



# **Business Requirements for Alignment of area characteristics**

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## CONTENT

### Table of Contents

A.	About this document .....	4
A.1.	Comments to the ebIX® model .....	4
A.2.	References .....	4
A.2.1.	Standards .....	4
A.2.2.	ebIX® Documents .....	5
A.3.	Main changes since last version .....	5
1.	Business Domain View: Alignment of area characteristics.....	6
1.1.	Introduction .....	6
1.2.	Align area characteristics (Business Process UseCase).....	7
1.2.1.	Description .....	7
1.2.2.	Manage area characteristics (Business Process UseCase) .....	8
1.2.3.	Manage area relations (Business Process UseCase) .....	15
1.3.	Business Partner View .....	22
1.3.1.	Business Partners for alignment of area characteristics .....	22
1.4.	Business Entity View .....	23
1.4.1.	Request change area characteristics (Class Diagram) .....	24
1.4.2.	Confirm request change area characteristics (Class Diagram).....	26
1.4.3.	Reject request change area characteristics (Class Diagram).....	28
1.4.4.	Request area characteristics (Class Diagram) .....	30
1.4.5.	Area characteristics (Class Diagram .....	32
1.4.6.	Reject request area characteristics (Class Diagram) .....	34
1.4.7.	Request change area relations (Class Diagram) .....	35
1.4.8.	Confirm request change area relations (Class Diagram) .....	37
1.4.9.	Reject request change area relations (Class Diagram).....	39
1.4.10.	Request area relations (Class Diagram).....	41

1.4.11. Area relations (Class Diagram) .....	43
1.4.12. Reject request area relations (Class Diagram) .....	45
Appendix A. Header and Context information for the class diagrams .....	47
A.1. Header and Context Information attributes definitions.....	47
A.2. Request change area characteristics .....	47
A.3. Confirm request change area characteristics .....	48
A.4. Reject request change area characteristics .....	48
A.5. Request area characteristics.....	49
A.6. Area characteristics.....	49
A.7. Reject request area characteristics.....	50
A.8. Request change area relations .....	50
A.9. Confirm request change area relations .....	51
A.10. Reject request change area relations.....	51
A.11. Request area relations.....	52
A.12. Area relations .....	52
A.13. Reject request area relations .....	53

## A. About this document

This document is a Business Requirements Specification for Alignment of area characteristics, within the structuring process of the European energy market. In this BRS we use business terms for the actors, and in chapter 1.3 we map them to the terms used in the Harmonised Role Model from ENTSO-E, ebIX® and EFET [2].

The alignment of area characteristics is a process where a party (Responsible Party) can notify changes to the characteristics of an area, such as a Metering Grid Area (MGA), Bidding Zone or Scheduling Area, or to the relations between the areas. At the end, an area is always a collection of Metering Points.

As a general introduction ebIX® has published a separate document “Introduction to ebIX® Business Requirements and Business Information Models” [4]. The introduction also includes the generic model elements that are not specific for a business process.

In line with UN/CEFACT Modelling Methodology version 2 (UMM-2) ebIX® defines the business requirements as the first step in modelling energy market processes. This document specifies an UMM Business Requirements View, which consist of the three sub views: Business Domain View, Business Partner View and Business Entity View.

The Business Information Model is in turn the basis for the creation of XML schema’s and is the basis for the specification of web services. The Business Information Model and the syntax specific structures are specified by the “ebIX® Technical Committee” (ETC).

Since the ebIX® model is open for national customisation, some attributes are added as optional for usage for regional/national customisation. If used, these attributes must be specified nationally.

### A.1. Comments to the ebIX® model

These Business Requirements, as part of the ebIX® Model for the European Energy Market (see [4]), are made in a project with the members of EBG, see [www.ebix.org](http://www.ebix.org). For comments to the document please contact the [secretary@ebix.org](mailto:secretary@ebix.org).

