Ediel BRS

(Business Requirement Specification)

for

Exchange of master data

Business process:	Exchange of master data
Version:	1.0A
Status:	Approved by NEMG
Date:	October 2nd, 2025

Content

1 Introduction

1.1 Background

Among others 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. NMEG members have long experience from energy market data exchange processes and represents all the four Nordic TSOs and the three Nordic datahubs. The aim is to define a common CIM based data exchange framework that will fit all the four Nordic countries, including the Nordic TSOs and Market Operators.

This BRS is detailing document exchanges related to exchange of master date between the actors in the Nordic energy market. The focus of this document is the business aspects of the document exchanges and the basis for the document is the master data exchanges within the Nordic Balance Settlement (NBS), the Nordic Balancing Model (NBM) and the Nordic Market Management System (MMS) processes, together with the ebIX®, EFET and ENTSO-E Harmonised role model [2]. This version covers process for exchange of master data for Nordic Balancing System (NBS) and Nordic MMS.

The basis for the BRS is the requirements for master data exchange from common Nordic projects and running processes, such as the Nordic Balance Settlement (eSett), the Nordic Balancing Model (NBM) and the Nordic Market Management System (MMS), the ebIX®, EFET and ENTSO-E Harmonised role model [2], the UN/CEFACT Unified Modelling Methodology (UMM) [3] and the CIM standard.

1.2 About Nordic Ediel BRSs

The NMEG Ediel Business Requirement Specifications (BRSs) describes business processes where data is exchanged between market participants in the Nordic energy market based on the UN/CEFACT Modelling Methodology (UMM) and the Cim model. A BRS is a tool that helps the participants in the Nordic energy market to implement effective and harmonised data-exchange processes. The Ediel BRSs can be seen as a framework designed to improve communication between stakeholders, reduce development time, and minimise errors.

The Nordic Ediel BRSs covers all aspects of a business requirement specification for a specific data-exchange process and purpose, including functional requirements, non-functional requirements (partly), UseCases, and data flows.

NMEG Ediel BRSs will as far as possible be based on already available standards and best practices, such as:

1) ENTSO-E Implementation Guides (IGs) based on IEC 62325-451-n standards
2) ENTSO-E Implementation Guides (IGs) based on IEC 62325-351 standard
3) Other Implementation Guides (IGs) based on IEC 62325-351 standard
4) EU Implementing Regulations
5) Documents from the EU DSO Entity and the ENTSO-E and EU DSO Entity Joint Working Group (JWG)
6) Nordic BRSs, IGs, regulations etc.

In addition, the NMEG Ediel BRSs will document Nordic extensions and/or restrictions compared with the standards and best practices the BRS is based on.

1.3 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 at [6].

1.4 Project organisation

The document is written by NMEG (Nordic Market Expert Group), see www.ediel.org.

1.5 References

[1] ENTSO-E Electronic Data Interchange (EDI) Library
- Implementation Guides
- CIM XML schemas
- MADES specifications
- Etc.

[2] The Harmonised Role Model, ENTSO-E, ebIX® and EFET

[3] UN/CEFACT Unified Modelling Methodology (UMM)

[4] Ediel BRSs, see http://www.ediel.org/

[5] Ediel Common Nordic XML rules and recommendations, see http://www.ediel.org/

[6] Nordic Energy Market Domain Model, see http://www.ediel.org/

[7] Edielportalen Norway

[8] Edielportalen Sweden

[9] Energinet DataHub

[10] Fingrid Datahub services

[11] Elhub

[12] Nordic Imbalance Settlement (NBS) Handbook, see https://www.esett.com/handbook/

1.6 Terms and notations

The term document is used instead of message when this is applicable. However, when referencing ENTSO-E document names, the ENTSO-E name will be used, e.g., message, report, or document.

Documents are described by a class diagram showing the full set of attributes in the related xml schema. In addition, the usage of the document is described by one or more tables detailing the usage of each attribute. Optional attributes from the class diagram, not used in the specific data exchange, are omitted from the table. In addition the cardinalities, e.g., [0..1], may be restricted in the detailed descriptions in comparison to the original ENTSO-E or Ediel documents.

Some abbreviations used:

AP	Accounting Point
CIM	Common Information Model from IEC/UCA
DK	Denmark
FI	Finland
NBS	Nordic Balancing System
Nordic MMS	Nordic Market Management System (MMS)
NO	Norway
SE	Sweden

1.7 Change log

Ver/rel/rev	Changed by	Date	Changes
1.0A	Ove Nesvik	20251002	First version to publish

2 Overview of the Nordic energy market domain

2.1 Exchange of master data in the overall context (Domain model)

The Domain model describes the core business process areas needed to have a well-functioning energy market. The model is important for having a common and agreed understanding on how the energy market works as a basis for development of common methods for exchange of information.

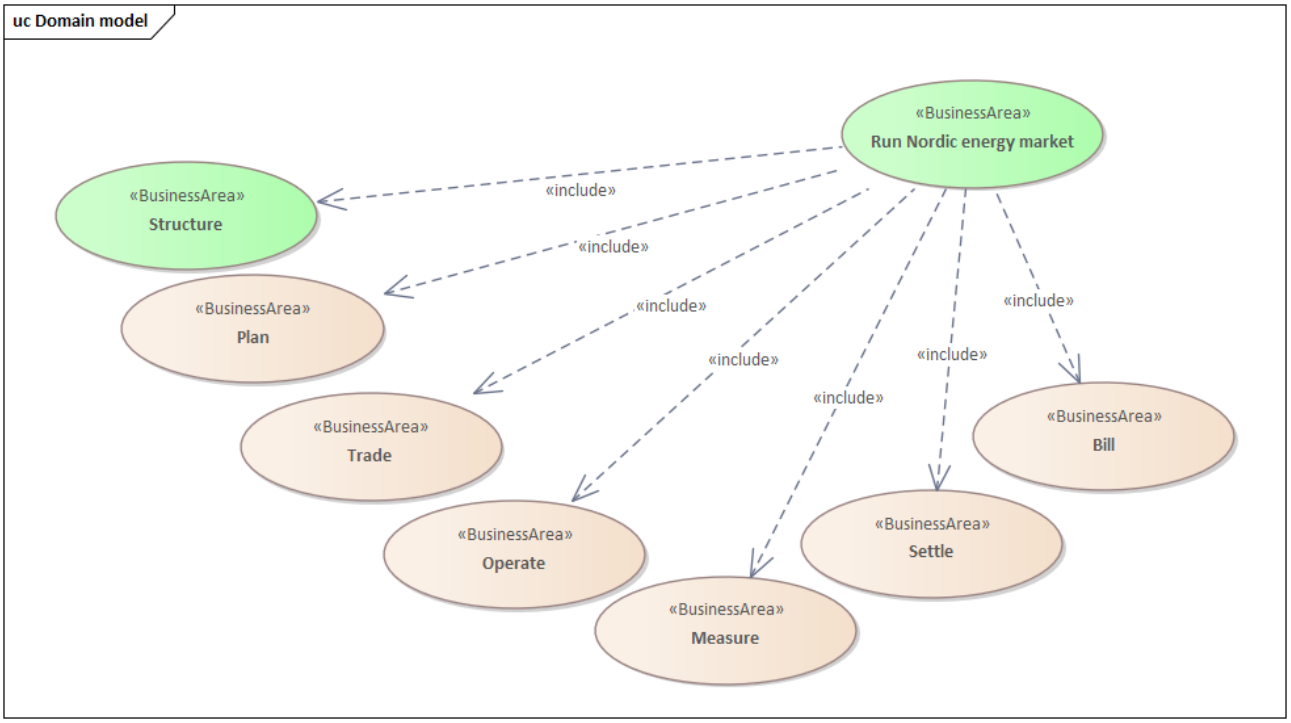

Figure 1: UseCase diagram: Domain model

The domain model of the energy market covers all stages from the structuring of the market until the settlement and billing of consumption and transport of energy, with a focus on the exchange of information:

- **Structure**: Exchange of master data including the change of supplier processes
- **Plan:** Planning of production, consumption, exchange, and transport
- **Trade:** Trade on different markets, including ancillary services, bilateral trade, etc.
- **Operate:** Operation
- **Measure:** Measuring of production, consumption, exchange, and transport
- **Settle:** Settlement
- **Bill:** Billing

The exchange of master data is a part of the process area Structure.

For a more elaborated description of the processes include in the domain model, see [6].

2.2 Business Domain View: Business area Exchange of master data

In the rest of this document the process areas (UseCases) “Exchange master data for NBS” and “Exchange master data for Nordic MMS” (the yellow use cases) from the business area “Exchange master data” are further elaborated.

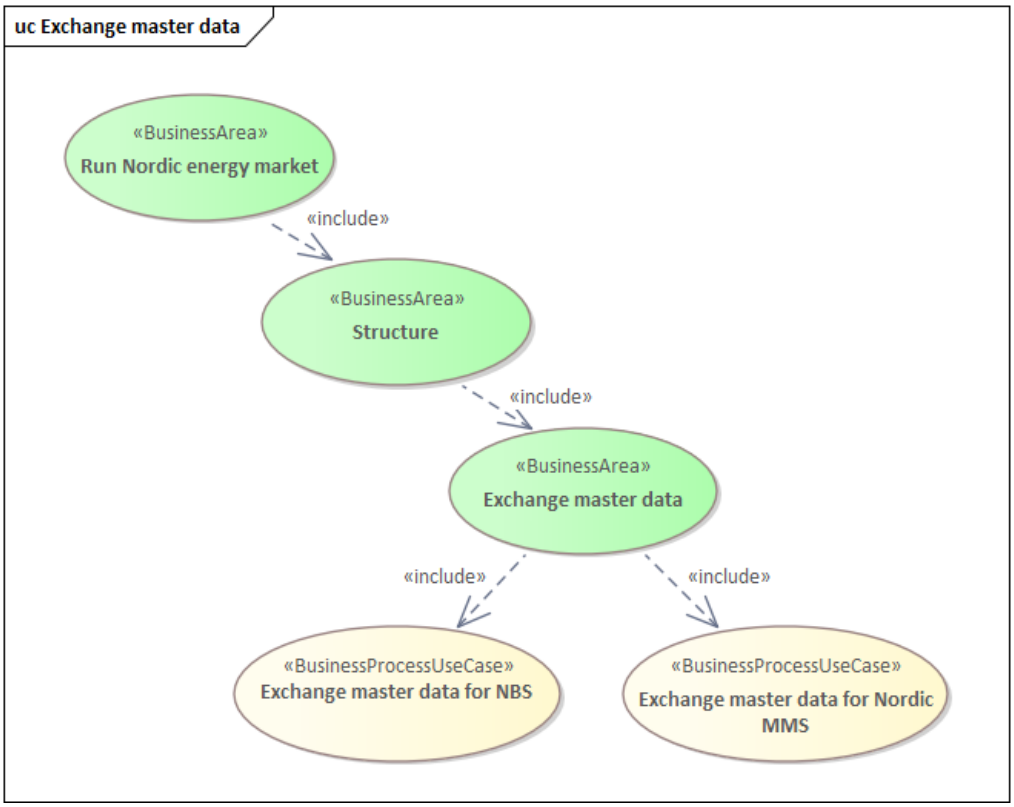

Figure 2: UseCase diagram: The Nordic exchange of master data business area

2.2.1 UseCase Description

UseCase description: Exchange master data	
definition	This is the process where an actor in the energy sector exchange master data with other actors in the energy sector.
beginsWhen	When an actor in the energy sector has a need to distribute master data to one or more actors in the energy sector, or an actor in the energy sector needs to request master data from another actor in the energy sector.
preCondition	The participating actors in the energy sector know each other and can exchange master data.
endsWhen	When the request for master data has been responded to, or the distribution of master data has been successfully received by the recipient.
postCondition	The recipient(s) have received the relevant master data.
exceptions	None.
actions	N/A

