

# **BRS**

## **(Business Requirement Specification)**

# **Nordic trading system**

## **Ediel Market Operator Configuration Document**

**Business process:** Nordic trading system  
**Version:** 1.0.A  
**Status:** For implementation  
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## 1 Introduction

### 1.1 Background

For efficiency reasons the four Nordic TSOs have set up the NMEG (Nordic Market Expert Group) for migration of the document exchanges towards one common document standard, and later maintenance of the Nordic document exchanges. The aim is to define document exchange models that can be used for all document exchanges between the actors in the Nordic energy market, Nordic TSOs and Market Operators.

This document is an implementation guide detailing the Ediel Market Operator Configuration Document. The document is used for sending a Market operator calendar, showing which NEMO is acting as Market Operator for a given period. The document is at a later stage intended to be merged with the Ediel BRS for the Nordic Trading System.

### 1.2 Nordic Energy Domain Model

A Nordic Energy Market Domain model, giving an overall overview of the structure and processes used in the Nordic Energy market, can be found in [5].

### 1.3 Project organisation

The document is written by NMEG (Nordic Market Expert Group), with the following members at the time of publication:

Anne Stine Hop, Statnett  
 Christian Odgaard, Energinet  
 Fedder Skovgaard, Energinet  
 Jan Owe, Svenska kraftnät  
 Jari Hirvonen, Fingrid  
 Jon-Egil Nordvik, Statnett (Convenor)  
 Ove Nesvik, Edisys (Secretary)  
 Teemu Hiekka, Fingrid

### 1.4 Technical rules for exchange of xml document in the Nordic countries

Technical rules for exchange of xml document in the Nordic countries are specified in the document: “Ediel Common Nordic XML rules and recommendations”, see [5]

### 1.5 References

- [1] [The Harmonised Role Model, ENTSO-E, ebIX® and EFET.](#)
- [2] [UN/CEFACT Unified Modelling Methodology \(UMM\).](#)
- [3] ebIX Modelling methodology, see <http://www.ebix.org/>.
- [4] Ediel Common Nordic XML rules and recommendations, see <http://www.ediel.org/>.
- [5] Nordic Energy Market Domain Model, see <http://www.ediel.org/>.

### 1.6 Change log

Ver/rel/rev	Changed by	Date	Changes
1.0.A	Ove Nesvik	20190905	First version approved by Nordic Ediel Group

## 2 Business Data View; Nordic trading system

### 2.1 Ediel Market Operator Configuration Document

The *Ediel Market Operator Configuration Document* is developed by NMEG.

