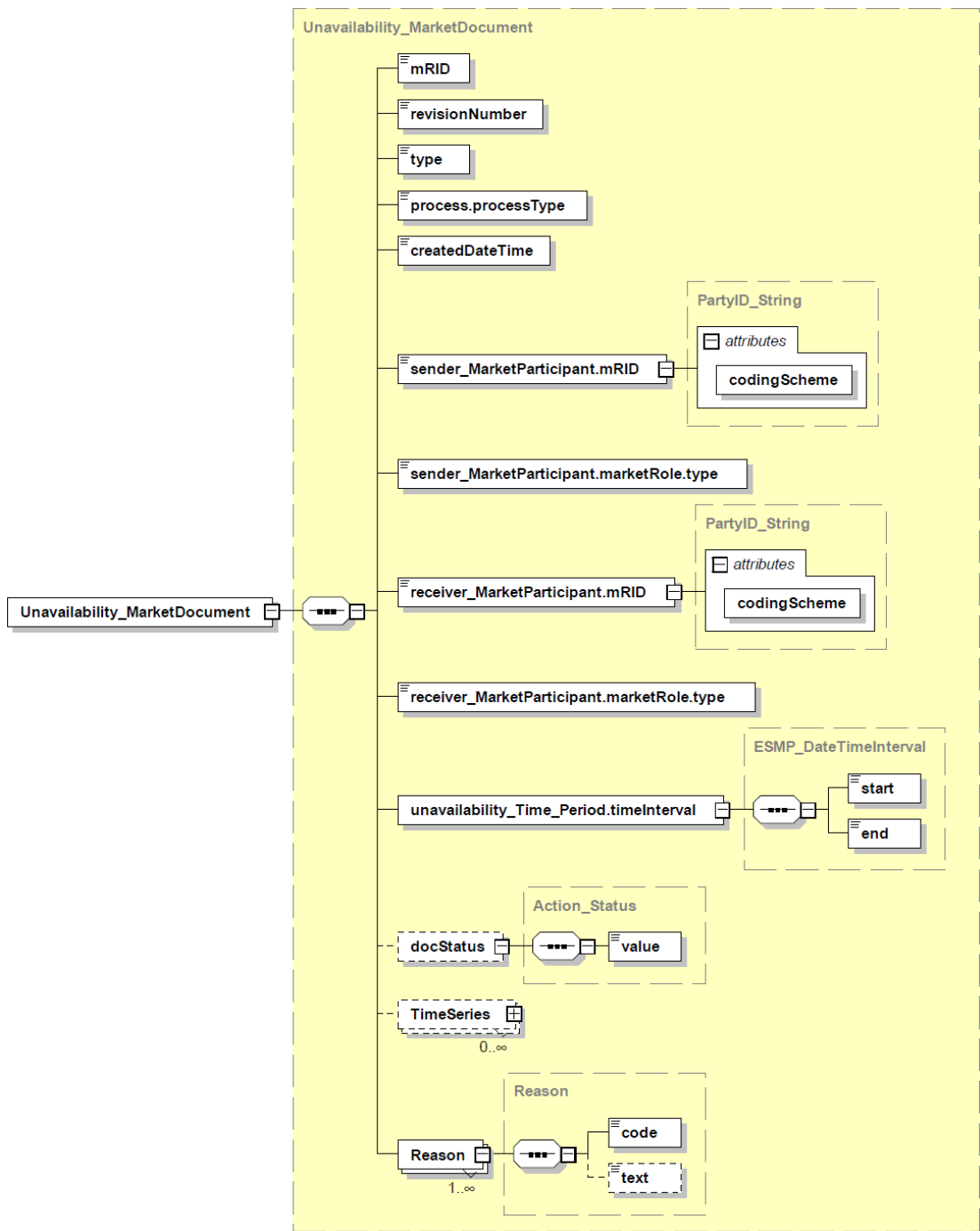


FIGURE 11: OUTAGE XML SCHEMA STRUCTURE GENERAL



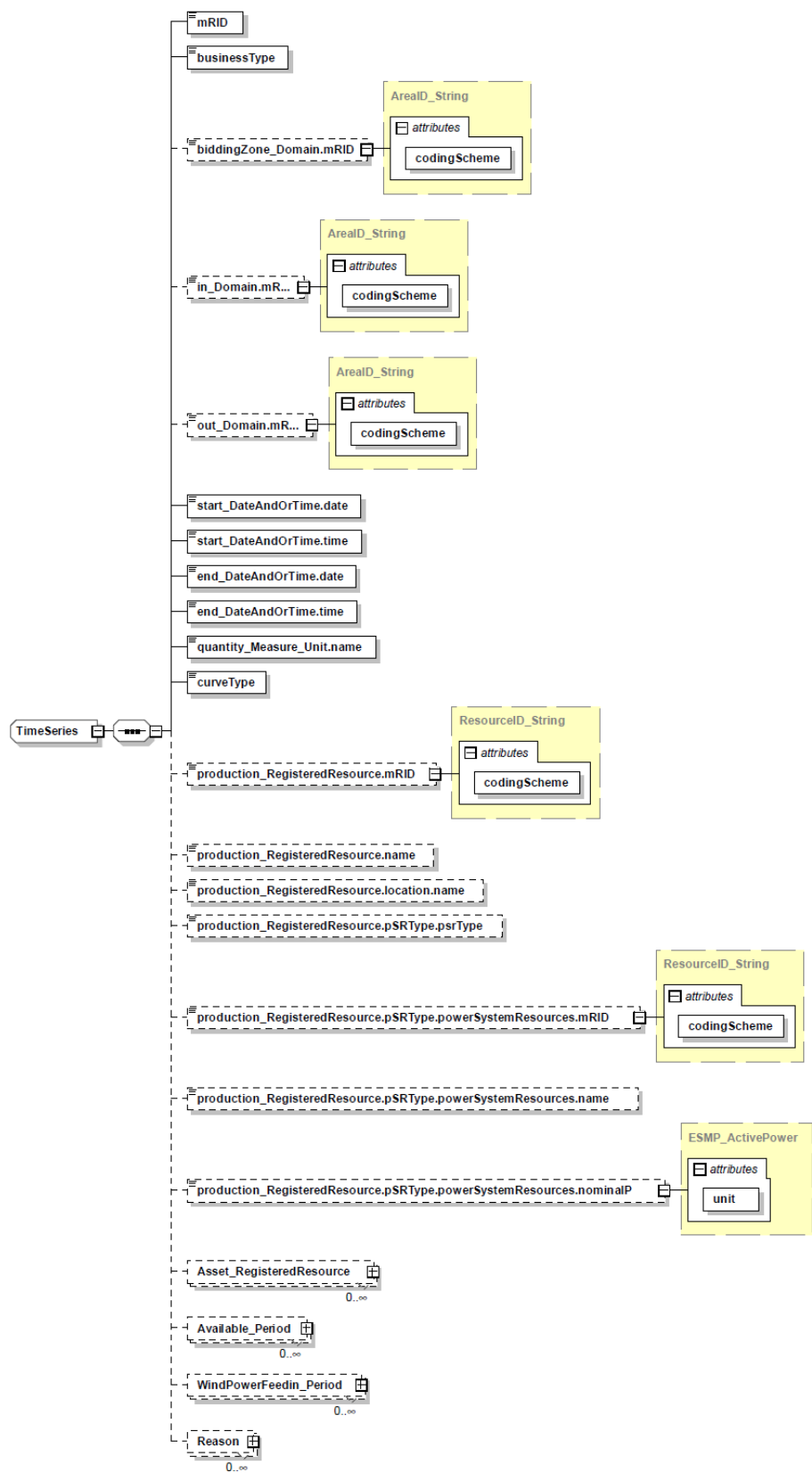


FIGURE 12: OUTAGE XML SCHEMA STRUCTURE – TIME SERIES

### 3.3 ENTSO-E TRANSMISSION TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

#### 3.3.1 TRANSMISSIONNETWORK\_MARKETDOCUMENT - XML SCHEMA STRUCTURE

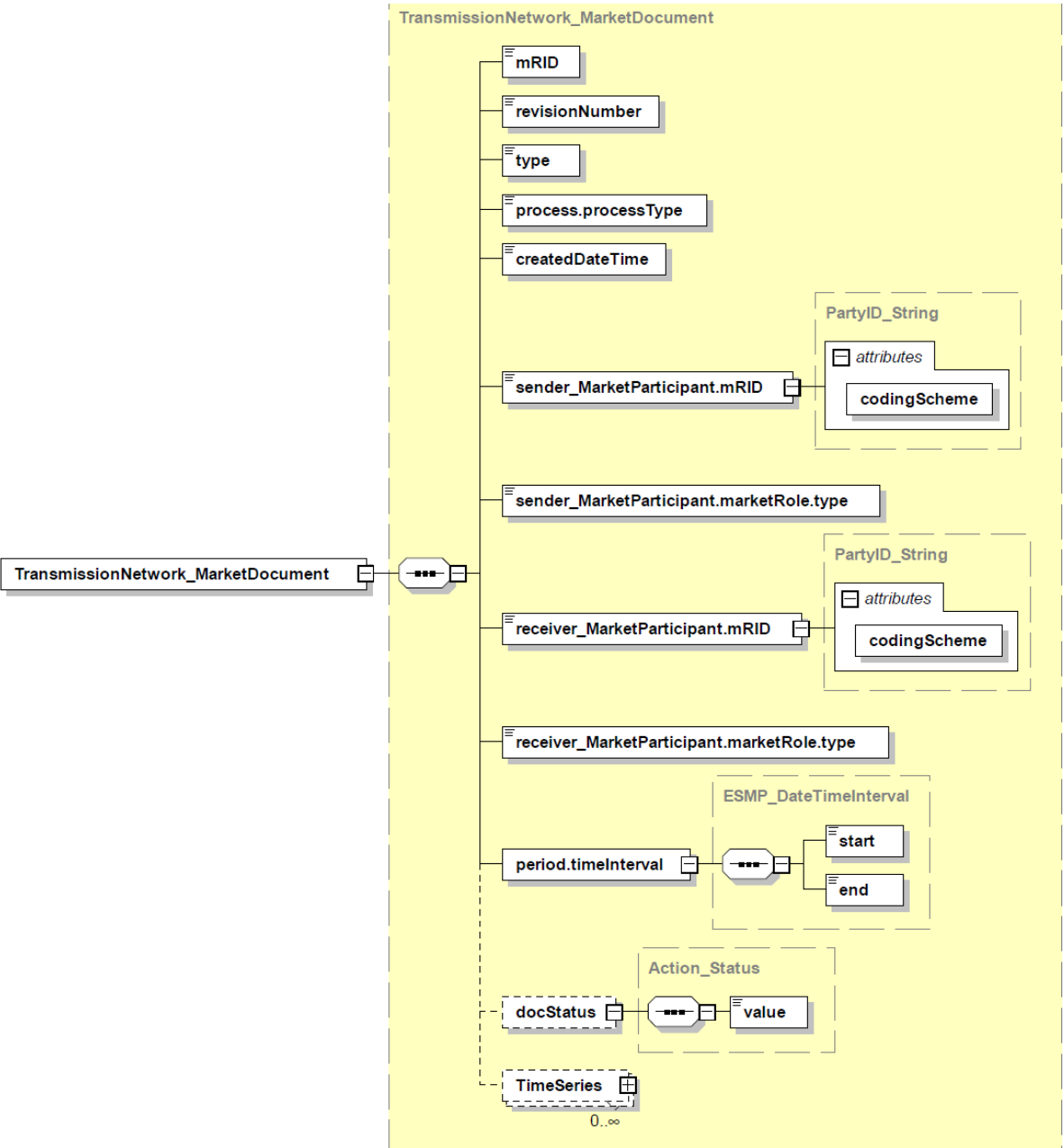


FIGURE 13: TRANSMISSION NETWORK XML SCHEMA STRUCTURE – GENERAL

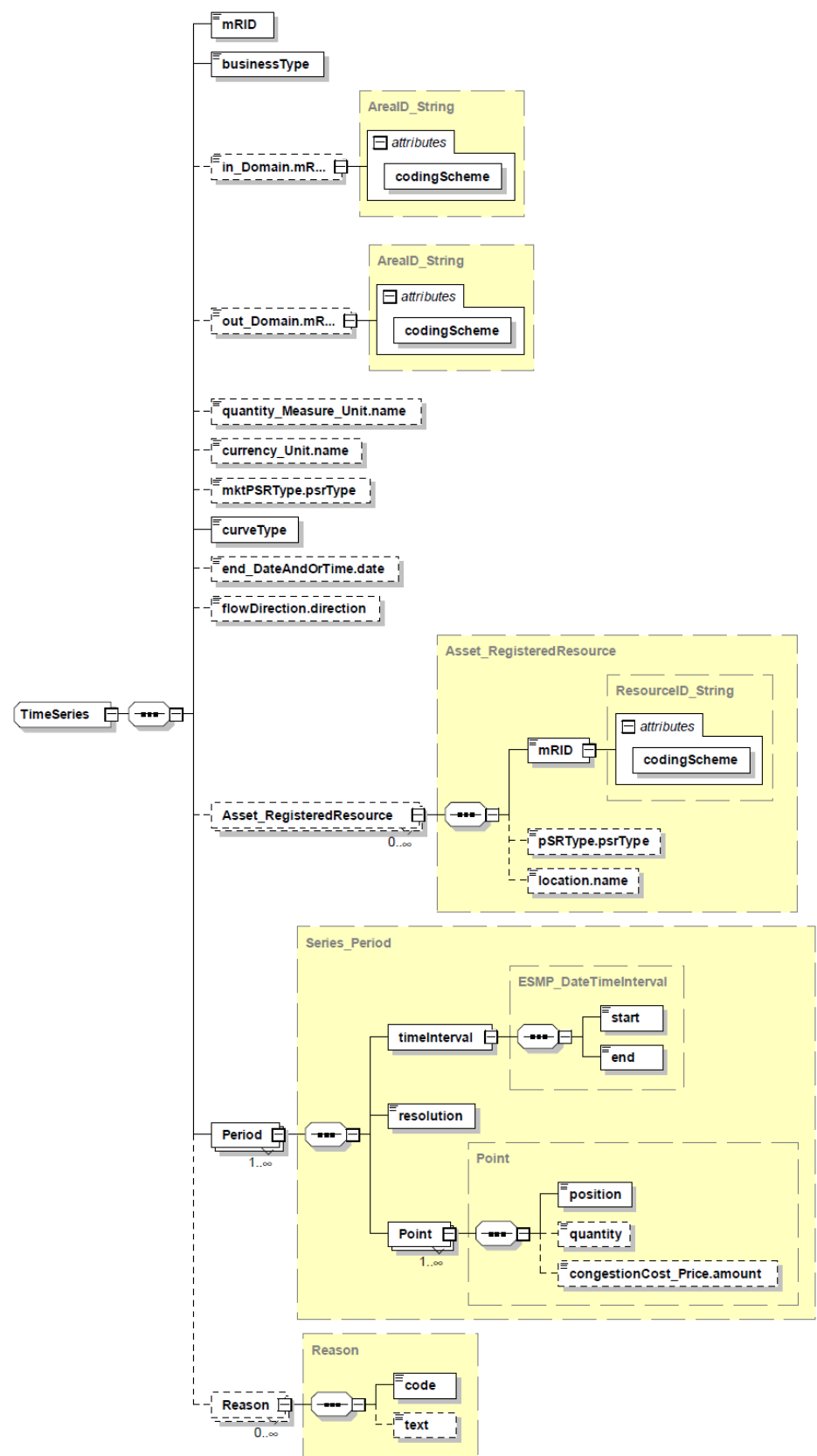


FIGURE 14: TRANSMISSION NETWORK XML SCHEMA STRUCTURE – TIME SERIES

## 3.4 ENTSO-E CONFIGURATION TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

### 3.4.1 BUSINESS TYPE - SECTION 4.5.2

The Business Type description in section 4.5.2 contains two incorrect codes, one for a Transmission Asset (currently A46) and one for a Consumption Unit (currently A85).

These codes shall be replaced with the following ones:

- B16 = Transmission Asset.
- B17 = Consumption Unit.

The dependency table in section 4.3.2 of the implementation guide is changed accordingly as Figure 15:

Configuration Dependency Table			
Attribute involved	Production	Transmission Assets	Consumption
type	A95 Configuration document	A95 Configuration document	A95 Configuration document
businessType	B11 Production unit	B16 Transmission asset	B17 Consumption unit
bidding_Domain.mRID	Used	Not used	Used
ControlArea_Domain.mRID	Only one occurrence permitted	Multiple occurrences permitted	Only one occurrence permitted
Provider_MarketParticipant.mRID	Only one occurrence permitted	Multiple occurrences permitted	Only one occurrence permitted
production_VoltageLeve.HighVoltageLimit	Used	Not used	Not used
NominalIP.nominallP	Used	Not used	Used