### A.2. References

#### A.2.1. Standards

- [1] UML Profile for UN/CEFACT’s Modelling Methodology (UMM), Base Module 2.0., (<http://www.unece.org/tradewelcome/un-centre-for-trade-facilitation-and-e-business-uncefact/outputs/technical-specifications/uncefact-modelling-methodology-umm.html>);
- [2] UML Profile for UN/CEFACT’s Modelling Methodology (UMM), Foundation Module, 2.0. (<http://www.unece.org/tradewelcome/un-centre-for-trade-facilitation-and-e-business-uncefact/outputs/technical-specifications/uncefact-modelling-methodology-umm.html>);
- [3] The Harmonized Role Model (for the Electricity Market) by ebIX®, ENTSO-E, and EFET ([www.ebix.org](http://www.ebix.org)).

### A.2.2. ebIX® Documents

- [4] Introduction to ebIX® Business Requirements and Business Information Models ([www.ebix.org](http://www.ebix.org));
- [5] Recommended Identification Schemes for the European Energy Market ([www.ebix.org](http://www.ebix.org));
- [6] ebIX® code lists ([www.ebix.org](http://www.ebix.org)).

### A.3. Main changes since last version

Old	New	Clarification	Date
<b>Version 1.0</b>			
	1.0.A		20180409
1.0.A	1.0.B	Removal of names and email addresses.	20180605
<b>Version 2.0</b>			
1.0.B	2.0.A	Recast of BRS.	20201019
2.0.A	2.0.B	<ul style="list-style-type: none"><li>Update of roles to be in line with the ebIX®, EFET and ENTSO-E Harmonised Electricity Market Role Model version 2022-01.</li><li>Hiding attributes from the root class in Appendix A, to make the class diagrams more readable.</li><li>Addition of clarifying text in chapter A.</li></ul>	20230815

## 1. Business Domain View: Alignment of area characteristics

### 1.1. Introduction

This BRS is based on the subset of the Harmonised Role Model from ebIX®, EFET and ENTSO-E [2] shown below, but with addition of the new role Area Administrator and the generic «BusinessPartner» Content Responsible Party.