#### 2.1.1 Class diagram: Ediel Market Operator Configuration Document contextual model (CIM version)

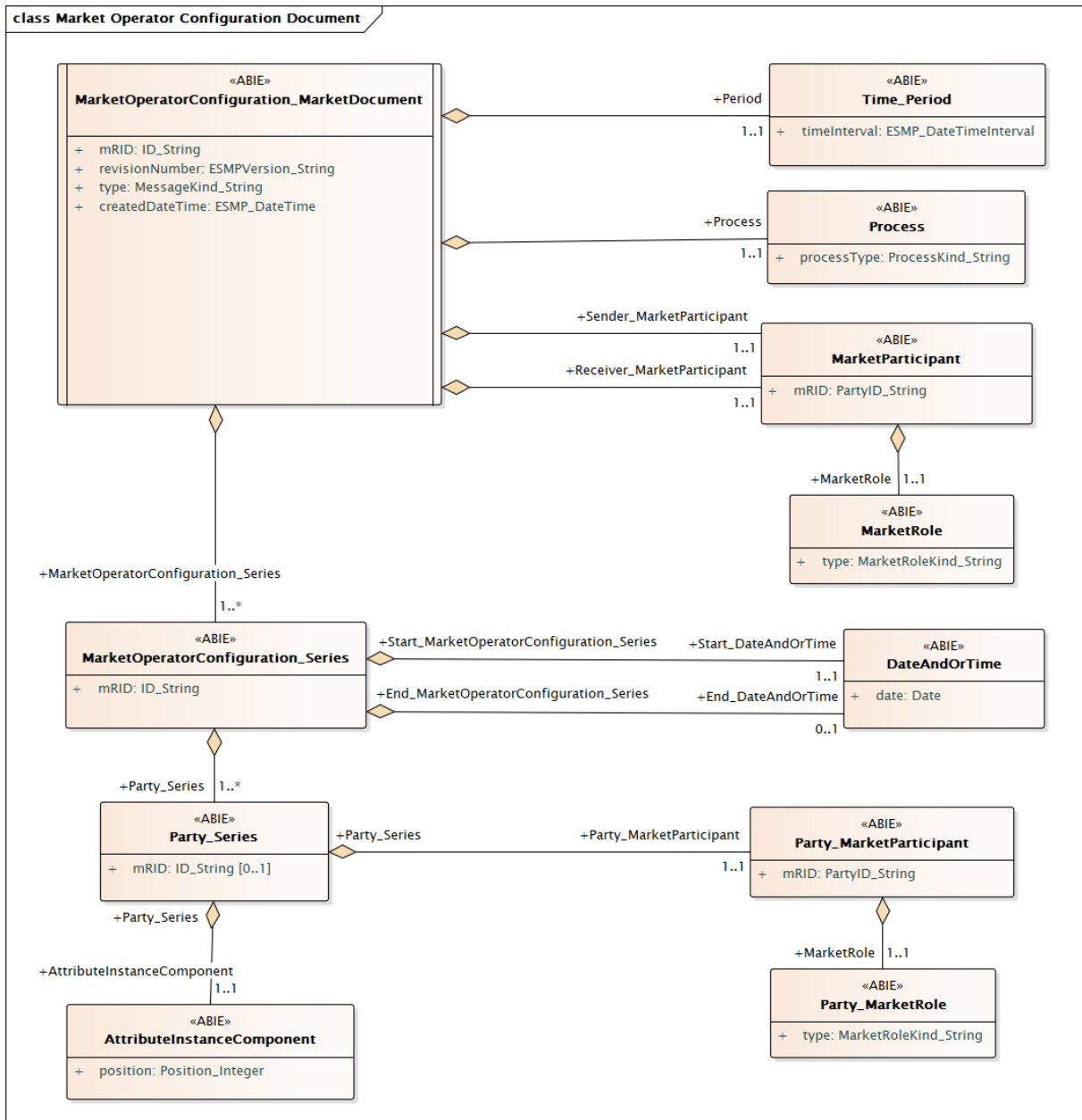


Figure 1: Class diagram: Ediel Market Operator Configuration Document contextual model (CIM version)

2.1.2 Class diagram: Ediel Market Operator Configuration Document assembly model (CIM version)

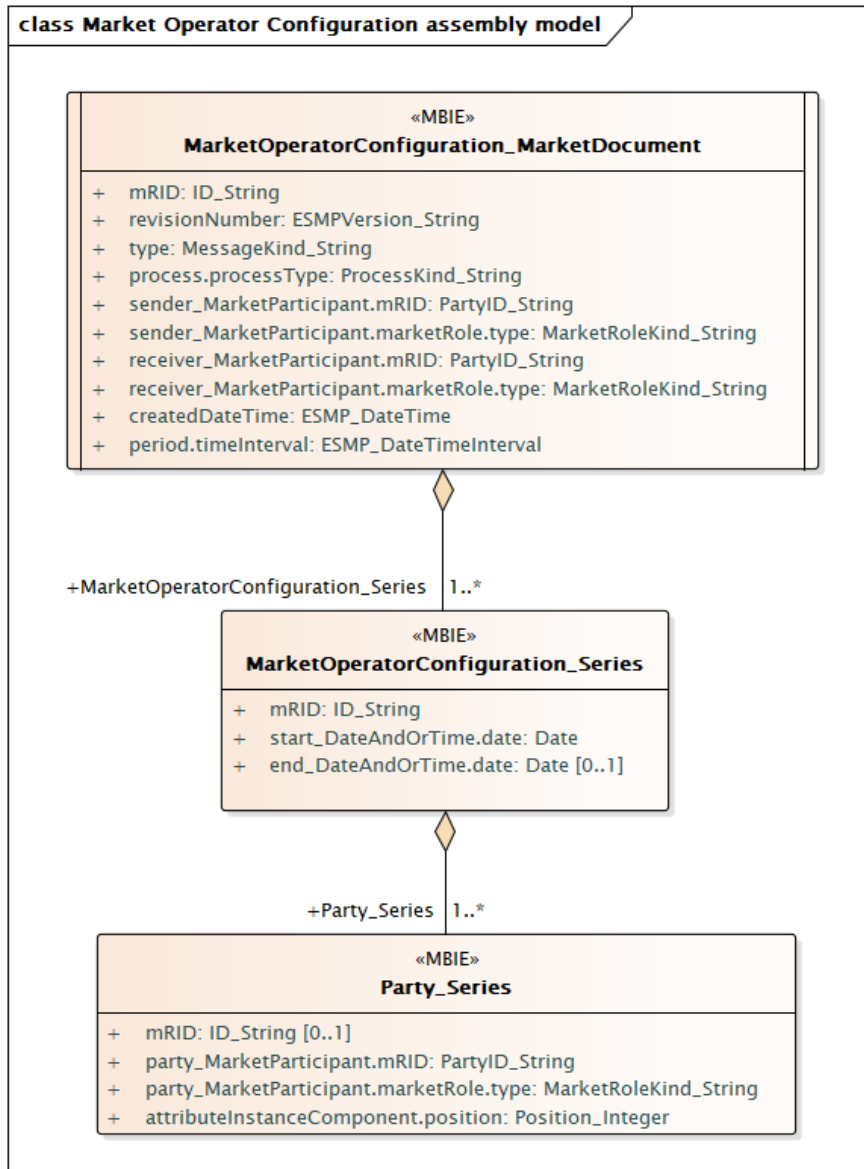


Figure 2: Class diagram: Ediel Market Operator Configuration Document assembly model (CIM version)