MktGeneratingUnit	Used for generation units	Not used	Not used

FIGURE 15: CONFIGURATION DEPENDENCY TABLE

## 4 VERSION 3 RELEASE 0 – 29<sup>TH</sup> OF APRIL 2014

At the WG-EDI meeting on the 2014-04-28/29, change requests were processed and the related actions are as follows:

- Publication Market document of Transmission transparency process implementation guide:
  - Add, for the contract\_MarketAgreement.Type attribute, “A05” as a possible code for use in the Publication Market document to satisfy an article 12.1(b) requirement.
  - Update of the Publication Market document dependency table as concerns the items related to 12.1(a), 12.1(b), 12.1(c) and 12.1(e).
  - Add the resolution daily (P1D) as well as correct the monthly resolution description in section 5.6.2 of the Publication Market document.
- Generation and load document: Indicate in the generation and load document load dependency table for articles 14(a), 16(a) and 16(b and c) that the inBiddingZone.Domain should be used in the case of positive production and clarification for 16 (a).
- Outage document: provide clarifications in section 4.9 about the use of reason codes.

These changes induce editorial changes in the related implementation guides.

The related schema are available in the dedicated file named “20140429\_CIM.zip” as there is an update of the code list.

### 4.1 ENTSO-E TRANSMISSION TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

#### 4.1.1 CONTRACT\_MARKETAGREEMENT.TYPE ATTRIBUTE OF PUBLICATION MARKET DOCUMENT

The Contract\_MarketAgreement.type description in section 5.5.8 of the Transmission is updated to add a new permitted code, “A05”.

A line is inserted in the list of the permitted codes as follows:

A05 = Total

The resulting text is thus as follows for section 5.5.8:

ACTION	DESCRIPTION
<b>Definition of element</b>	<p>The specification of the kind of the agreement, e.g. long term, daily contract.</p> <p>--- The contract type defines the conditions under which the capacity was allocated and handled, e.g.: daily auction, weekly auction, monthly auction, yearly auction, long term contract, etc.</p> <p>The significance of this type is dependent on the in area and out area specific coded working methods.</p>
<b>Description</b>	<p>The identification of the type of procurement time period for which information is provided.</p> <p><b>Permitted codes are:</b></p> <p>A01 = Daily. A02 = Weekly A03 = Monthly A04 = Yearly A05 = Total A06 = Long term A07 = Intraday</p>
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	This information is dependent.
<b>Dependence requirements</b>	This information is provided in accordance with the dependency table.

#### 4.1.2 DEPENDENCY TABLE OF PUBLICATION MARKET DOCUMENT

In section 5.3.2 of the Transmission Transparency process implementation guide, the following changes have been made in the dependency table referred as “Figure 9: Publication dependency table for Article 12”:

- Auction revenue: the auction revenue may be submitted separately; an additional column titled “12.1(a) Explicit allocation information (revenue only)” has been inserted using the businessType “B07”.
- For the column 12.1(b), the attribute auction.category is changed from “used” to “Not used”.
- For the column 12.1(c), the attribute type is changed from “A19 capacity for resale” to “A26 capacity document” and the attribute businessType is changed from “A41 released AAC” to “A29 AAC”.