Table 1: UseCase description: Exchange of master data

2.3 Overview of exchange of master data for NBS

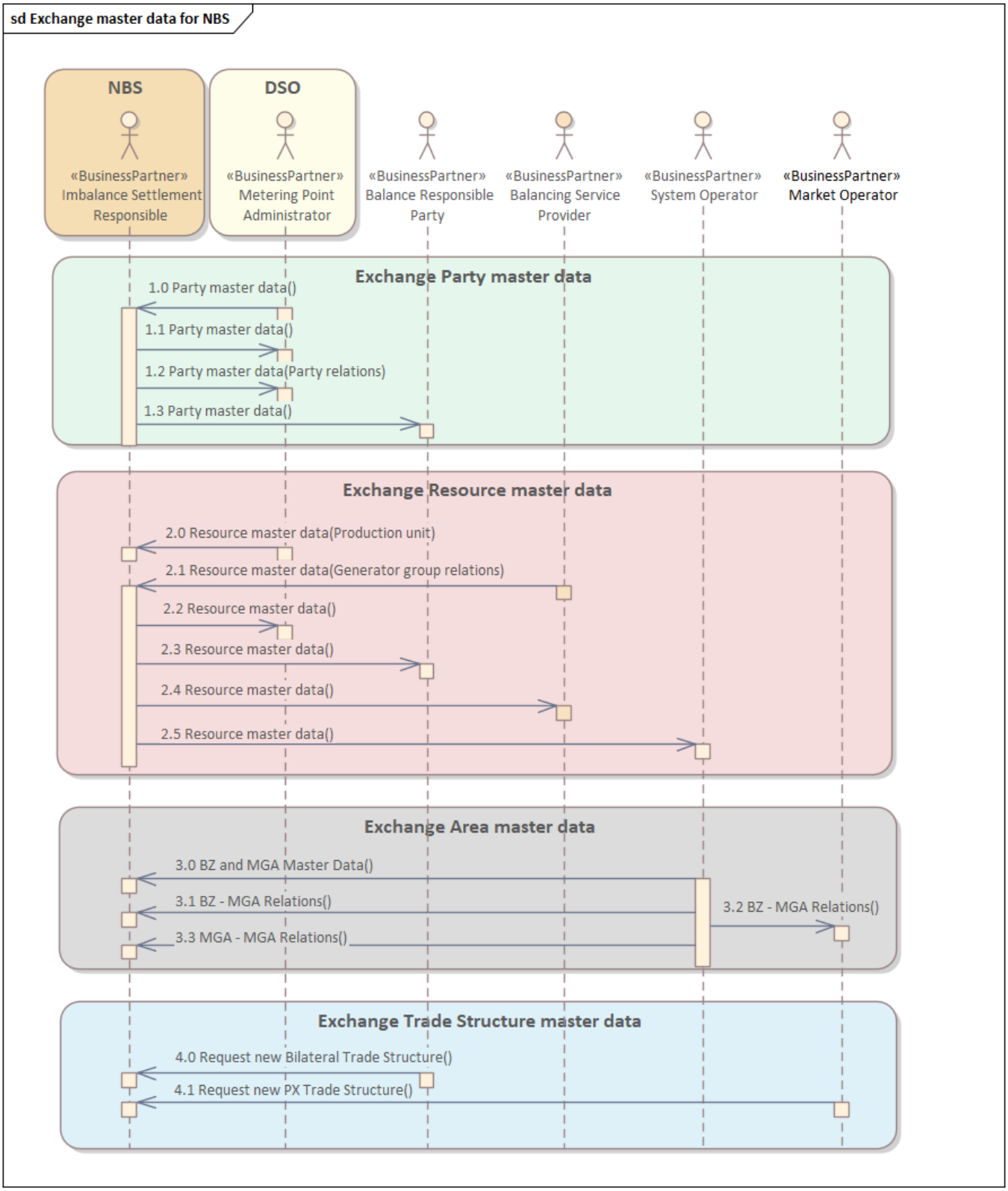

Figure 3: Sequence diagram: Exchange of master data for NBS

NBS document	Roles	Documentation
Exchange of master data for NBS		
1.0 Party master data	MPA (DSO) → ISR (eSett)	Ediel CIM Party Master Data Market Document version 1.1 **For details see:** 5.1.5
1.1 Party master data	ISR (eSett) → MPA (DSO)	Ediel CIM Party Master Data Market Document version 1.1 **For details see:** 5.1.5
1.2 Party master data (Party relations)	ISR (eSett) → MPA (DSO)	Ediel CIM Party Master Data Market Document version 1.1 **For details see:** 5.1.5
1.3 Party master data	ISR (eSett) → BRP	Ediel CIM Party Master Data Market Document version 1.1 **For details see:** 5.1.5
2.0 Resource master data (Production unit)	MPA (DSO) → ISR (eSett)	Ediel CIM Resource Master Data Market Document **For details see:** 5.3.5
2.1 Resource master data (Generator group relation)	BSP → ISR (eSett)	Ediel CIM Resource Master Data Market Document **For details see:** 5.3.5
2.2 Resource master data	ISR (eSett) → MPA (DSO)	Ediel CIM Resource Master Data Market Document **For details see:** 5.3.5
2.3 Resource master data	ISR (eSett) → BRP	Ediel CIM Resource Master Data Market Document **For details see:** 5.3.5
2.4 Resource master data (Generator group relations)	ISR (eSett) → BSP	Ediel CIM Resource Master Data Market Document **For details see:** 5.3.5
2.5 Resource, Production Plan Structure Master Data	ISR (eSett) → SO	Ediel CIM Resource Master Data Market Document **For details see:** 5.3.5
3.0 BZ and MGA Master Data	SO → eSett	Area Configuration Document **For details see:** 5.4.4
3.1 BZ - MGA Relations	SO → eSett	Area Configuration Document **For details see:** 5.4.4

NBS document	Roles	Documentation
3.2 BZ - MGA Relations	SO → MO	Area Configuration Document **For details see:** 5.4.4
3.3 MGA - MGA Relations	SO → eSett	Area Configuration Document **For details see:** 5.4.4
4.0 Request new Bilateral Trade Structure	BRP → eSett	Ediel Request Trade Structure Document **For details see:** 5.5.3
4.1 Request new PX Trade Structure	MO → eSett	Ediel Request Trade Structure Document **For details see:** 5.5.3

Table 2: UseCase description: Exchanged master data for NBS

2.4 Overview of exchange of master data for Nordic MMS

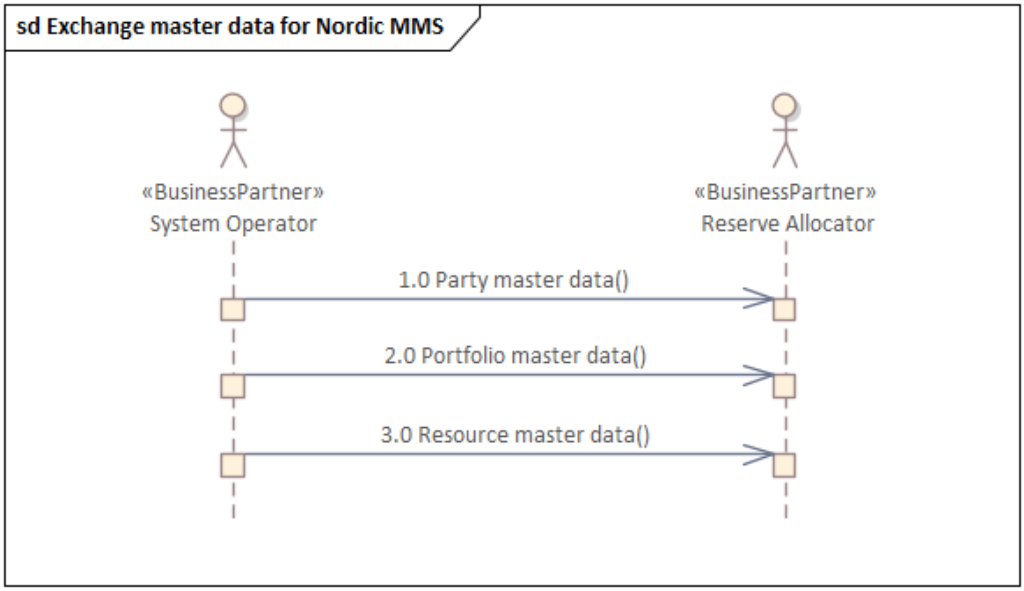

Figure 4: Sequence diagram: Exchange of master data for Nordic MMS

NBS document	Roles	Documentation
Exchange of master data for Nordic MMS		
1. Party master data	SO → RA	Ediel CIM Party Master Data Market Document version 1.1 **For details see:** 5.1.5
2. Portfolio master data	SO → RA	Ediel CIM Portfolio Master Data Market Document version 1.0 **For details see:** 5.2.4
3. Resource master data	SO → RA	Ediel CIM Resource Master Data Market Document **For details see:** 5.3.5

Table 3: UseCase description: Exchanged master data for Nordic MMS

3 Process areas within business area Exchange of master data

3.1 Process Area: Exchange master data for NBS

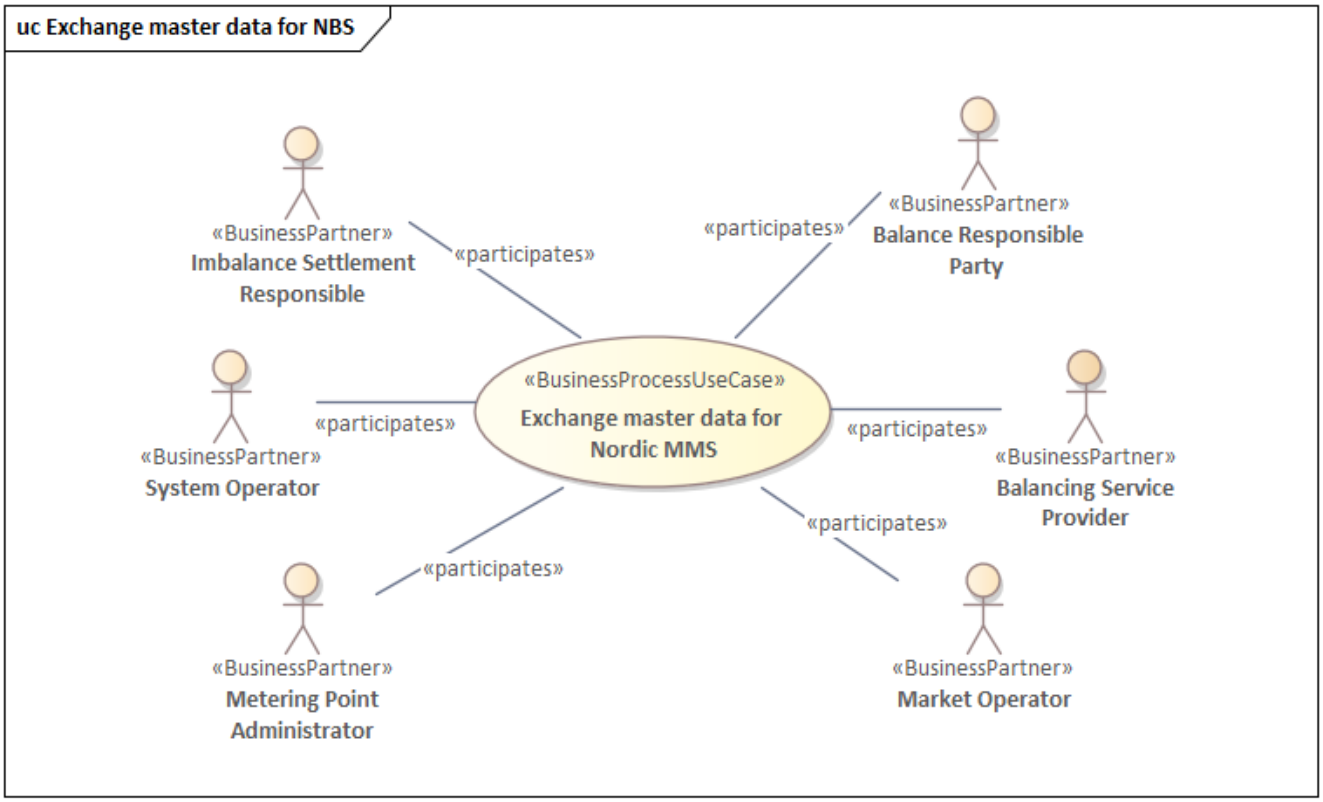

Figure 5: UseCase diagram: Exchange master data for NBS

3.1.1 UseCase Description

UseCase description: Exchange master data for NBS	
definition	This is the process where actors participating in the NBS processes exchange master data.
beginsWhen	When a Metering Point Administrator (DSO or data hub) or a Balancing Service Provider sends updated master data to the Imbalance Settlement Responsible (eSett), or the Imbalance Settlement Responsible sends updated master data to the entitled roles participating in the NBS processes: • Metering Point Administrator • Balance Responsible Party • Balancing Service Provider • System Operator • Market Operator
preCondition	The participating actors in the energy sector know each other and can exchange master data.
endsWhen	When the updated master data has been successfully received by the recipient.
postCondition	The recipient(s) have received the relevant master data.

exceptions	None.
actions	N/A

Table 4: UseCase description: Exchange master data for NBS

3.2 Process area: Exchange of master data for Nordic MMS

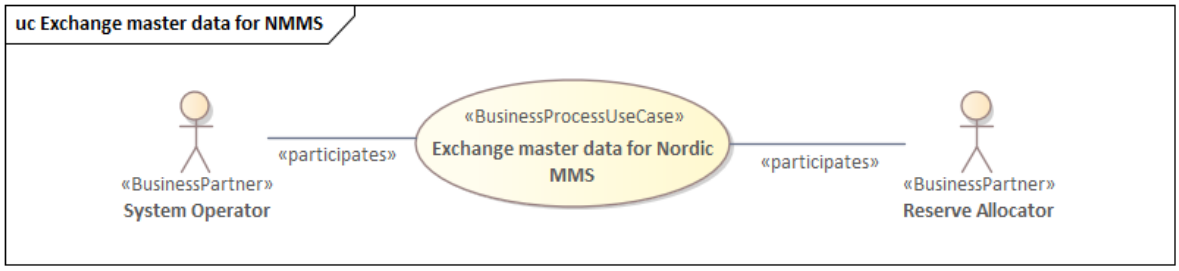

Figure 1 UseCase diagram: Exchange of master data for Nordic MMS

3.2.1 Description

UseCase description: Exchange of master data for Nordic MMS	
definition	In this process, the System Operator informs the Reserve Allocator about updates of master data for Parties, Portfolios or Resources.
beginsWhen	When there has been an update in master data for Parties, Portfolios or Resources.
preCondition	The updated master data for Parties, Portfolios or Resources has been notified to the Resource Allocator.
endsWhen	When the Resource Allocator has received the update master data.
postCondition	The Resource Allocator has been informed of the updated master data.
exceptions	None
actions	N/A

4 Harmonised roles and domains used in the Nordic Exchange of master data process

In Figure 6 and in definitions below the relevant parts of the ebIX®, EFET and ENTSO-E Harmonised role model are outlined.