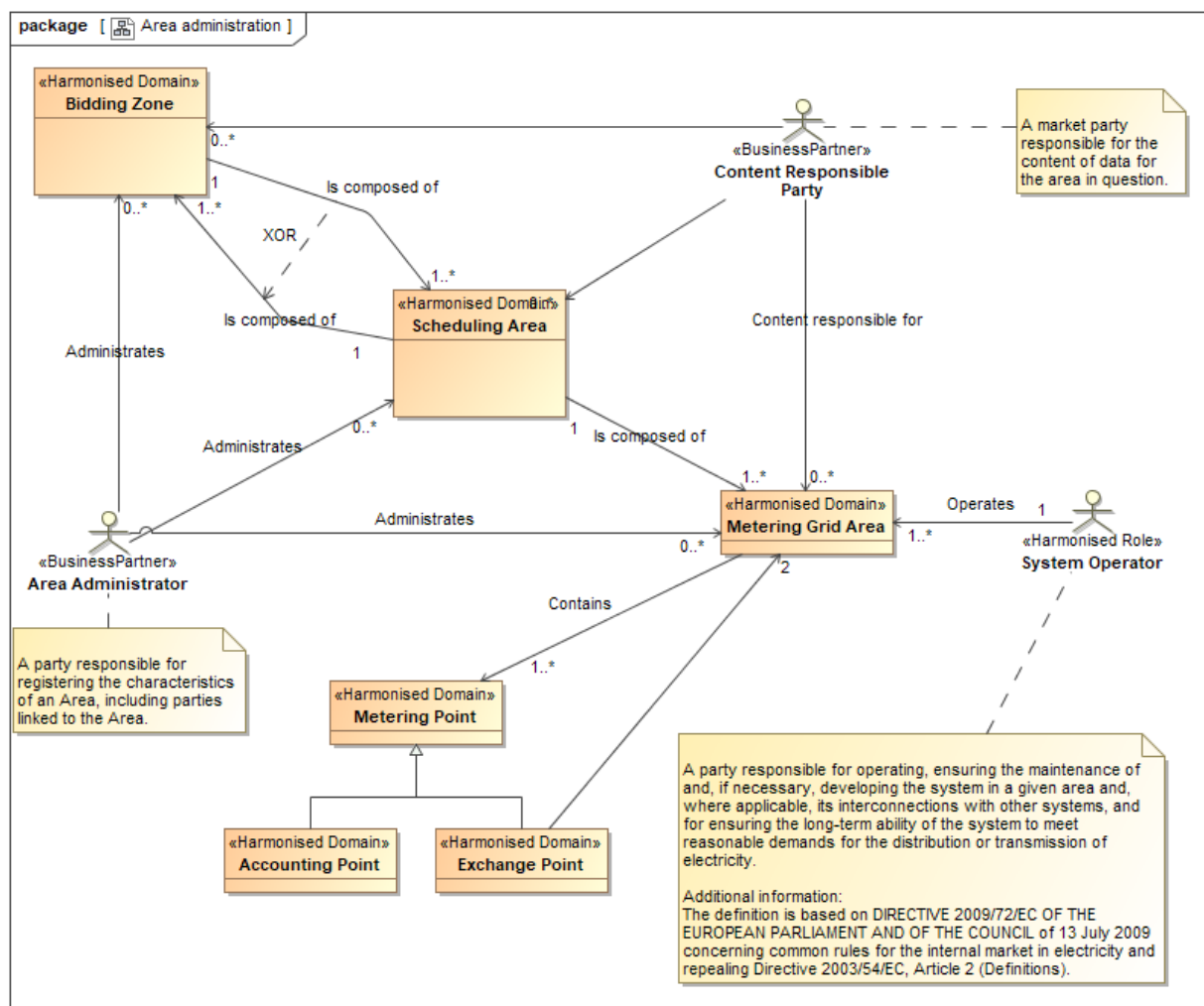


Figure 1 Area structure

## 1.2. Align area characteristics (Business Process UseCase)

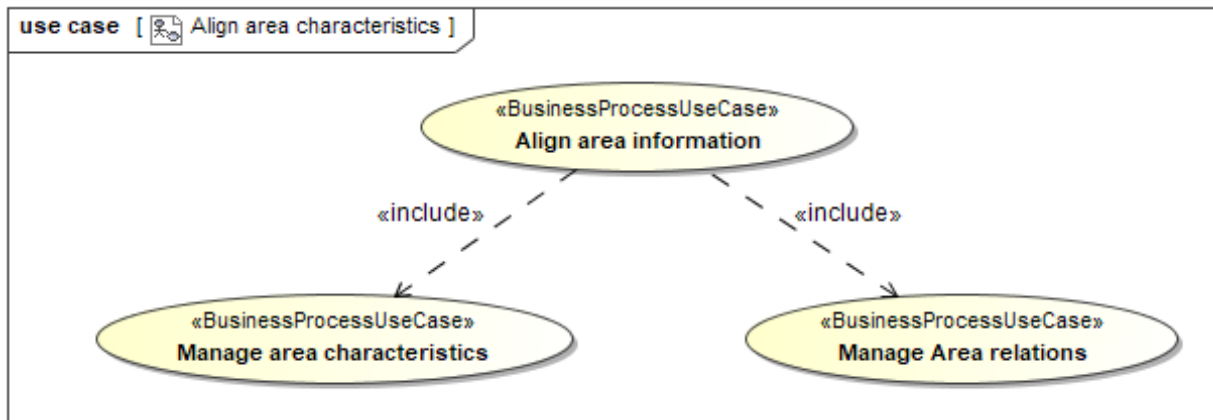


Figure 2 UseCase: Align area characteristics

### 1.2.1. Description

UseCase description: Align area characteristics	
definition	This is the process where an Area Administrator processes request for changes and notifies administrated changes in the characteristics of an area or in the relations between areas.
beginsWhen	When the Content Responsible Party, i.e. Grid Company, needs to change area characteristics or area relations.
preCondition	There is a need to update the area information or if area information is requested.
endsWhen	When the Entitled Party (or Parties) has received area characteristics or area relations.
postCondition	The area characteristics and/or area relations are aligned between the Content Responsible Party and the Area Administrator and the Entitled Party (or Parties).
exceptions	None
actions	Not relevant at this level.