- For the column 12.1(e), the attribute quantity\_Measure\_Unit.name should be “MAW” if the business type is “B09”.

The resulting dependency table is provided in Figure 16 of this document.

#### 4.1.3 RESOLUTION ATTRIBUTE OF PUBLICATION MARKET DOCUMENT

In section 5.6.2 of the Transmission Transparency process implementation guide, the following changes have been made in the description:

- The line “P1M if the resolution is yearly” is changed into “P1M if the resolution is monthly”.
- A new resolution is added, “P1D if the resolution is daily”.

The resulting text is thus as follows for section 5.6.2:

ACTION	DESCRIPTION
<b>Definition of element</b>	The definition of the number of units of time that compose an individual step within a period.
<b>Description</b>	This information defines the resolution of a single period.
<b>Size</b>	The Resolution is expressed in compliance with ISO 8601 and shall be equal to: <ul style="list-style-type: none"> <li>P1Y if the resolution is yearly</li> <li>P1M if the resolution is monthly</li> <li>P7D if the resolution is weekly</li> <li>P1D if the resolution is daily</li> <li>PT60M if the resolution is hourly</li> <li>PT30M if the resolution is half hourly</li> <li>PT15M if the resolution is quarter hourly</li> </ul>
<b>Applicability</b>	This information is mandatory.
<b>Dependence requirements</b>	None.

## ENTSO-E CORRIGENDUM TO THE EMFIP IMPLEMENTATION GUIDES

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Attribute involved	Publication Market Document - Article 12								
	12.1(a) Explicit allocation information (capacity)	12.1(a) Explicit allocation information (revenue only)	12.1(b) Total capacity nominated	12.1(c) Total capacity already allocated	12.1(d) Day ahead prices	12.1(e) Implicit auction net positions and congestion income	12.1(f) Scheduled day ahead commercial exchanges	12.1(g) Physical flows	12.1(h) Capacity allocated outside EU
type	A25 allocation results	A25 allocation results	A26 capacity document	A26 capacity document	A44 price document	A25 allocation results	A09 finalised schedules	A11 Aggregated energy data report	A94 non EU allocations
Receiver market participant and role	Used	Used	Used	Used	Used	Used	Used	Used	Used
domain	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
auction.mRID	Used	Used	Not used	Used	Not used	Not used	Not used	Not used	Used
auction.type	A02 Explicit auction	A02 Explicit auction	Not used	A02 Explicit auction	Not used	A01 implicit	Not used	Not used	A02 explicit auction
businessType	A43 Requested capacity (without price) B05 Capacity allocated (including price) B07 auction revenue	B07 auction revenue	B08 total nominated capacity	A29 AAC	A62 spot price	B09 net position B10 congestion income (shall be in a different document)	A06 external trade without explicit capacity	A66 energy flow	A34 Capacity rights
in_Domain.mRID	In bidding zone	In bidding zone	In bidding zone	In bidding zone	In bidding zone (same as out bidding zone)	In bidding zone (depending on direction this shall be the "Regional Market Area" or the "Bidding zone" in the case of net position. In the case of congestion income it shall be the same as the out_Domain)	In bidding zone	In bidding zone	In bidding zone
out_Domain.mRID	Out bidding zone	Out bidding zone	Out bidding zone	Out bidding zone	Out bidding zone (same as in bidding zone)	Out bidding zone (depending on direction this shall be the "Regional Market Area" or the "Bidding zone" in the case of net position. In the case of congestion income it shall be the same as the in_Domain)	Out bidding zone	Out bidding zone	Out bidding zone
contract_MarketAgreementType	Used	Used	Used only for upload transmissions	Used	Not used	Used	Not used	Not used	Used
quantity_MeasureUnit.name	MAW	Not used	MAW	MAW	Not used	MAW if BusinessType = "	MAW	MAW	MAW
currency_Unit.name	Used	Used	Not used	Not used	Used	Used if price	Not used	Not used	Not used
price_MeasureUnit.name	MWH	Not used	Not used	Not used	MWH	MWH if price	Not used	Not used	Not used
auction.category	Used	Not used	Not used	Used only for upload transmissions	Not used	Not used	Not used	Not used	Used
classificationSequence_AttributeInstanceComponent.position	Used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	May be used
participantNumber_AttributeInstanceComponent.position	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
winnerParticipantNumber_AttributeInstanceComponent.position	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
curveType	Used	Used	Used	Used	Used	Used	Used	Used	Used
resolution	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	P1Y; P1M; P7D; P1D; PT60M; PT30M; PT15M
quantity	Used	Not used	Used	Used	Not used	used in case of net position	Used	Used	used
priceAmount	Used	Used	Not used	Not used	Used	used in case of congestion income	Not used	Not used	Not used
						Note in the case of net position the in bidding zone and the out bidding zone shall contain depending on direction the "Regional Market Area" and the "Bidding Zone".			
						Note in the case of congestion income the in and out bidding zones should always be the same.			

FIGURE 16: PUBLICATION DEPENDENCY TABLE FOR ARTICLE 12



## 4.2 ENTSO-E GENERATION AND LOAD TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

### 4.2.1 GENERATION DEPENDENCY TABLE

In section 4.3.5.1 of the Generation and Load Transparency process implementation guide, the following changes have been made in the dependency table:

- For the column 14 (a), the attribute inBiddingZone.Domain is changed from “Used” to “Used (production positive)”.
- For the column 16 (a), the attribute inBiddingZone.Domain is changed from “Used” to “Used (production positive)” and the attribute registeredResource.mRID is changed from “Used” to “Not used” as only generating unit data is to be exchanged.
- For the column 16 (b and c), the attribute inBiddingZone.Domain is changed from “Used” to “Used (production positive)”.

The resulting dependency table is provided in Figure 17 of this document.