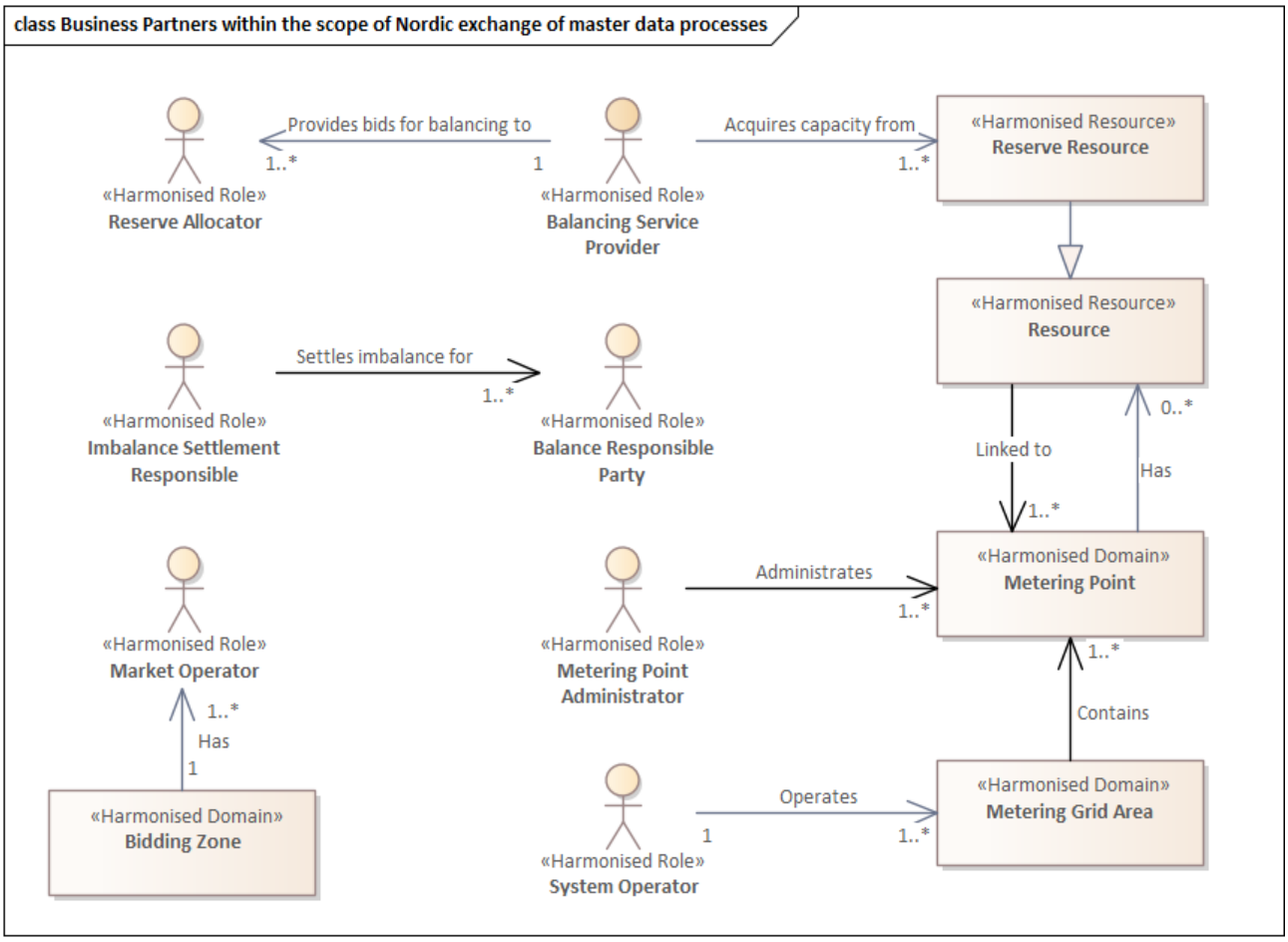

Figure 6: Outline of the Harmonised role model within the scope of the Nordic Exchange of master data

4.1 Roles from the ebIX®, EFET and ENTSO-E Harmonised role model HRM)

4.1.1 Balance Responsible Party

A party financially accountable for its imbalances.

Based on:
Consolidated text: Commission Regulation (EU) 2017/2195 - Art.2 Definitions.

Additional information:
A balance responsibility requires a contract proving financial security with the Imbalance Settlement Responsible of the Scheduling Area entitling the party to operate in the market.

Imbalance means an energy volume calculated for a Balance Responsible Party and representing the difference between the allocated volume attributed to that Balance Responsible Party and the final position of that Balance Responsible Party, including any imbalance adjustment applied to that Balance Responsible Party, within a given imbalance settlement period.

4.1.2 Balancing Service Provider

A party providing energy balancing services to the energy or capacity market.

Additional information:
Balancing services can be balancing energy and/or balancing capacity.

This is a type of Flexibility Service Provider.

Based on:

Consolidated text: Commission Regulation (EU) 2017/2195 - Art.2 Definitions and Consolidated text: Regulation (EU) 2019/943.

4.1.3 Imbalance Settlement Responsible

A party that is responsible for settlement of the difference between the contracted quantities with physical delivery and the established quantities of energy products for the Balance Responsible Parties in a Scheduling Area.

Additional information:
The Imbalance Settlement Responsible may delegate the invoicing responsibility to a more generic role such as a Billing Agent.

4.1.4 Metering Point Administrator

A party responsible for administrating and making available the Metering Point characteristics, including registering the parties linked to the Metering Point.

4.1.5 Reserve Allocator

Informs the market of reserve requirements, receives bids against the requirements and in compliance with the prequalification criteria, determines which bids meet requirements and assigns bids.

4.1.6 System Operator

A party responsible for operating, ensuring the maintenance of and, if necessary, developing the system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the distribution or transmission of energy.

Based on:
Consolidated text: Directive (EU) 2019/944.

4.2 Domains from the ebIX®, EFET and ENTSO-E Harmonised role model HRM)

4.2.1 Bidding Zone

The largest geographical area within which market participants are able to exchange energy without capacity allocation.

Source: Consolidated text: Commission Regulation (EU) No 543/2013.

4.2.2 Metering Grid Area

A Metering Grid Area is a physical area where consumption, production and exchange can be measured. It is delimited by the placement of meters for continuous measurement for input to, and withdrawal from the area.

Additional information:
It can be used to establish volumes that cannot be measured such as network losses.

4.2.3 Metering Point

An entity where energy products are measured or computed.

4.2.4 Reserve Resource

A resource technically pre-qualified using a uniform set of standards to supply reserve capabilities to a System Operator and is associated with one or more tele-measuring devices.

Additional information:
This is a type of Resource.

4.2.5 Resource

A market representation of an asset or a group of assets related to the energy industry.

Additional information:
A Resource represents for example grid assets, consumption assets or production assets, such as generating units, consumption units, energy storage units or virtual power plants.

5 Business Entity View, Nordic exchange of master data process

5.1 Ediel CIM Party Master Data Market Document version 1.1

5.1.1 Class diagram: Party Master Data Market Document contextual model

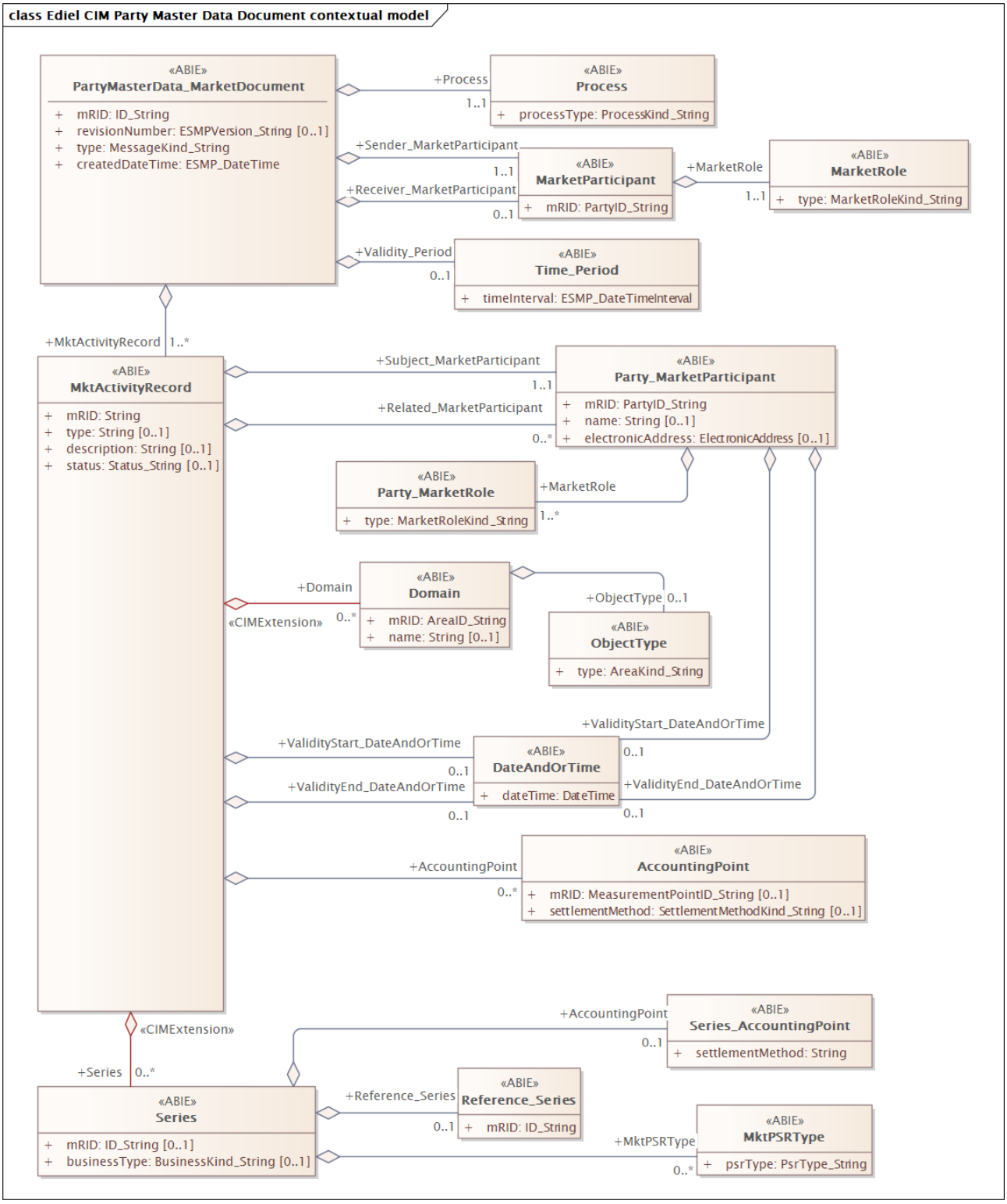

Figure 7: Class diagram: Party Master Data Market Document contextual model

5.1.2 Class diagram: Party Master Data Market Document assembly model

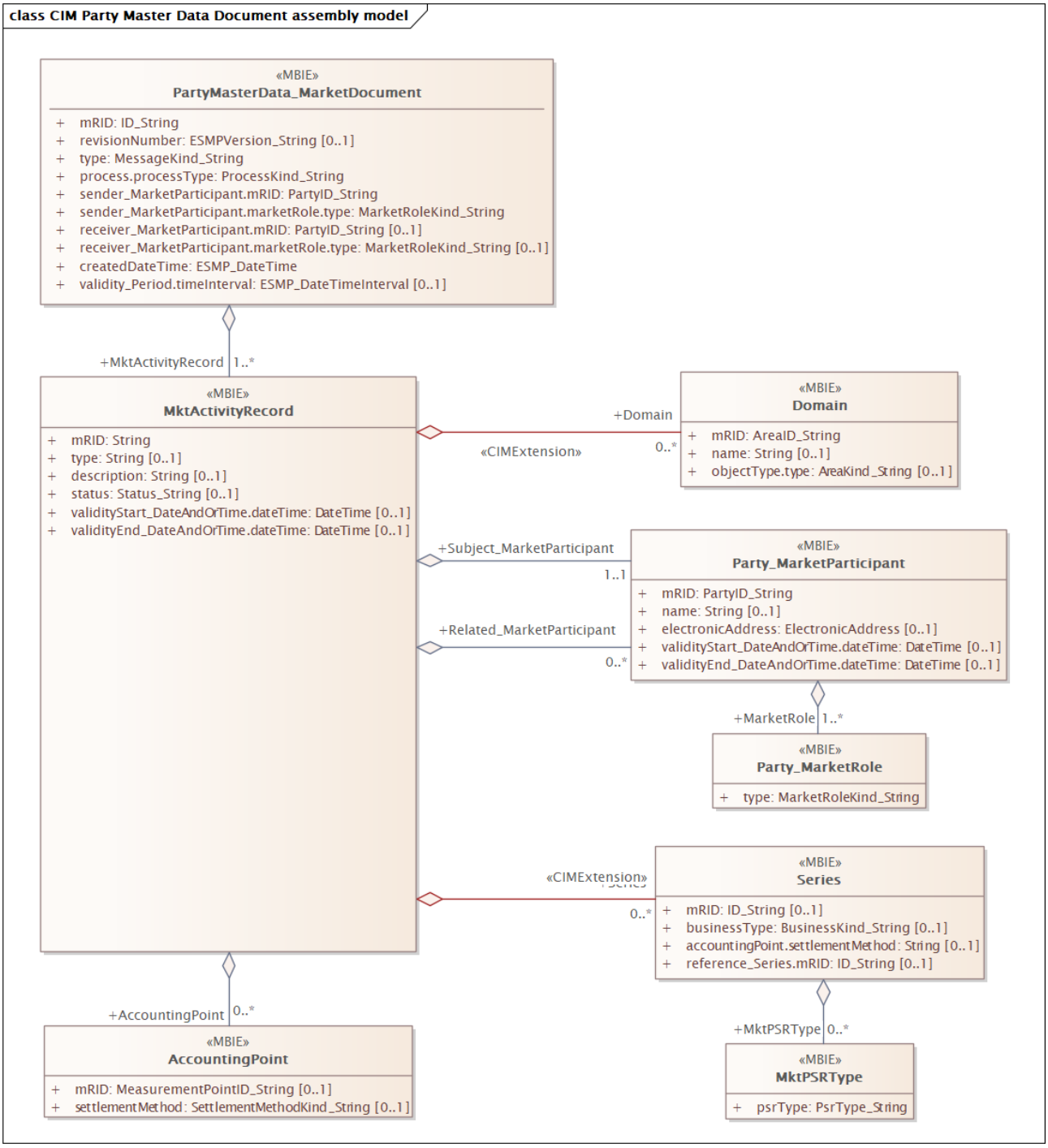

Figure 8: Class diagram: Party Master Data Market Document assembly model

5.1.3 Change log for Party Master Data Market Document version 1.1

1) The process.processType attribute is made required
2) Domain is moved after ValidityStart_DateAndOrTime and ValidityEnd_DateAndOrTime

5.1.4 Needed changes to ESMP and IEC 62325 (need for MRs):

1) Change the cardinality of the association from MktActivityRecord to Process to [0..*] in ESMP.
2) Add an association from MarketParticipant to DateAndOrTime in both TC57CIM/Market and in ESMP.
3) Add an association from MarketParticipant to Process in both TC57CIM/Market and in ESMP.