## 2.1.3 Attribute usage: Ediel Market Operator Configuration Document (CIM version)

Document	Attribute	Cl.	Code and description
Balancing Market Document assembly model (CIM version)	<b>Balancing_MarketDocument</b>		
	mRID	[1]	Unique identification of the document. Note that all new versions of the document shall have a new mRID.
	revisionNumber	[1]	Fixed 1
	type	[1]	<b>Z34</b> Market Operator Configuration Document
	process.processType	[1]	<b>A01</b> Day ahead
	sender_MarketParticipant.mRID	[1]	Identification of the party who is sending the document.
	sender_MarketParticipant.marketRole.type	[1]	<b>A11</b> Market operator
	receiver_MarketParticipant.mRID	[1]	Identification of the party who is receiving the schedules.
	receiver_MarketParticipant.marketRole.type	[1]	<b>A33</b> Information receiver
	createdDateTime	[1]	Date and time for the creation of the document.
	period.timeInterval.start	[1]	Start date and time for the information in the detailed part of the document. <sup>1</sup>
	period.timeInterval.end	[1]	End date and time for the information in the detailed part of the document.
		[1..*]	<b>MarketOperatorConfiguration_Series</b>
	mRID	[1]	Unique ID of this set of information, e.g. to be used in acknowledgements.
	marketOperatorConfiguration_Period.start_DateAndOrTime.date	[1]	Start date for the period when the NEMO in question acts as Market Operator.
	marketOperatorConfiguration_Period.end_DateAndOrTime.date	[0..1]	Not used.
		[1..*]	<b>Party_Series</b>
mRID	[0..1]	Not used.	

<sup>1</sup> The period.timeInterval.start and period.timeInterval.end are of dateTime type. If used as start or end date (without a time part), the time part may be sent as 00:00. All date/times used in the detailed level (Series level) shall be within the period.timeinterval in the document header (Market Document level). Note that the start date/time is inclusive, and the end date/time is exclusive. Hence the period.timeInterval.start must be equal to or earlier than the earliest date/time at the detailed level and the period.timeInterval.end must be equal to or later than the latest end date/time at the detail level. If the detail level only have start date/times, the period.timeInterval.end must be equal to or later than the last date/time at the Series level + one day.

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	party_MarketParticipant.mRID	[1]	Unique ID of the NEMO that acts as Market Operator or Backup Operator for the period in question.
	party_MarketParticipant.marketRole.type	[1]	<b>A11</b> Market Operator
	attributeInstanceComponent.position	[1]	A Sequence number starting with 1 for the NEMO acting as Nordic Market Operator in the period in question and increased with one for each additional Backup Market Operator.

**Table 1:** Attribute usage of Ediel Market Operator Configuration Document (CIM version)

## 3 Business rules

### 3.1 General ground rules

The process flow assumes that a certain number of basic rules are respected. This does not include the specific rules that have been defined in an interchange agreement. These basic rules are:

1. The last valid document (latest Creation date) received before cut-off time is the valid document.
2. All version numbers shall be positive integer values and leading zeros shall be suppressed.
3. All documents received shall have an acknowledgement (acceptance, rejection or errors).
4. All the times related to energy products in the documents are expressed in Coordinated Universal Time (the acronym of which is UTC) in compliance with ISO 8601. This is restricted to YYYY-MM-DDTHH:MMZ in order to remain in conformity with XML schema requirements.
5. All the time intervals in the documents are expressed in compliance with ISO 8601 This is restricted to YYYY-MM-DDTHH:MMZ/YYYY-MMDDTHH:MMZ. The time interval has an inclusive start time and an exclusive end time and is expressed in minutes (i.e. 00:00Z to 00:00Z is exactly a 24 hour period).
6. The time interval defined in the period class shall always be a multiple of its resolution.
7. Whenever a coded value within a document is associated with a coding scheme, the coding scheme must always be supplied. The coding scheme is an independent attribute with a size of 3 alphanumeric characters.
8. One legal entity can be identified by different id's for different purposes, apart from in Sweden.
9. All the documents use UTF-8, hence supporting all Scandinavian characters.