Generation dependency table							
Article involved	Generation process						
	Art. 14 (a) installed production capacity aggregated per production type	Art. 14 (b) Production unit existing and planned capacity	Art. 14 (c) day-ahead aggregated generation	Art. 14 (d) day-ahead generation forecast for wind and solar	Art. 16 (a) actual generation per unit	Art. 16 (b and c) aggregated generation per type	16 (d) reservoir/hydro storage plant filling rate
DocumentType (Type)	A68 = Installed Generation per type	A71 = Generation forecast	A71 = Generation forecast	A69= wind and solar forecast	A73 = Actual generation	A75 = Actual generation per type A74 = wind and solar generation	A72 = Reservoir filling information
ProcessType (process.processType)	A33 = Year ahead	A33 = Year ahead	A01 = Day ahead	A01 = Day ahead	A16 = Realised	A16 = Realised	A16 = Realised
BusinessType (businessType)	A37 = Installed generation	A37 = Installed generation	A01 = Production	A93 = wind generation A94 = solar generation	A01 = Production	A01 = Production A93 = wind generation A94 = solar generation	A01 = Production
InBiddingZone_Domain	Used	Used	Used (production positive)	Used	Used (production positive)	Used (production positive)	Used
OutBiddingZone_Domain	Not used	Not used	Used (production negative)	Not used	Used (production negative)	Used (production negative)	Not used
MeasurementUnit (measurement_Unit.name)	MAW = Megawatts						MWH = Megawatt hours
ObjectAggregation (objectAggregation)	A08 = Resource type	A06= Resource object	A01 = Area	A08 = Resource type	A06= Resource object	A08 = Resource type	A01 = Area
ResourceObjectIdentification (registeredResource.mRID)	Not used	Used	Not used	Not used	Not used	Not used	Not used
ResourceObjectType (mktPSRType.psrType)	Used	Used, if nominalIP for production unit provided in download context	Not used	Used	Used	Used	Not used
HighVoltageLimit	Not used	Used only for download transmissions Not used for upload transmissions	Not used	Not used	Not used	Not used	Not used
ResourceObjectName (registeredResource.name)	Not used	Used only for download transmissions Not used for upload transmissions	Not used	Not used	Not used	Not used	Not used
MktGenerationUnit.mRID	Not used	Not used	Not used	Not used	Used	Not used	Not used
MktGenerationUnit.name	Not used	Not used	Not used	Not used	Used only for download transmissions Not used for upload transmissions	Not used	Not used
MktGenerationUnit.nominalIP	Not used	Used only for download transmissions for production unit nominal IP Not used for upload transmissions	Not used	Not used	Not used	Not used	Not used
Resolution (resolution)	P1Y	transmissions	PT60M PT30M PT15M	PT60M PT30M PT15M	PT60M PT30M PT15M	PT60M PT30M PT15M	P7D
SecondaryQuantity	Not used	Not used	Not used	Not used	Not used	Not used	Not used

FIGURE 17: GENERATION DEPENDENCY TABLE

## 4.3 ENTSO-E OUTAGE TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

### 4.3.1 CLARIFICATION ABOUT THE USE OF REASON CODES

The following text is added immediately after the text in section 4.9 “Rules governing the Reason class:

The associated reason codes to be used in respect to the regulatory definitions have to comply with the following table:

Detailed Data Definition	Implementation Guide
Maintenance	B19 (Foreseen Maintenance)
Upgrading	B19 (Foreseen Maintenance) & A95 (Complementary Information) with reason text “Upgrading”
Incident/Forced Outage	B18 (Failure) or B20 (Shutdown) depending on the case.
Failure	B18 (Failure)
Shutdown	B20 (Shutdown)
External factors	A95 (Complementary Information)
Other	A95 (Complementary Information)

## 5 VERSION 4 RELEASE 0 – 6<sup>TH</sup> OF JUNE 2014

At the WG EDI meeting on the 2014-06-03/04, the following change requests were processed:

- In the Problem Statement document, there is a mandatory attribute that shall be optional, i.e. the attribute `expected_MarketDocument.process.processType` shall be provided only if there is a defined process in the expected document and this is not always the case (as an example there is no process identification in the Publication document).
- In the Transmission Transparency Process implementation guide, as concerns the Publication Market Document:
  - the definition of the attribute `price_Measure_Unit.name` is updated from “The unit of measure associated with the quantities in a TimeSeries” to “The unit of measure associated with the prices in a TimeSeries”;
  - the dependency table for article 12

These changes induce editorial changes in the related implementation guides.

The related schema are available in the dedicated file named “20140606\_CIM.zip”.

### 5.1 VERSION OF THE SCHEMA TO BE USED FOR EMFIP PLATFORM

Data exchanges with the EMFIP platform shall be based on the IEC 62325-351 core components.

Thus the XML schema to be used shall be the ones from:

- IEC 62325-451-1 Ed.1.0
- IEC 62325-451-2 Ed.1.0
- IEC 62325-451-3 Ed.1.0
- IEC 62325-451-4 (under approval)
- IEC 62325-451-5 (under approval)
- IEC 62325-451-6 (under approval)

These XML schema are provided in a dedicated file on the ENTSO-E web site.

## 5.2 ENTSO-E PROBLEM STATEMENT DOCUMENT IMPLEMENTATION GUIDE

### 5.2.1 UPDATE OF THE CONTEXTUAL AND ASSEMBLY MODELS

The association between the class Process and MarketDocument is changed from 1..1 to 0..1 as the attribute is now optional. In consequence the new contextual model is provided in Figure 18:

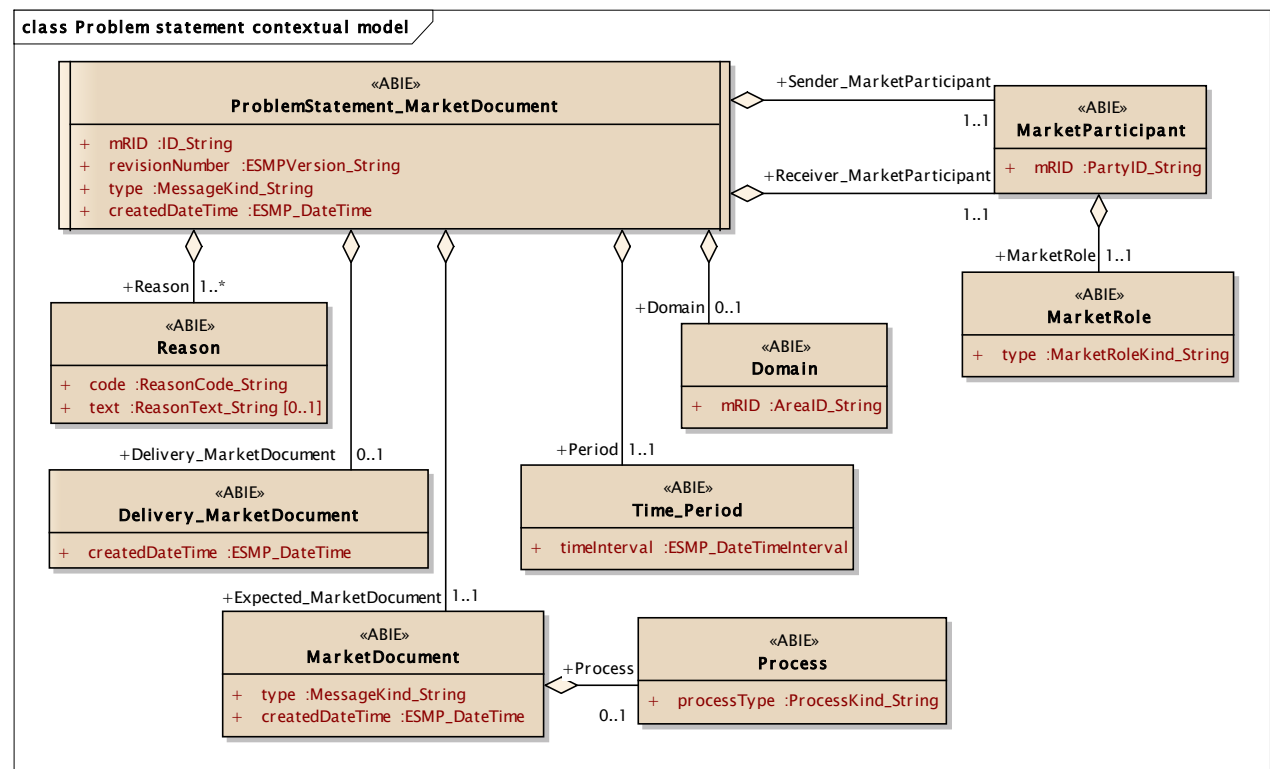


FIGURE 18: PROBLEM STATEMENT CONTEXTUAL MODEL

In addition, the attribute expected\_MarketDocument.process.processType is changed from mandatory to optional depending upon the use of this attribute in the expected document. When there is no process in the expected document, the attribute expected\_MarketDocument.process.processType shall not be provided. This change is provided in Figure 19:

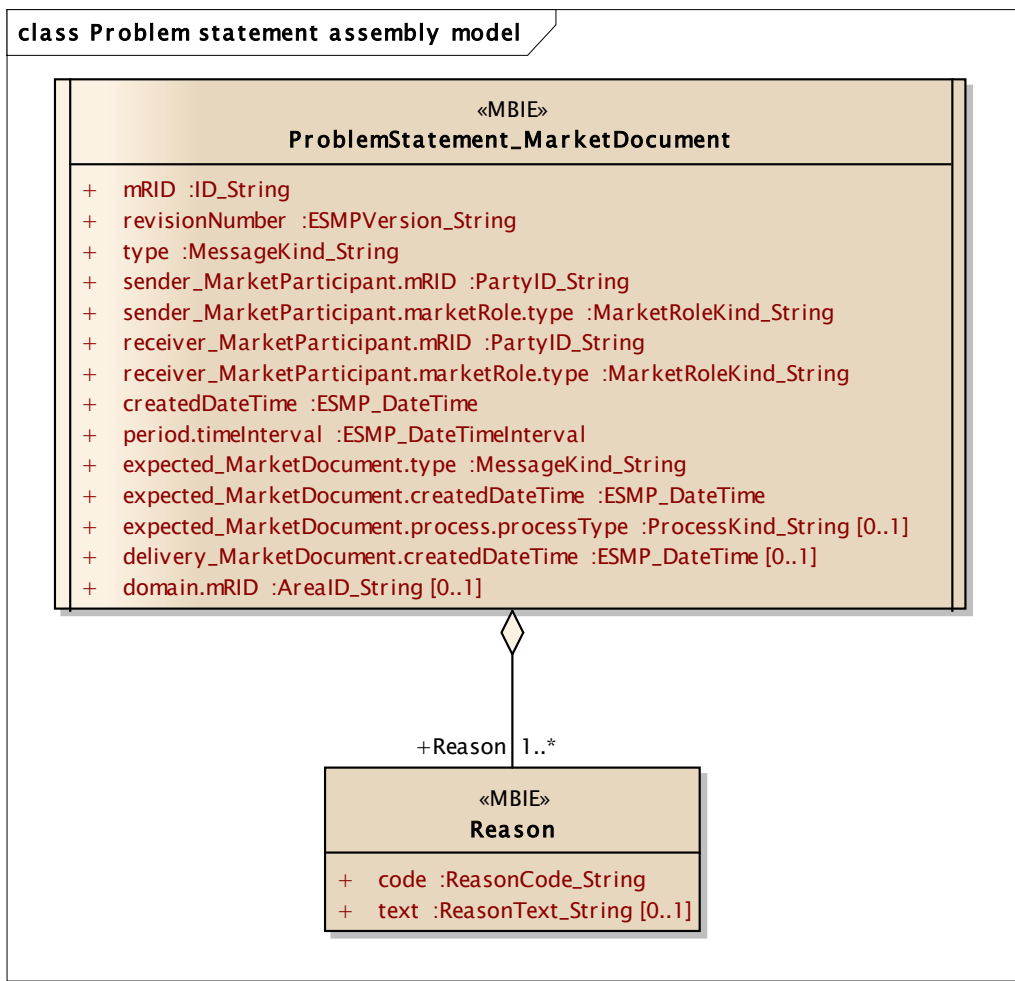


FIGURE 19: PROBLEM STATEMENT ASSEMBLY MODEL

### 5.2.2 UPDATE OF THE PROBLEM STATEMENT SCHEMA

From the assembly model, the new schema is provided in Figure 20:

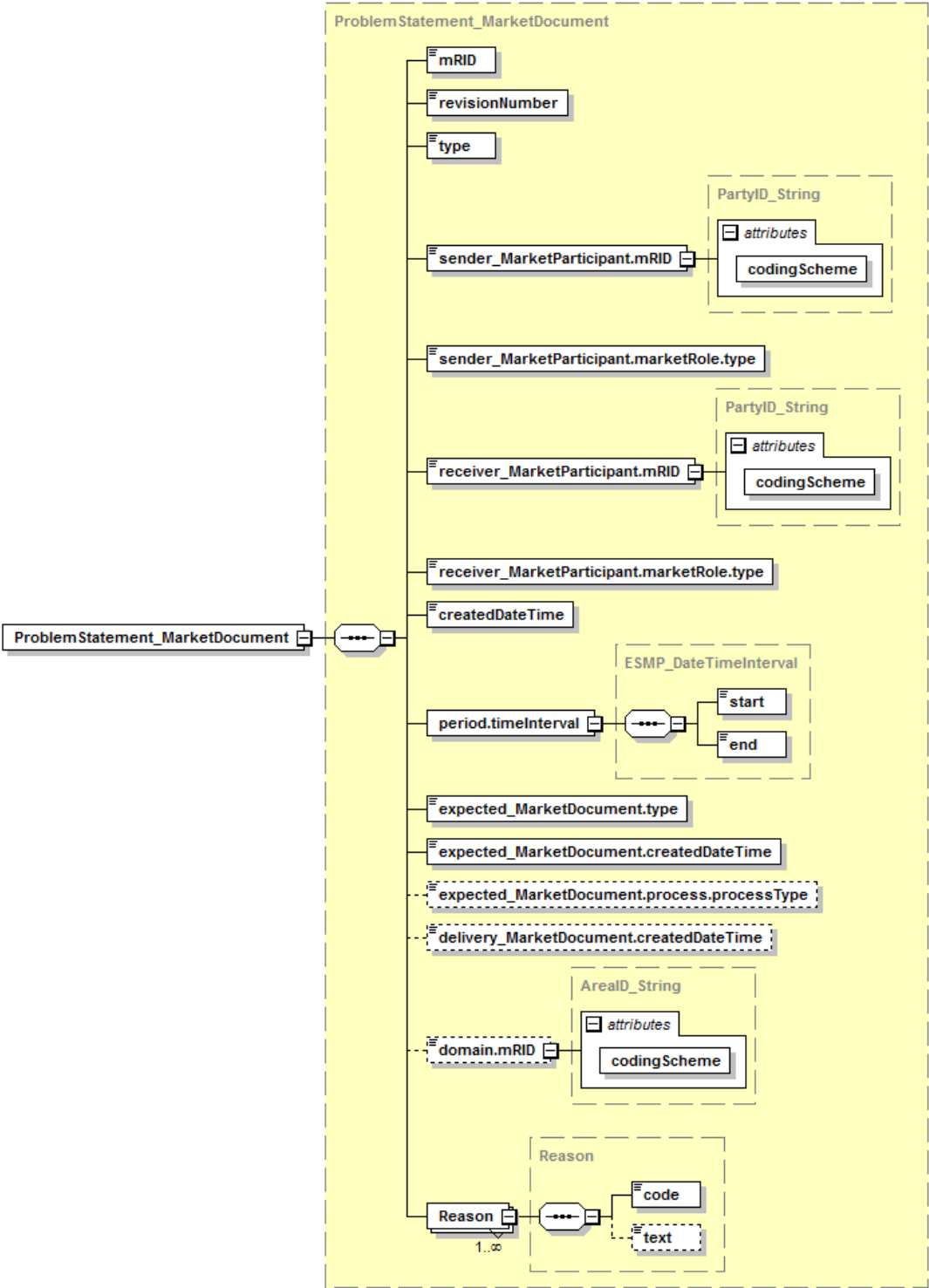


FIGURE 20: PROBLEM STATEMENT SCHEMA

## 5.3 ENTSO-E OUTAGE TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

### 5.3.1 CLARIFICATION ON DEPENDENCY TABLE OF PUBLICATION MARKET DOCUMENT

In order to precise the use of the quantity and price related elements for article 12.1(a) in section 5.3.2 of the Transmission Transparency process implementation guide, the following changes have been made in the dependency table referred as “Figure 9: Publication dependency table for Article 12”:

- The attribute quantity\_Measure\_Unit.name shall be used when the businessType has either the value “A43” or “B05”.
- The attribute currency\_Unit.name shall be used when the businessType has either the value “B05” or “B07”.
- The attribute price\_Measure\_Unit.name shall be used when the businessType has either the value “B05” or “B07”.
- The attribute quantity shall be used when the businessType has either the value “A43” or “B05”.
- The attribute price.amount shall be used when the businessType has either the value “B05” or “B07”.

The resulting dependency table is provided in Figure 21 of this document.



Publication Market Document - Article 12									
Attribute involved	12.1(a) Explicit allocation information (capacity)	12.1(a) Explicit allocation information (revenue only)	12.1(b) Total capacity nominated	12.1 (c) Total capacity already allocated	12.1(d) Day ahead prices	12.1(e) Implicit auction net positions and congestion income	12.1(f) Scheduled day ahead commercial exchanges	12.1(g) Physical flows	12.1(h) Capacity allocated outside EU
type	A25 allocation results	A25 allocation results	A26 capacity document	A26 capacity document	A44 price document	A25 allocation results	A09 finalised schedules	A11 Aggregated energy data report	A94 non EU allocations
Receiver market participant and role	Used	Used	Used	Used	Used	Used	Used	Used	Used
domain	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
auction.mRID	Used	Used	Not used	Used	Not used	Not used	Not used	Not used	Used
auction.type	A02 Explicit auction	A02 Explicit auction	Not used	A02 Explicit auction	Not used	A01 implicit	Not used	Not used	A02 explicit auction
businessType	A43 Requested capacity (without price) B05 Capacity allocated (including price) B07 auction revenue	B07 auction revenue	B08 total nominated capacity	A29 AAC	A62 spot price	B09 net position B10 congestion income (shall be in a different document)	A06 external trade without explicit capacity	A66 energy flow	A34 Capacity rights
in_Domain.mRID	In bidding zone	In bidding zone	In bidding zone	In bidding zone	In bidding zone (same as out bidding zone)	In bidding zone (depending on direction this shall be the "Regional Market Area" or the "Bidding zone" in the case of net position. In the case of congestion income it shall be the same as the out_Domain)	In bidding zone	In bidding zone	In bidding zone
out_Domain.mRID	Out bidding zone	Out bidding zone	Out bidding zone	Out bidding zone	Out bidding zone (same as in bidding zone)	Out bidding zone (depending on direction this shall be the "Regional Market Area" or the "Bidding zone" in the case of net position. In the case of congestion income it shall be the same as the in_Domain)	Out bidding zone	Out bidding zone	Out bidding zone
contract_MarketAgreementType	Used	Used	Used only for upload transmissions	Used	Not used	Used	Not used	Not used	Used
quantity_MeasureUnit.name	MAW, if BusinessType = A43 or B05	Not used	MAW	MAW	Not used	MAW if BusinessType = "B09"	MAW	MAW	MAW
currency_Unit.name	Used if BusinessType = B05 or B07	Used	Not used	Not used	Used	Used if priceAmount	Not used	Not used	Not used
price_MeasureUnit.name	MWH, if BusinessType = B05 or B07	Not used	Not used	Not used	MWH	MWH if priceAmount	Not used	Not used	Not used
auction.category	Used	Not used	Not used	Used only for upload transmissions	Not used	Not used	Not used	Not used	Used
classificationSequence_AttributeInstanceComponent.position	Used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	May be used
participantNumber_AttributeInstanceComponent.position	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
winnerParticipantNumber_AttributeInstanceComponent.position	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
curveType	Used	Used	Used	Used	Used	Used	Used	Used	Used
resolution	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	P1Y; P1M; P7D; P1D; PT60M; PT30M; PT15M
quantity	Used if BusinessType = A43 or B05	Not used	Used	Used	Not used	used if BusinessType = "B09"	Used	Used	used
priceAmount	Used if BusinessType = B05 or B07	Used	Not used	Not used	Used	used if BusinessType = "B10"	Not used	Not used	Not used
Note in the case of net position the in bidding zone and the out bidding zone shall contain depending on direction the "Regional Market Area" and the "Bidding Zone".									
Note in the case of congestion income the in and out bidding zones should always be the same.									