5.1.5 Attribute usage: Party Master Data Market Document

CIM attribute	Card	Remark
Party Master Data Document	**1**	
mRID	1	Unique identification of the document. Global uniqueness is easily achieved by using a UUID for the mRID. It is strongly recommended to do this.
type	1	*NBS usage:* **A95** Configuration document **Z12** Request change of retailer consumption master data **Z18** Party Relation Master Data Document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z19** Party Relation Master Data Document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z20** Retailer consumption master data document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z21** Retailer consumption master data document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) *Nordic MMS usage:* **A95** Configuration document *NBS business rules:* • **Z12** is used for requests (create and update) to Imbalance Settlement Responsible. • **Z18**, **Z19**, **Z20** and **Z21** are used for reporting from Imbalance Settlement Responsible.
process.processType	1	**A55** Exchange of Master data
sender_MarketParticipant.mRID	1	Identification of the party who is sending the document (and Coding Scheme).
sender_MarketParticipant.marketRole.type	1	*NBS business rules:* **A04** System Operator **A05** Imbalance settlement responsible **A26** Metering Point Administrator (DSO) *Nordic MMS usage:* **A04** System Operator
receiver_MarketParticipant.mRID	0..1	Identification of the party who is receiving the master data (and Coding Scheme) *NBS business rules:* • **Required** unless used for “broadcast” (same document to several recipients).

CIM attribute	Card	Remark
receiver_MarketParticipant.marketRole.type	0..1	*NBS usage:* **A05** Imbalance Settlement Responsible **A08** Balance Responsible Party **A26** Metering Point Administrator (DSO) *Nordic MMS usage:* **A34** Reserve allocator *NBS business rules:* • Required unless used for "broadcast" (same document to several recipients)
createdDateTime	1	Date and time for creation of the document
Validity_Period. timeInterval	0..1	The period for which this Party Master Data document details are valid.
MktActivityRecord	**1..***	*Business rules when sending request for structure change to eSett:* • One MktActivityRecord represents one request • There cannot be more than one MktActivityRecord with the same Subject Party document.
mRID	1	Unique ID of this transaction.
type	0..1	*NBS usage:* **A01** Production **A04** Consumption (general consumption) **A07** Net production/ consumption (combined pumped storage) **A15** Losses **A72** Interruptible Consumption **B27** Pumped **B28** Large installation consumption **B29** MGA imbalance **B36** Production Units own consumption (Only used in Finland) *Nordic MMS business rules:* • Not used
status	0..1	*NBS usage:* **A14** Creation **A15** Update *Nordic MMS usage:* **A09** Cancelled *Nordic MMS business rules:* • **A09** is only used when the party under the given MktActivityRecord is to be deleted. The party cannot be deleted if it already has a user, a portfolio or if it is part of an agent–principal relation.

CIM attribute	Card	Remark
Domain	**0..***	
mRID	1	Unique ID ow a domain, such as a Bidding Zone (BZ) or MGA *NBS business rules:* • Required • Unique ID of the MGA *Nordic MMS business rules:* • Not used
ObjectType.type	0..1	**Znn codes to be updated when published by ENTSO-E:** **Z01** Bidding Zone (BZ) **Z02** Metering Grid Area (MGA) *NBS usage:* **Z02** Metering Grid Area (MGA) *Nordic MMS business rules:* • Not used
Subject_MarketParticipant	**1**	
mRID	1	Unique ID of the Party in question (and Coding Scheme).
MarketRole	**1..***	
type	1	*NBS usage:* **A08** Balance Responsible Party **A12** Energy Supplier (Retailer) *Nordic MMS usage:* **A46** Balancing service provider
name	0..1	*NBS business rules:* • Not used *Nordic MMS business rules:* • Name of the Party in question.
electronicAddress. email1	0..1	*NBS business rules:* • Not used *Nordic MMS business rules* • ECP endpoint + EDX service + allowed e-mail domains. • Multiple allowed e-mail domains are delimited by comma. ECP endpoint, EDX service and allowed e-mail domains as a whole are delimited by semicolon. • Examples: 1) BSP1ENDPOINT;BSP1SERVICE;bsp1.no,bsp1.eu 2) BSP1ENDPOINT;BSP1SERVICE; 3) ;;bsp1.no,bsp1.eu

CIM attribute	Card	Remark
ValidityStart_DateAndOrTime. dateTime	0..1	The validity start date and time for this market participant. *NBS business rules:* • At least one of Validity Start or Validity End must be present, with one exception; The Validity End can be extended to "unlimited" (i.e. no Validity End) by sending a Party Detail with Status = "**A15** Update" and no Validity Start or Validity End. *Nordic MMS business rules:* • Must be present for creation. • For update, the element is optional. If the element is present, NMMS changes the validity of the existing party accordingly. If the element is not present, the validity start remains unchanged.
ValidityEnd_DateAndOrTime. dateTime	0..1	The validity end date and time for this market participant. *NBS business rules:* • At least one of Validity Start or Validity End must be present, with one exception; The Validity End can be extended to "unlimited" (i.e. no Validity End) by sending a Party Detail with Status = "A15 Update" and no Validity Start or Validity End. *Nordic MMS business rules:* • For update, if the value is different from the existing one (including the case that existing value is present and new is unlimited or vice versa), NMMS changes the validity of the existing party accordingly. • Validity of the party must be always equal or wider than the validity of all portfolios of the party and all agent–principal relations where the party participates.
Related_MarketParticipant	**0..***	*Nordic MMS business rules:* • Related_MarketParticipant represents the mRID(s) valid in the specific period of time. • If the sender does not want to change mRID of the party already stored in the NMMS database, this section will be not present. • Multiple records may be sent at the same time.
mRID	1	Unique ID of the Party in question (and Coding Scheme).
MarketRole	**1..***	*Nordic MMS business rules:* • Not used
type	1	*NBS usage:* **A08** Balance Responsible Party **A12** Energy Supplier (Retailer)

CIM attribute	Card	Remark
Series	**0..***	*Nordic MMS business rules:* • Not used
businessType	0..1	*NBS Usage:* **A01** Production **A04** Consumption (general consumption) **A07** Net production/ consumption (combined pumped storage) **A15** Losses **A72** Interruptible Consumption **B27** Pumped **B28** Large installation consumption **B29** MGA imbalance **B36** Production Units own consumption (Only used in Finland)
accountingPoint. settlementMethod	0..1	*NBS Usage:* **E01** Profiled **E02** Non-profiled **E15** Non-profiled with special rules (Flex settled)
reference_Series.mRID	0..1	*NBS business rules:* • Reference to a set of "Party Details" • MEC (Market Entity Connection) ID, see eSett handbook [12]. The element is only used if an entity has several MEC IDs and the MEC ID is needed to identify the correct MEC
Series/ MktPSRType	**0..***	
psrType	1	*NBS Usage:* **B25** Energy storage
AccountingPoint	**0..***	*Nordic MMS business rules:* • Not used
settlementMethod	0..1	**E01** Profiled **E02** Non-profiled **E15** Non-profiled with special rules (Flex settled)

Table 5: Attribute usage: Party Master Data Market Document

5.1.6 Dependency table for the Party Master Data Market Document

Class/attribute	NBS	Nordic MMS
Party Master Data Document		
type	**Z12** Request change of retailer consumption master data **Z18** Party Relation Master Data Document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z19** Party Relation Master Data Document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z20** Retailer consumption master data document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z21** Retailer consumption master data document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive)	**A95** Configuration document.
sender_MarketParticipant. marketRole.type	**A05** Imbalance settlement responsible **A26** Metering Point Administrator (DSO)	**A04** System Operator
receiver_MarketParticipant. marketRole.type	A05 Imbalance Settlement Responsible **A08** Balance Responsible Party **A26** Metering Point Administrator (DSO)	**A34** Reserve Allocator
MktActivityRecord		
type	**A01** Production **A04** Consumption (general consumption) **A07** Net production/ consumption (combined pumped storage) **A15** Losses **A72** Interruptible Consumption **B27** Pumped **B28** Large installation consumption **B29** MGA imbalance **B36** Production Units own consumption (Only used in Finland)	Not used.
status	**A14** Creation **A15** Update	**A09** Cancelled

Class/attribute	NBS	Nordic MMS
	Not used for information notifications	Only used when the party under the given MktActivityRecord is to be deleted
Domain		Not used
ObjectType.type	**Znn codes to be updated when published by ENTSO-E:** **Z02** Metering Grid Area (MGA)	Not used
ValidityStart_DateAndOrTime. dateTime	Optional	Not used
ValidityEnd_DateAndOrTime. dateTime	Optional	Not used
Subject_MarketParticipant		
MarketRole		
type	**A08** Balance Responsible Party **A12** Energy Supplier (Retailer)	**A46** Balancing service provider
name	Not used	Optional
electronicAddress. email1	ECP endpoint + EDX service + allowed e-mail domains.	Not used
Related_MarketParticipant		
MarketRole		
type	**A08** Balance Responsible Party **A12** Energy Supplier (Retailer)	**A08** Balance Responsible Party
ValidityStart_DateAndOrTime. dateTime	Not used	Start of the mRID validity.
ValidityEnd_DateAndOrTime. dateTime	Not used	End of the mRID validity. If the value is not present, the validity end is considered as the last day of the party validity (which may be also unlimited).
Series		
Series/ MktPSRType		
psrType	**B25** Energy storage (Else not used)	

Table 6: Dependency table for the Party Master Data Market Document

5.2 Ediel CIM Portfolio Master Data Market Document version 1.0

5.2.1 Class diagram: Portfolio Master Data Market Document contextual model

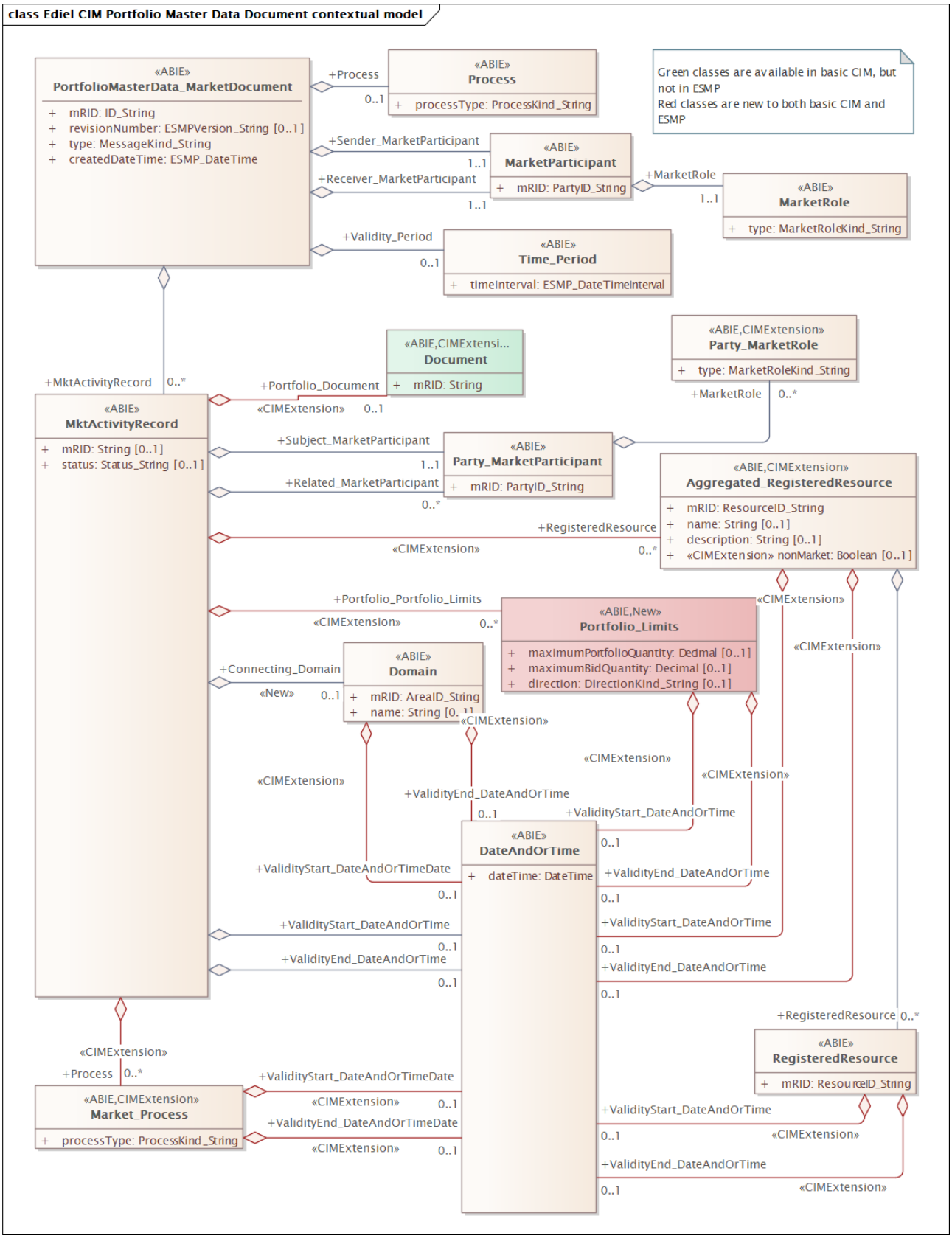

Figure 9: Class diagram: Portfolio Master Data Market Document contextual model

5.2.2 Class diagram: Portfolio Master Data Market Document assembly model

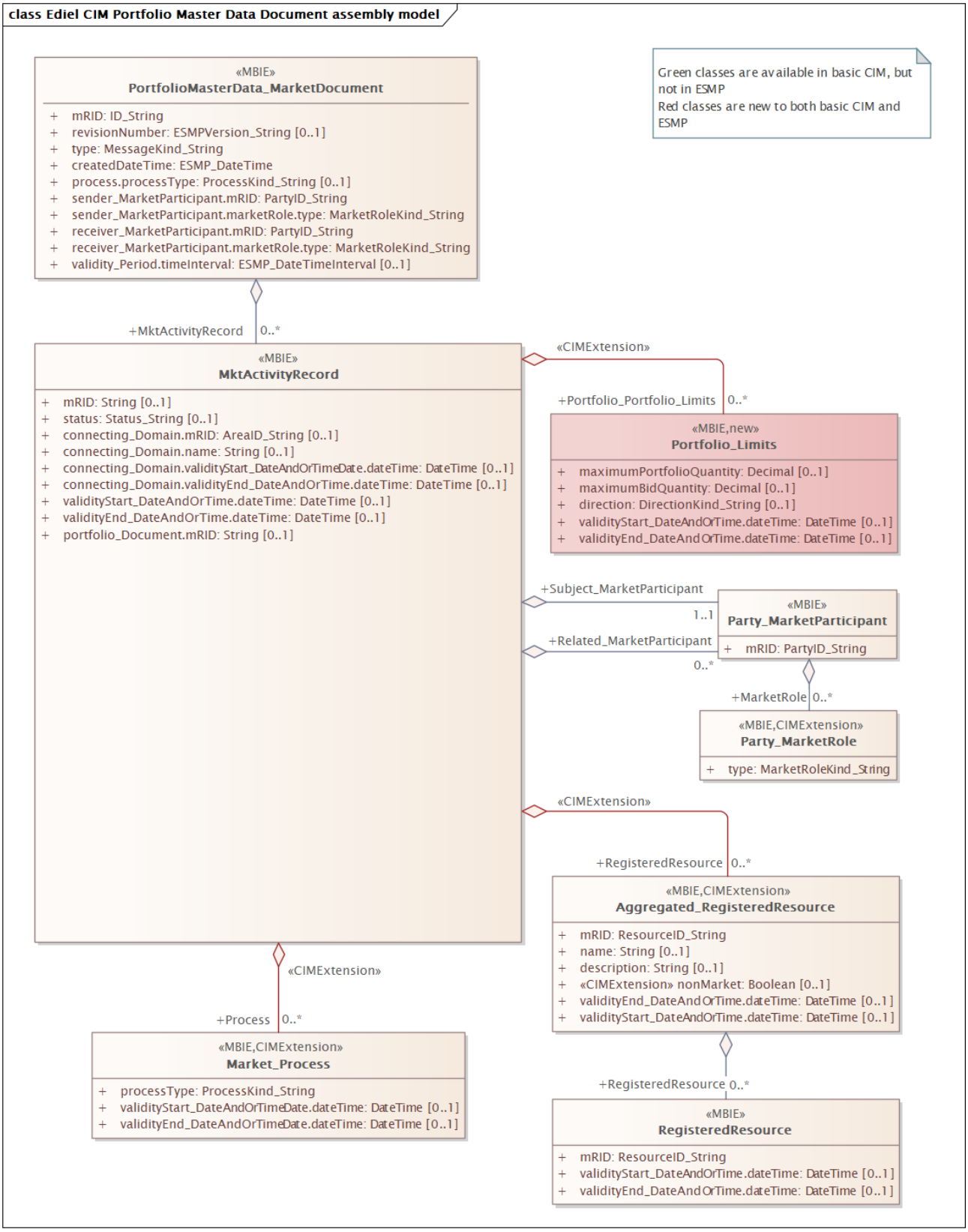

Figure 10: Class diagram: Portfolio Master Data Market Document assembly model

5.2.3 Needed changes to ESMP and IEC 62325 (need for MRs):

1) Addition of a new PortfolioLimits class in both IEC/62325 and ESMP or alternatively replace the PortfolioLimits class with a Quantity and a Direction class.
2) Extension of the ESMP RegisteredResource class:
    - Addition of the attribute nonMarket (Boolean)
        - The attribute is present in the IEC62325/MarketCommon/RegisteredResource class
        - This attributed will be used for the Resource membership/Active attribute from NBM/Nordic MMS.
    - Addition of an association from RegisteredResource to itself named Aggregated_RegisteredResource:
        - There is already an association from RegisteredResource to itself named AggregatedRegisteredResource in the IEC62325/MarketCommon package, hence we need the association from RegisteredResource to itself only in ESMP
3) Addition of associations
    - From MktActivityRecord to Portfolio_Limits
    - From MktActivityRecord to Domain
    - From MktActivityRecord to Aggregated_RegisteredResource
    - From Domain to DateAndOrTime
    - From RegisteredResource to DateAndOrTime
    - From Process to DateAndOrTime
4) Change the cardinality of the association from MktActivityRecord to Process to [0..*]

5.2.4 Attribute usage: Portfolio Master Data Market Document

CIM attribute	Card	Remark
Portfolio Master Data Document	**1**	
mRID	1	Unique identification of the document. Global uniqueness is easily achieved by using a UUID for the mRID. It is strongly recommended to do this.
type	1	**A95** Configuration document
process.processType	1	**A55** Exchange of Master data
sender_MarketParticipant.mRID	1	Identification of the party who is sending the document (and Coding Scheme).
sender_MarketParticipant.marketRole.type	1	**A04** System operator
receiver_MarketParticipant.mRID	1	Identification of the party who is receiving the master data (and Coding Scheme)
receiver_MarketParticipant.marketRole.type	1	**A34** Reserve allocator
createdDateTime	1	Date and time for creation of the document
Validity_Period. timeInterval	0..1	The period for which this Party Master Data document details are valid.
MktActivityRecord	**1..***	One MktActivityRecord class represents one portfolio.
mRID	0..1	Unique ID of this transaction.
status	0..1	**A09** Cancelled **A14** Creation **A15** Update *Nordic MMS business rules:* • The only status processed by Nordic MMS is **A09** (Cancelled), Which result in the portfolio to be deleted. • All other statuses, if present, are ignored.
connecting_Domain.mRID	0..1	Bidding zone of the portfolio. *Nordic MMS business rules:* • The sender TSO must be responsible for the bidding zone.
connecting_Domain.validityStart_DateAndOrTimeDate.dateTime	0..1	The validity start date and time for this domain. *Nordic MMS business rules:* • Must be present for creation. • For update, the element is optional. If the element is present, NMMS changes the validity of the existing portfolio accordingly. If the element is not present, the validity start remains unchanged.

CIM attribute	Card	Remark
connecting_Domain.validityEnd_DateAndOrTimeDate.dateTime	0..1	The validity end date and time for this domain. *Nordic MMS business rules:* • If the value is not present for creation, the validity end is considered as unlimited. • For update, if the value is different from the existing one (including the case that existing value is present and new is unlimited or vice versa), NMMS changes the validity of the existing portfolio accordingly. • Validity of the portfolio must be always equal or shorter than the validity of the assigned party and location(s).
portfolio_Document.mRID	0..1	
Portfolio_Limits	**0..***	*Nordic MMS business rules:* • May be present multiple times. Each record represents one set of portfolio limits. If the sender does not want to change the limits, the section will be not present.
maximumPortfolioQuantity	0..1	*Nordic MMS business rules:* • Maximum total quantity which the **BSP** can bid in the given portfolio for the given direction.
maximumBidQuantity	0..1	*Nordic MMS business rules:* • Maximum quantity which the **BSP** can bid in the given portfolio for the given direction, in single bid.
direction	0..1	The identification of the direction of the capacity product. **A01** Up **A02** Down **A03** symmetric (for FCR only)
validityStart_DateAndOrTime.dateTime	0..1	First day of the validity of the portfolio limits.
validityEnd_DateAndOrTime.dateTime	0..1	Last day of the validity of the portfolio limits. *Nordic MMS business rules:* • The validity must be within the validity of the portfolio. If the value is not present, the validity end is aligned to the last day of the portfolio validity (which may be also unlimited).
Subject_MarketParticipant	**1**	
mRID	1	Unique ID of the BSP owning the portfolio
MarketRole	**1..***	
type	1	**A46** Balancing Service Provider
RegisteredResource	**0..***	*Nordic MMS business rules:* • Each record contains one location assigned to the portfolio. In the case of the update of the existing portfolio, the locations already assigned to the portfolio do not need to be repeated.

CIM attribute	Card	Remark
mRID	1	Unique ID of this Registered Resource or Aggregated Registered Resource. *Nordic MMS business rules:* • Identification of the location associated with the portfolio. The location must be under responsibility of the sender TSO.
validityStart_DateAndOrTime. dateTime	0..1	The validity start date and time for this Registered Resource. *Nordic MMS business rules:* • First day of the validity of the location membership. • Must be present for creation of new location membership. • For update, the element is optional. If the element is present, the system changes the validity of the existing location membership accordingly. If the element is not present, the validity start remains unchanged.
validityEnd_DateAndOrTime.dateTime	0..1	The validity end date and time for this Registered Resource. • Last day of the validity of the location membership. • For creation: If the value is not present, the validity end is considered as unlimited. • For update: If the value is different from the existing one (including the case that existing value is present and new is unlimited or vice versa), the system changes the validity of the existing location membership accordingly. • The validity of the location assignment must be within the validity of the portfolio.
Market_Process	**0..***	
processType	1	**A51** AFRR, A47 = mFRR. *Nordic MMS business rules:* • Must be present once and only once.