FIGURE 21: PUBLICATION DEPENDENCY TABLE FOR ARTICLE 12

### 5.3.1 CLARIFICATION ABOUT THE ATTRIBUTE PRICE\_MEASURE\_UNIT.NAME

The attribute price\_Measure\_Unit.name provides “the unit of measure associated with the prices in the TimeSeries, the possible units of measure are MAW or MWH”.

The table in section 5.5.11 is changed by the one provided in the following table:

ACTION	DESCRIPTION
<b>Definition of element</b>	Identification of the formal code for a measurement unit (UN/ECE Recommendation 20). --- The unit of measure associated with the prices in a TimeSeries.
<b>Description</b>	The unit of measurement used for the prices expressed within the time series.  Possible units of measure codes are: MAW = Megawatts MWH = Megawatt hours
<b>Size</b>	The maximum length of this information is 3 alphanumeric characters.
<b>Applicability</b>	This information is dependent
<b>Dependence requirements</b>	This information is provided in accordance with the dependency table.

## 6 VERSION 5 RELEASE 0 – 19<sup>TH</sup> OF NOVEMBER 2014

At the WG EDI meeting on the 2014-11-18/19, the following change requests were processed:

- In the Transmission Transparency Process implementation guide, as concerns the Publication Market Document, the dependency table in § 5.3.2 is updated for article 12.1 (c), i.e. the auction.category attribute dependency is change from “Used only for upload transmissions” to “Used”.
- In all the implementation guides, a reference to the “ENTSO-E XML namespace reference document” v2r0 is to be included.

These changes induce only editorial changes in the related implementation guides.

The related schema are available in the dedicated file named “2014-10-17\_CIM.zip”.

### 6.1 ENTSO-E TRANSMISSION TRANSPARENCY PROCESS IMPLEMENTATION GUIDE

#### 6.1.1 CLARIFICATION ON DEPENDENCY TABLE OF PUBLICATION MARKET DOCUMENT

Concerning article 12.1 (c) of Transparency Regulation, the central transparency platform will not perform any aggregation of data. Therefore, in order to precise the use of the auction.category element for article 12.1 (c) in section 5.3.2 of the Transmission Transparency process implementation guide, the following change has been made in the dependency table referred as “Figure 9: Publication dependency table for Article 12”:

- The attribute auction.category shall be used for the article 12.1 (c).

The resulting dependency table is provided in Figure 22 of this document.

Publication Market Document - Article 12									
Attribute involved	12.1(a) Explicit allocation information (capacity)	12.1(a) Explicit allocation information (revenue only)	12.1(b) Total capacity nominated	12.1(c) Total capacity already allocated	12.1(d) Day ahead prices	12.1(e) Implicit auction net positions and congestion income	12.1(f) Scheduled day ahead commercial exchanges	12.1(g) Physical flows	12.1(h) Capacity allocated outside EU
type	A25 allocation results	A25 allocation results	A26 capacity document	A26 capacity document	A44 price document	A25 allocation results	A09 finalised schedules	A11 Aggregated energy data report	A94 non EU allocations
Receiver market participant and role	Used	Used	Used	Used	Used	Used	Used	Used	Used
domain	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
auction.mRID	Used	Used	Not used	Used	Not used	Not used	Not used	Not used	Used
auction.type	A02 Explicit auction	A02 Explicit auction	Not used	A02 Explicit auction	Not used	A01 implicit	Not used	Not used	A02 explicit auction
businessType	A43 Requested capacity (without price) B05 Capacity allocated (including price) B07 auction revenue	B07 auction revenue	B08 total nominated capacity	A29 AAC	A62 spot price	B09 net position B10 congestion income (shall be in a different document)	A06 external trade (without explicit capacity)	A66 energy flow	A34 Capacity rights
in_Domain.mRID	In bidding zone	In bidding zone	In bidding zone	In bidding zone	In bidding zone (same as out bidding zone)	In bidding zone (depending on direction this shall be the "Regional Market Area" or the "Bidding zone" in the case of net position. In the case of congestion income it shall be the same as the out_Domain)	In bidding zone	In bidding zone	In bidding zone
out_Domain.mRID	Out bidding zone	Out bidding zone	Out bidding zone	Out bidding zone	Out bidding zone (same as in bidding zone)	Out bidding zone (depending on direction this shall be the "Regional Market Area" or the "Bidding zone" in the case of net position. In the case of congestion income it shall be the same as the in_Domain)	Out bidding zone	Out bidding zone	Out bidding zone
contract_MarketAgreementType	Used	Used	Used only for upload transmissions	Used	Not used	Used	Not used	Not used	Used
quantity_MeasureUnit.name	MAW, if BusinessType = A43 or B05	Not used	MAW	MAW	Not used	MAW if BusinessType = "B09"	MAW	MAW	MAW
currency_Unit.name	Used if BusinessType = B05 or B07	Used	Not used	Not used	Used	Used if priceAmount	Not used	Not used	Not used
price_MeasureUnit.name	MWH, if BusinessType = B05 or B07	Not used	Not used	Not used	MWH	MWH if priceAmount	Not used	Not used	Not used
auction.category	Used	Not used	Not used	Used	Not used	Not used	Not used	Not used	Used
classificationSequence_AttributeInstanceComponent.position	Used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	May be used
participantNumber_AttributeInstanceComponent.position	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
winnerParticipantNumber_AttributeInstanceComponent.position	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
curveType	Used	Used	Used	Used	Used	Used	Used	Used	Used
resolution	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M	PT60M; PT30M; PT15M
quantity	Used if BusinessType = A43 or B05	Not used	Used	Used	Not used	used if BusinessType = "B09"	Used	Used	used
priceAmount	Used if BusinessType = B05 or B07	Used	Not used	Not used	Used	used if BusinessType = "B10"	Not used	Not used	Not used
						Note in the case of net position the in bidding zone and the out bidding zone shall contain depending on direction the "Regional Market Area" and the "Bidding Zone".			
						Note in the case of congestion income the in and out bidding zones should always be the same.			

## 6.2 ALL IMPLEMENTATION GUIDES

A reference to the “ENTSO-E XML namespace reference document” version 2 release 0 is to be included in all the implementation guides.

This reference shall ensure to have compliant electronic document instance files; and in particular to apply the following recommendations:

**In order to enable flexibility, it is recommended that the schema location instruction (and xsi definition) in the schema compliant instance should not be used.**