Table 7: Attribute usage: Portfolio Master Data Market Document

5.3 Ediel CIM Resource Master Data Market Document

5.3.1 Class diagram: Resource Master Data Market Document contextual model

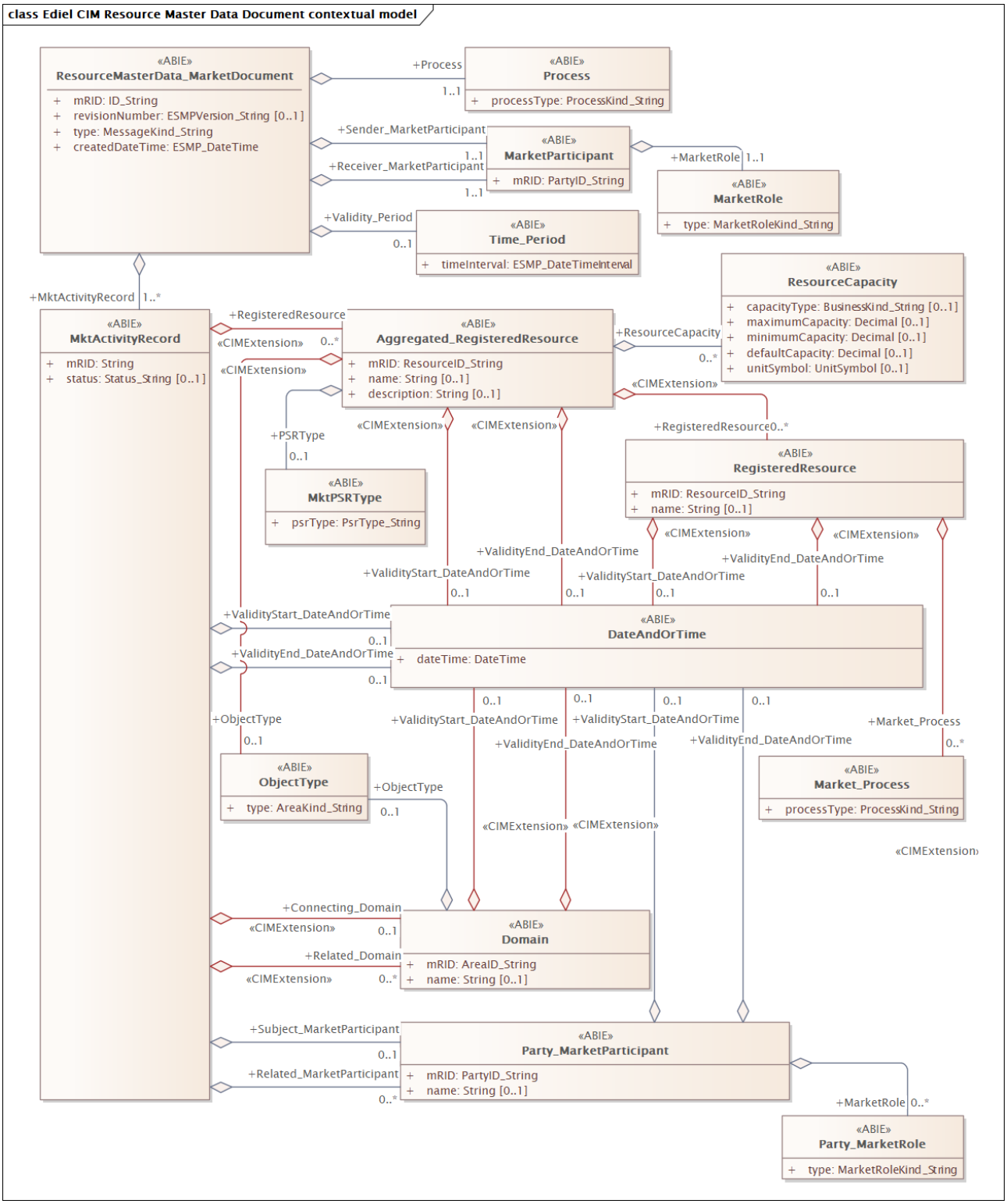

Figure 11: Class diagram: Resource Master Data Market Document contextual model

5.3.2 Class diagram: Resource Master Data Market Document assembly model

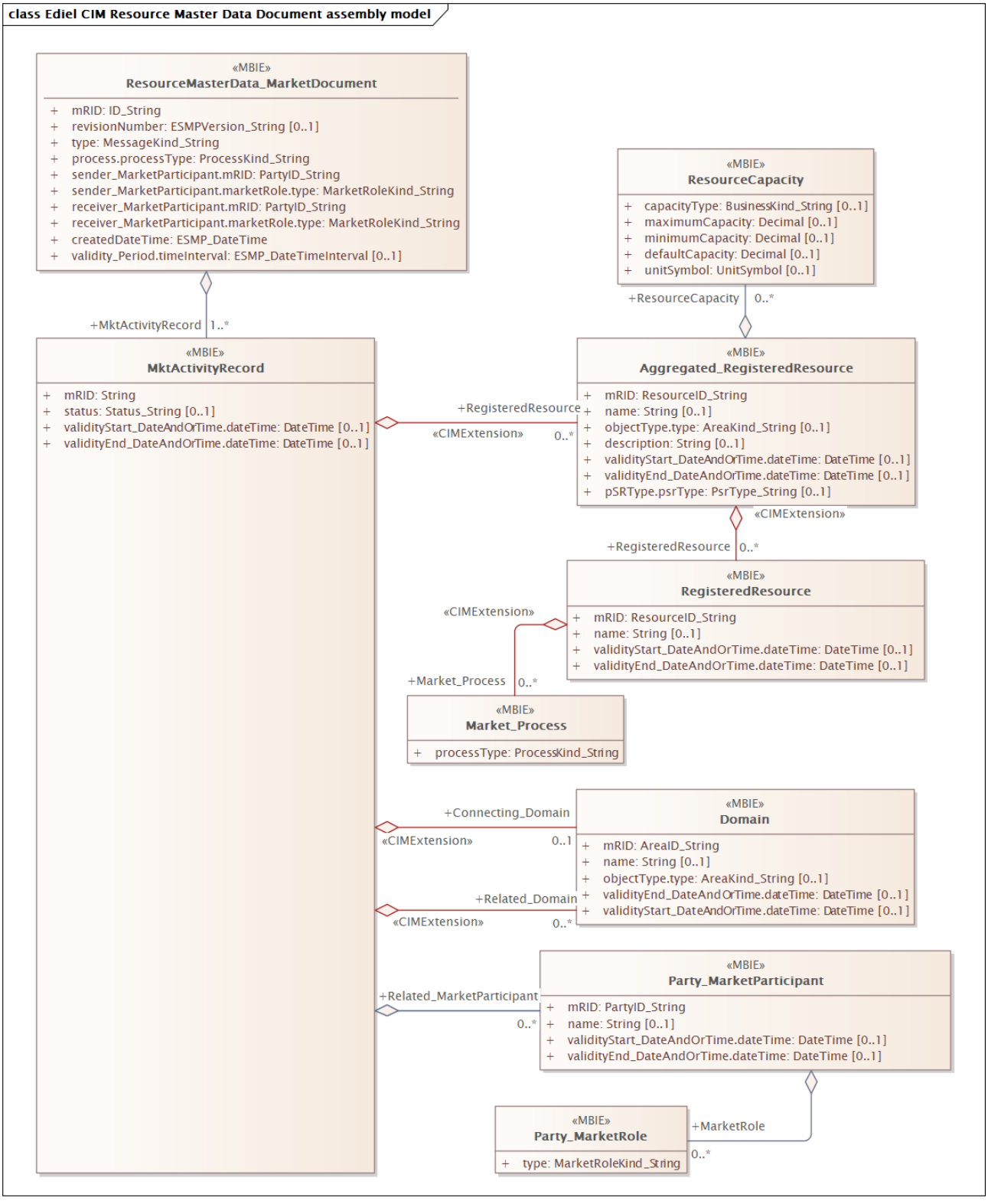

Figure 12: Class diagram: Resource Master Data Market Document assembly model

5.3.3 Change log for Resource Master Data Market Document version 1.1

1) The Registered Resource (the Aggregated_RegisteredResource class that is association from the MktActivityRecord class) is moved from after mRID to after ValidityStart_DateAndOrTime and ValidityEnd_DateAndOrTime (within the MktActivityRecord class).
2) The Market_Process class (the Market_Process class that is association from the RegisteredResource class) is moved from after “name” to after ValidityStart_DateAndOrTime and ValidityEnd_DateAndOrTime (within the RegisteredResource class).
3) The ResourceCapacity class (the ResourceCapacity class that is association from the Aggregated_RegisteredResource class) is moved from after pSRType.psrType to after ValidityStart_DateAndOrTime and ValidityEnd_DateAndOrTime (within the RegisteredResource class).
4) The Party_MarketRole class (the Party_MarketRole class that is association from the Party_MarketParticipant class) is moved from after “name” to after ValidityStart_DateAndOrTime and ValidityEnd_DateAndOrTime (within the Subject_MarketParticipant class and the Related_MarketParticipant class).

5.3.4 Needed changes to ESMP and CIM/Market (IEC 62325) (need for MRs):

1) Add an association from Domain to DateAndOrTime in both CIM/Market and in ESMP.
2) Add an association from RegisteredResource to DateAndOrTime in both CIM/Market and in ESMP.
3) Add an association from RegisteredResource to itself named AggregatedRegisteredResource in ESMP (already present in CIM/Market).
4) Add an association from MarketParticipant to DateAndOrTime in both CIM/Market and in ESMP.
5) Add an association from RegisteredResource to Process in both CIM/Market and in ESMP.
6) Add an ObjectType class, including the “type” attribute. The ObjectType class is already present in the CIM/Grid/Base/Core package and is associated to the Domain class in the CIM/Market/MarketManagement package. The “type” attribute is used for telling the type of Domain.

5.3.5 Attribute usage: Resource Master Data Market Document

Class/attribute	Card.	Code and description
Resource Master Data Document		
mRID	[1]	Unique identification of the document
revisionNumber	[0..1]	Not used
type	[1]	**A95** Configuration document Z13 Request change of Resource master data **Z16** Generator Group Relations document **Z22** Resource master data document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z23** Resource master data document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z30** Request change of Generator Group (Regulation Object) relations **Z31** Production Plan Structure – valid for the whole time-interval **Z32** Production Plan Structure – having a start or end within the validity period *NBS business rules:* • **Z13** is used for requests (create, update and deactivate) to Imbalance Settlement Responsible • **Z16** is only used for updates of BRP and/or Bidding Zone. • *Resource (Production Unit):* ○ **Z22** and **Z23** are used for reporting from Imbalance Settlement Responsible • *Resource Object (Generator Group Relations):* ○ **Z22** and **Z23** contains a list of all "MACs" identifying production plans and are only sent to the System Operators. The documents are without the Generator Group and Generator relations.
Process.processType	[1]	**A55** Exchange of Master data
Sender_MarketParticipant. mRID	[1]	Identification of the party who is sending the document (and Coding Scheme).
Sender_MarketParticipant. MarketRole. type	[1]	**A04** System Operator **A05** Imbalance settlement responsible **A08** Balance Responsible Party **A26** Metering Point Administrator (DSO)
Receiver_MarketParticipant. mRID	[1]	Identification of the party who is receiving the master data (and Coding Scheme)
Receiver_MarketParticipant. MarketRole.type	[1]	**A05** Imbalance Settlement Responsible **A08** Balance Responsible Party **A26** Metering Point Administrator (DSO) **A34** Reserve allocator
createdDateTime	[1]	Date and time for creation of the document

Class/attribute	Card.	Code and description
Validity_Period. timeInterval	[0..1]	The period for which this Resource Master Data document details are valid.
MktActivityRecord	[1..*]	*NBS business rules when requesting a structure change:* • One Resource Details represents one request • There cannot be more than one Resource Details with the same object identification present in one xml file (multiple requests for more than one Production Unit will be rejected) *NBS business rules when distributed from the Imbalance Settlement Responsible:* • Resource Details will repeat for each change of a time-dependent attribute • Resource Details contain all attributes *Nordic MMS business rules:* • The class MktActivityRecord generally records the activity of one market participant in the specified timeframe. In the context of this specific data flow, one or more elements MktActivityRecord may be present in the document. The sender may combine all child elements RegisteredResource under the same element MktActivityRecord or under multiple elements MktActivityRecord.
mRID	[1]	Unique ID of this transaction.
status	[0..1]	**A09** Cancelled **A14** Creation **A15** Update **A16** Deactivation *NBS business rules:* • Only used when requesting a change to an object. Not used for information notifications • Deactivation is used to remove a linked party (Supplier, Retailer or Balance Responsible Party) from a Resource. To reactivate a deactivation, **A15** Update is used • For "**A14** Creation", all time-dependent attributes have the same validity as the Production Unit • An "**A14** Creation" for a Resource already crated, will be rejected • An "**A15** Update", for a not existing Resource, will be rejected • An "**A16** Deactivation", for an already deactivated Resource, will be rejected *Nordic MMS business rules:* • The only status processed by Nordic MMS is **A09** (Cancelled). If such status is present, the locations under the given market activity record is to be deleted. The location cannot be deleted if it is part of a portfolio of a bottleneck group. • All other statuses, if present, are ignored.
validityStart_DateAndOrTime. dateTime	[0..1]	Date Time *NBS business rules:* • At least one of Validity Start or Validity End must be present, except for Status = "**A15** Update", for not time-dependent attributes (Resource Name and Asset Type)

Class/attribute	Card.	Code and description
validityEnd_DateAndOrTime. dateTime	[0..1]	Date Time *NBS business rules:* • At least one of Validity Start or Validity End must be present, except for Status "**A15** Update" for not time-dependent attributes (Resource Name and Asset Type)
RegisteredResource	[0..*]	
mRID	[1]	Unique ID of the Resource (Generator Group) in question .
name	[0..1]	Name of the Resource (Generator Group) in clear text. *NBS business rules:* • Resource Name and Asset Type for Production Units are not time-dependent; hence Validity Start and Validity End are NOT used when updating these attributes.
pSRType.psrType	[0..1]	**A05** Load (replaces **Z07**) **B14** Nuclear **B16** Solar **B18** Wind offshore **B19** Wind onshore (replaces **Z05**) **B20** Other production **B25** Energy storage **B31** Hydro unspecified (replaces **Z06**) **B37** Thermal unspecified (replaces **Z04**) **Z04** Thermal **Z05** Wind **Z06** Hydro **Z07** Consumption *NBS business rules:* • Resource Name and Asset Type for Production Units are not time dependent; hence Validity Start and Validity End are NOT used when updating these attributes. • Not required when updating Resource (Production Units)
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules for Resource (Production Unit):* • At least one of Validity Start or Validity End must be present, except for Status = "**A15** Update", for not time-dependent attributes (Resource Name and Asset Type) *NBS business rules for Resource Object (Generator Group Relations):* • At least one of Validity Start or Validity End must be present. *Nordic MMS business rules:* • Must be present for creation. • For update, the element is optional. If the element is present, NMMS changes the validity of the existing location accordingly. If the element is not present, the validity start remains unchanged.

Class/attribute	Card.	Code and description
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules Resource (Production Unit):* • At least one of Validity Start or Validity End must be present, except for Status = "A15 Update", for not time-dependent attributes (Resource Name and Asset Type) *NBS business rules Resource Object (Generator Group Relations):* • At least one of Validity Start or Validity End must be present. *Nordic MMS business rules:* • If the value is not present for creation, the validity end is considered as unlimited. • For update, if the value is different from the existing one (including the case that existing value is present and new is unlimited or vice versa), NMMS changes the validity of the existing location accordingly. • Validity of the location must be always equal or wider than the validity of all portfolios and all bottleneck groups where the location participates.
ResourceCapacity	[0..*]	
capacityType	[0..1]	**Z01** Normal **Z02** Minor *NBS business rules:* • Production Type is only used for creation of Production Units and for structure information sent from Imbalance Settlement Responsible to Market Parties, i.e. the Production Type cannot be changed
maximumCapacity	[0..1]	*NBS business rules:* • Not used.
minimumCapacity	[0..1]	*NBS business rules:* • Not used.
defaultCapacity	[0..1]	Capacity of the Resource. *NBS business rules:* • Not used for Generator Groups.
unitSymbol	[0..1]	**MAW** Megawatt *NBS business rules:* • Not used for Generator Groups.
RegisteredResource	[0..*]	*NBS business rules:* • Only used for "Generator Group – Generator Relations", i.e. Document Type **Z30**
mRID	[1]	Unique ID of the Resource (Generator) in question
name	[0..1]	*NBS business rules:* • Not used.

Class/attribute	Card.	Code and description
validityStart_DateAndOrTime . dateTime	[0..1]	*NBS business rules:* • Not used.
validityStart_DateAndOrTime . dateTime	[0..1]	*NBS business rules:* • Not used.
Market_Process	[0..*]	
processType	[1]	*NBS business rules:* • Not used.
Connecting_Domain	[0..1]	
mRID	[1]	*NBS business rules:* • Not used.
name	[0..1]	*NBS business rules:* • Not used.
objectType.type	[0..1]	*NBS business rules:* • Not used.
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules:* • Not used.
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules:* • Not used.
Related_Domain	[0..1]	*NBS business rules:* • Required for Generators • Required for Generator Groups in Sweden • May be repeated if a Generator or a Generator group covers more than one area • Related Area is only used for creation of Production Units and for structure information sent from Imbalance Settlement Responsible to Market Parties, i.e. the Related Area cannot be changed
mRID	[1]	Unique ID of the MGA or BZ (and Coding Scheme)
name	[0..1]	*NBS business rules:* • Not used.
objectType.type	[0..1]	**Znn codes to be updated when published by ENTSO-E:** **Z01** Bidding Zone (BZ) **Z02** Metering Grid Area (MGA)
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules for Resource (Production Unit):* • Not Used *Resource Object (Generator Group Relations):* • At least one of Validity Start or Validity End must be present.

Class/attribute	Card.	Code and description
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules for Resource (Production Unit):* • Not Used *NBS business rules for Resource Object (Generator Group Relations):* • At least one of Validity Start or Validity End must be present.
Subject_MarketParticipant	[0..1]	
mRID	[1]	Unique ID of the Retailer or Balance Responsible Party in question (and codingScheme)
name	[0..1]	*NBS business rules:* • Not used.
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules for Resource (Production Unit):* • Not Used *NBS business rules for Resource Object (Generator Group Relations):* • At least one of Validity Start or Validity End must be present.
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules for Resource (Production Unit):* • Not Used *NBS business rules for Resource Object (Generator Group Relations):* • At least one of Validity Start or Validity End must be present.
MarketRole	[0..*]	
type	[1]	*Role Type enumeration:* **A08** Balance Responsible Party **A12** Energy Supplier
Related_MarketParticipant	[0..*]	
mRID	[1]	*NBS business rules:* • Not used.
name	[0..1]	*NBS business rules:* • Not used.
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules:* • Not used.
validityStart_DateAndOrTime. dateTime	[0..1]	*NBS business rules:* • Not used.
MarketRole	[0..*]	
type	[1]	*NBS business rules:* • Not used.

Table 8: Attribute usage: Resource Master Data Market Document

5.3.6 Dependency table for the Resource Master Data Market Document

Class/attribute	NBS	Nordic MMS
Resource Master Data Document		
type	**Z13** Request change of Resource master data **Z16** Generator Group Relations document **Z22** Resource master data document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z23** Resource master data document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) **Z30** Request change of Generator Group (Regulation Object) relations **Z31** Production Plan Structure – valid for the whole time-interval **Z32** Production Plan Structure – having a start or end within the validity period	**A95** Configuration document
Sender_MarketParticipant. MarketRole. type	**A05** Imbalance settlement responsible **A08** Balance Responsible Party **A26** Metering Point Administrator (DSO)	**A04** System Operator
Receiver_MarketParticipant. MarketRole.type	**A05** Imbalance Settlement Responsible **A08** Balance Responsible Party **A26** Metering Point Administrator (DSO)	**A34** Reserve allocator
MktActivityRecord		
status	**A14** Creation **A15** Update **A16** Deactivation	**A09** Cancelled (Else not used)
RegisteredResource		
pSRType.psrType	**A05** Load (replaces **Z07**) **B14** Nuclear **B16** Solar **B18** Wind offshore **B19** Wind onshore (replaces **Z05**) **B20** Other production **B25** Energy storage **B31** Hydro unspecified (replaces **Z06**) **B37** Thermal unspecified (replaces **Z04**) **Z04** Thermal **Z05** Wind **Z06** Hydro **Z07** Consumption	
ResourceCapacity		Not used.

Class/attribute	NBS	Nordic MMS
capacityType	**Z01** Normal **Z02** Minor	Not used.
defaultCapacity	Not used for Generator Groups.	Not used.
unitSymbol	**MAW** Megawatt Not used for Generator Groups	Not used.
RegisteredResource	Only used for "Generator Group – Generator Relations", i.e. Document Type **Z30**	Not used.
Related_Domain	• NBS business rules: • Required for Generators • Required for Generator Groups in Sweden • May be repeated if a Generator or a Generator group covers more than one area • Related Area is only used for creation of Production Units and for structure information sent from Imbalance Settlement Responsible to Market Parties, i.e. the Related Area cannot be changed.	Not used.
objectType.type	**Znn codes to be updated when published by ENTSO-E:** **Z01** Bidding Zone (BZ) **Z02** Metering Grid Area (MGA)	Not used.
Subject_MarketParticipant	Only used for Resource Object (Generator Group Relations):	Not used.
MarketRole		Not used.
type	**A08** Balance Responsible Party **A12** Energy Supplier	Not used.

Table 9: Dependency table for the Resource Master Data Market Document

5.4 Area Configuration Document

5.4.1 Class diagram Area Configuration Document

5.4.2 Class Diagram: Area Configuration Market Document contextual model

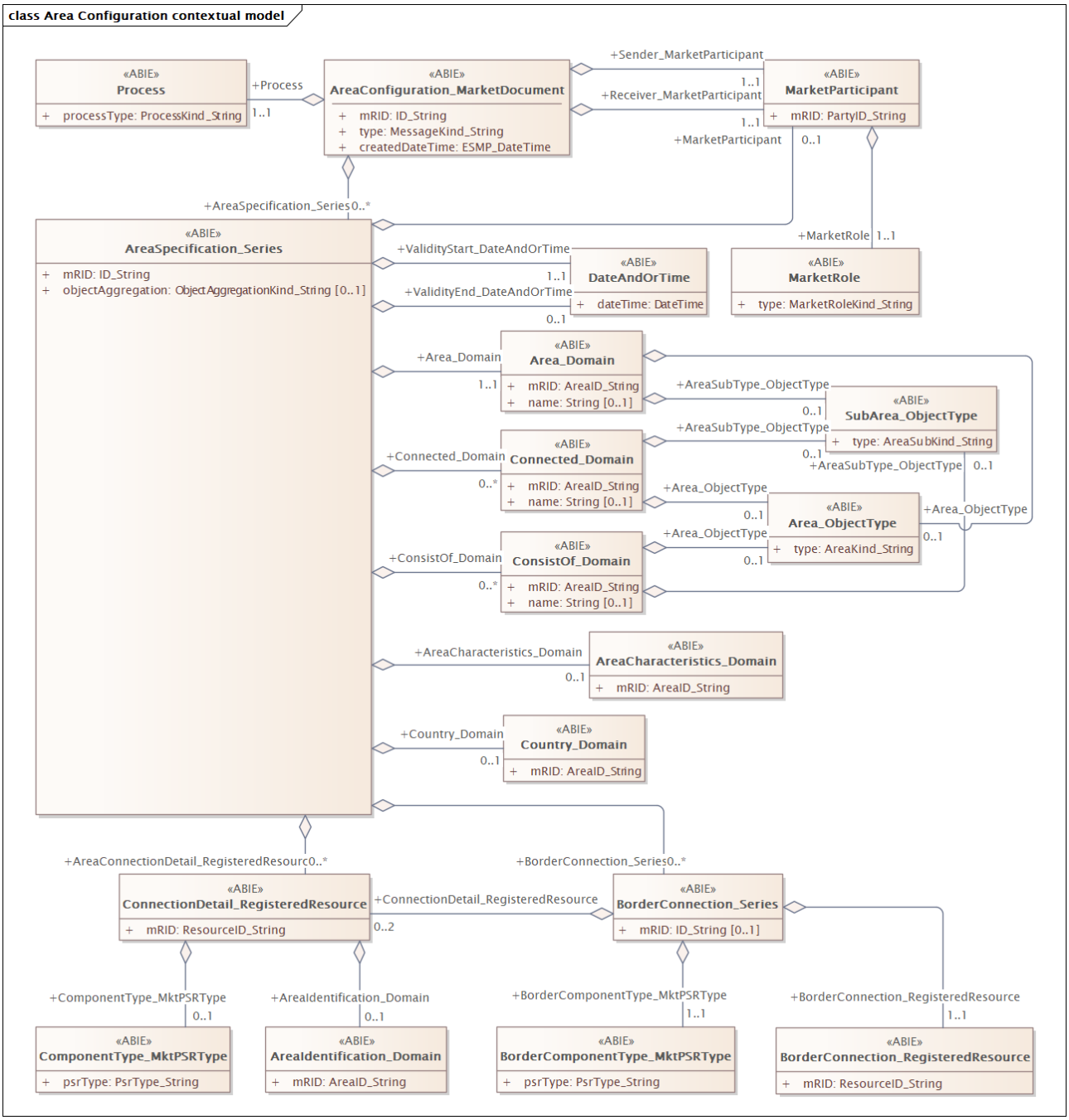

Figure 13 Class diagram: Area Configuration Market Document contextual model

5.4.3 Class Diagram: Area Configuration Market Document assembly model

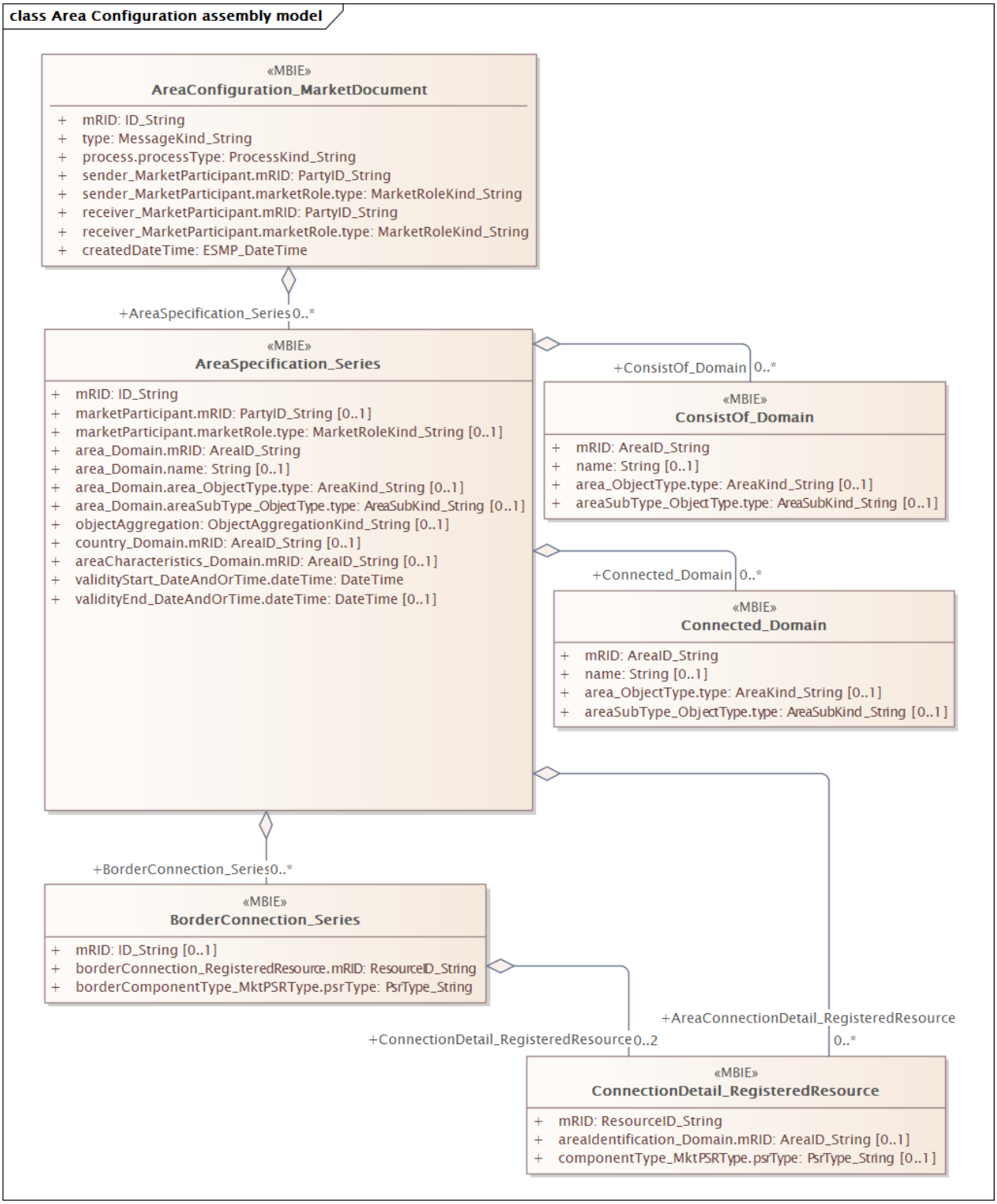

Figure 14 Class diagram: Area Configuration Market Document assembly model

5.4.4 Attribute usage: Area Configuration Market Document

Class/attribute	Card.	Code and description
AreaConfiguration_MarketDocument	[1]	
mRID	[1]	Unique identification of the document
type	[1]	**B35** Area Configuration document
Process.processType	[1]	**A55** Master data
Sender_MarketParticipant.mRID	[1]	Identification of the party who is sending the document (and codingScheme)
sender_MarketParticipant.marketRole.type	[1]	**A04** System Operator
Reciever_MarketParticipant.mRID	[1]	Identification of the party who is receiving the master data (and codingScheme)
receiver_MarketParticipant.marketRole.type	[1]	**A05** Imbalance Settlement Responsible
createdDateTime	[1]	Date and time for creation of the document
AreaSpecification_Series	[1..*]	
mRID	[1]	Unique ID of this transaction.
marketParticipant.mRID	[0..1]	The unique identification of the System Operator responsible for the area or domain
marketParticipant.market Role.type	[0..1]	**A04** System Operator
area_Domain.mRID	[0..1]	Unique ID of the area
area_Domain.name	[0..1]	Name of the BZ or MGA in clear text
area_Domain.area_ObjectType.type	[1]	**Znn codes to be updated when published by ENTSO-E:** **Z01** Bidding Zone (BZ) **Z02** Metering Grid Area (MGA)
area_Domain.areaSubType_ObjectType.type	[0..1]	**Znn codes to be updated when published by ENTSO-E:** **Z01** Regional **Z03** Industrial **Z04** Distribution **Z05** Non-concessional **Z06** Production **Z07** Transmission (main/central grid)
country_Domain.mRID	[0..1]	**DK** Denmark **FI** Finland **NO** Norway **SE** Sweden codingScheme = **A03** (ISO)
validityEnd_DateAndOrTime.dateTime	[1]	Validity start date and time
validityEnd_DateAndOrTime.dateTime	[0..1]	Validity end date and time
ConsistOf_Domain	[0..*]	
mRID	[1]	Unique identification of the area

Class/attribute	Card.	Code and description
area_ObjectType.type	[0..1]	**Znn codes to be updated when published by ENTSO-E:** **Z02** Metering Grid Area (MGA)
Connected_Domain	[0..*]	
mRID	[1]	Unique identification of the connected area
area_ObjectType.type	[0..1]	**Znn codes to be updated when published by ENTSO-E:** **Z01** Bidding Zone (BZ) **Z02** Metering Grid Area (MGA)

Table 10: Attribute usage: Area Configuration Market Document

5.5 Ediel Request Trade Structure Document

5.5.1 Class diagram: Ediel CIM Request Trade Structure Market Document

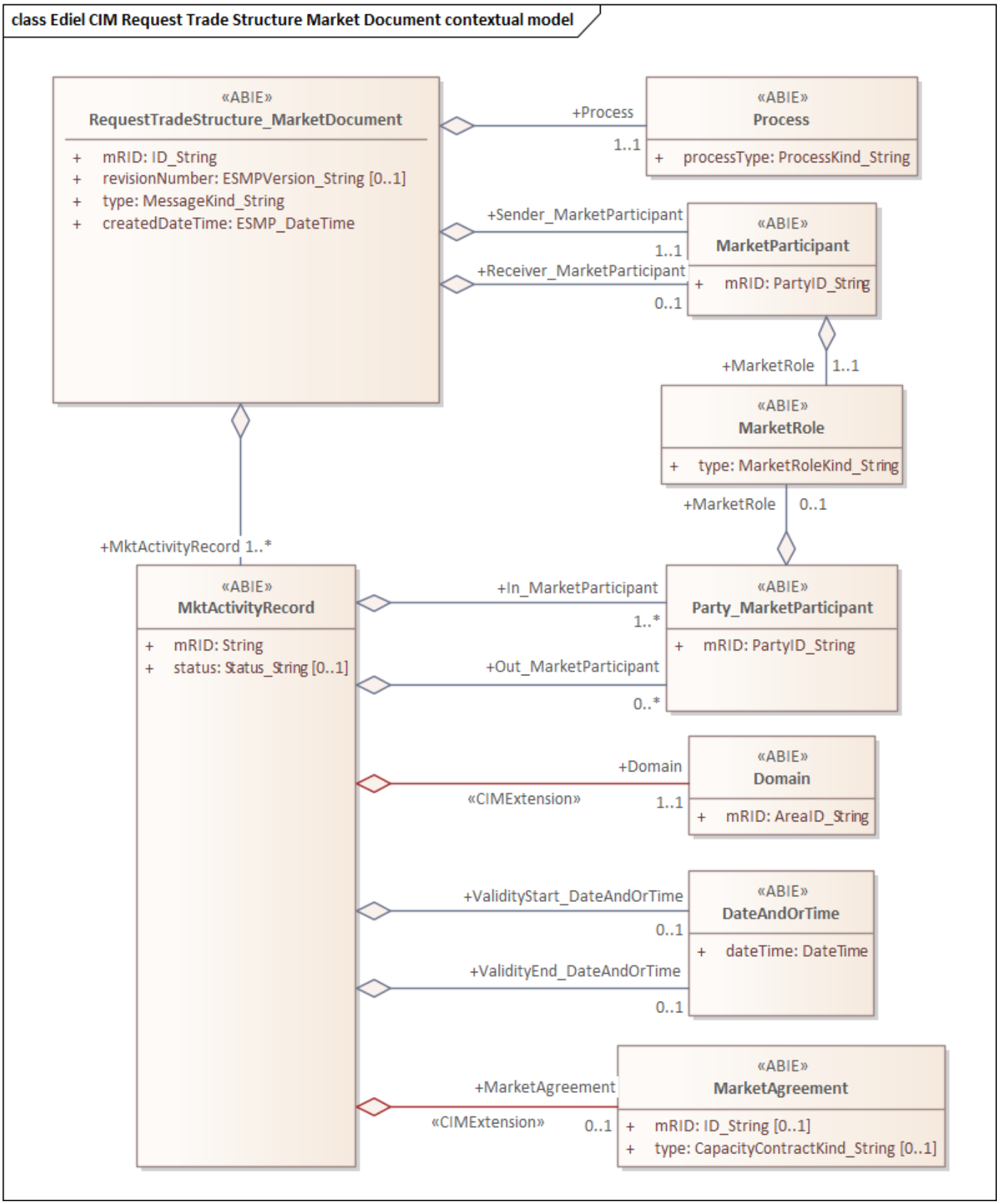

Figure 15 Class diagram: Ediel CIM Request Trade Structure Market Document

5.5.2 Class Diagram: Ediel CIM Notify Trade Structure Market Document

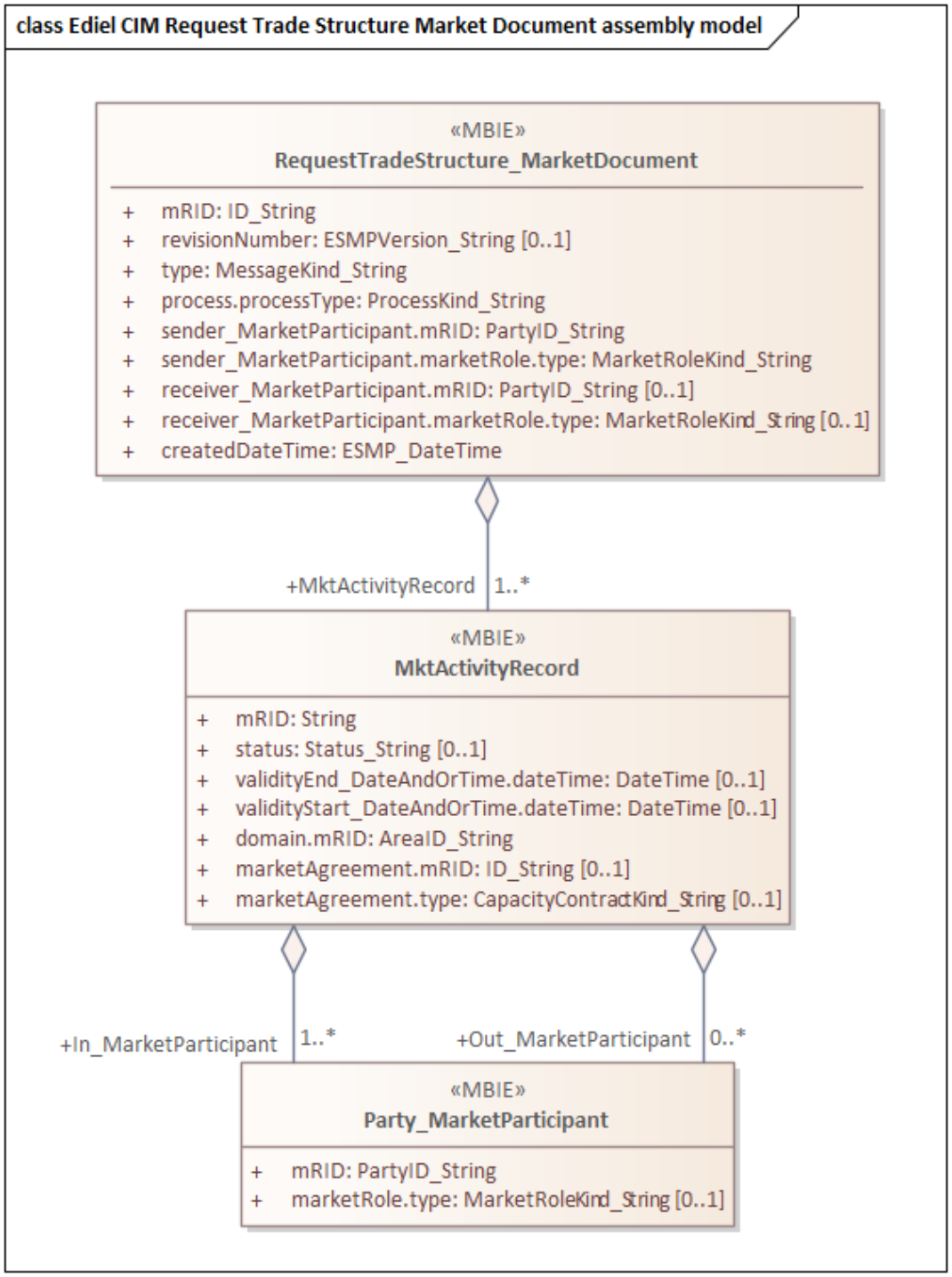

Figure 16 Class diagram: Ediel CIM Notify Trade Structure Market Document

5.5.3 Attribute usage: Ediel Request Bilateral Trade Structure Document

Class/attribute	Card.	Code and description
RequestTradeStructure_ MarketDocument	[1]	
mRID	[1]	Unique identification of the document
type	[1]	**Z24** Request Bilateral Trade Structure Document **Z25** Request PX Trade Structure Document
Process.processType	[1]	**Z07** Master data
Sender_MarketParticipant.mRID	[1]	Identification of the party who is sending the document (and codingScheme)
sender_MarketParticipant.marketRole.type	[1]	**A08** Balance Responsible Party
Reciever_MarketParticipant.mRID	[1]	Identification of the party who is receiving the master data (and codingScheme)
receiver_MarketParticipant.marketRole.type	[1]	**A05** Imbalance Settlement Responsible
createdDateTime	[1]	Date and time for creation of the document
RequestTradeStructure_TimeSeries	[1..*]	
mRID	[1]	Unique ID of this transaction.
MarketObjectStatus.status	[0..1]	**A14** Creation **A15** Update **A16** Deactivation (delete)
validityStart_DateAndOrTime.dateTime	[0..1]	Date Time **Note:** At least one of Validity Start or Validity End must be present
validityEnd_DateAndOrTime.dateTime	[0..1]	Date Time **Note:** At least one of Validity Start or Validity End must be present
domain.mRID	[1]	The Bidding Zone (BZ) where trade can take place.
marketAgreement.mRID	[0..1]	MEC (Market Entity Connection) ID
marketAgreement.type	[0..1]	Power Exchange market, i.e.: **A01** Daily (Day Ahead) **A06** Long term contract **A07** Intraday contract
In_MarketParticipant	[1..2]	
mRID	[1]	The identification of the In Party (and codingScheme).
marketRole.type	[1]	The role of the in party, i.e. **A08** Balance Responsible Party **A47** Energy Trader
Out_MarketParticipant	[1..2]	
mRID	[1]	The identification of the Out Party (and codingScheme).
marketRole.type	[1]	The role of the party **A08** Balance Responsible Party **A47** Energy Trader

Table 11: Attribute usage: Ediel Request Bilateral Trade Structure Document