### 1.2.2. Manage area characteristics (Business Process UseCase)

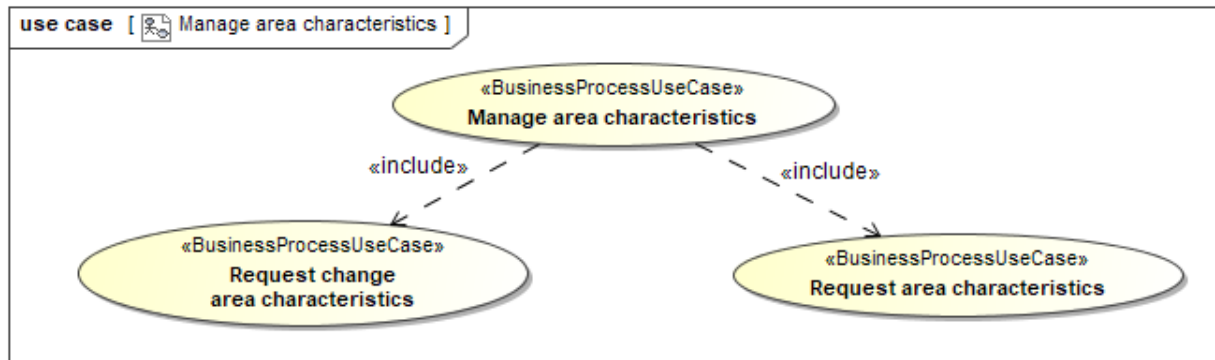


Figure 3 UseCase: Manage area characteristics

#### 1.2.2.1. Description

UseCase description: Align area characteristics	
definition	<p>This is the process where the area characteristics can be changed at the area administration by the Content Responsible party, i.e. Grid Company.</p> <p>Further, Entitled Parties can request area characteristics at the Area Administrator.</p>
beginsWhen	When the Content Responsible Party informs the Area Administrator of a change, or when an Entitled Party sends a request for area characteristics.
preCondition	There is a need to update the area characteristics or an Entitled Party needs to align its area characteristics.
endsWhen	When the Entitled Party (or Parties) has received characteristics of the area.
postCondition	The area characteristics are aligned between the Area Administrator and the Entitled Party (or Parties).
exceptions	None
actions	Not relevant at this level.



### 1.2.2.2. Request change area characteristics (Business Process UseCase)

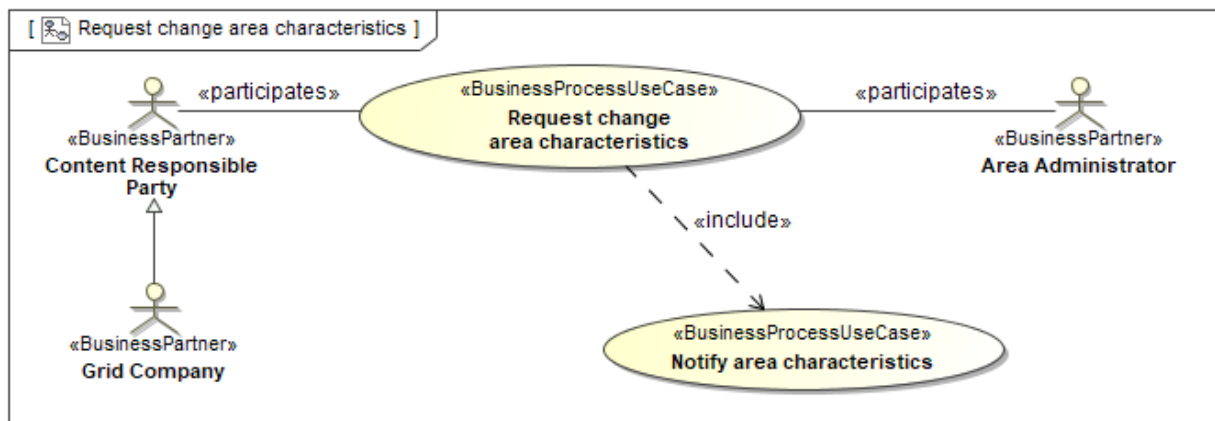


Figure 4 UseCase: Request change area characteristics

#### 1.2.2.2.1. Description

UseCase description: Request change area characteristics	
definition	<p>In this process the Content Responsible Party, i.e. the Grid Company, requests the Area Administrator to change one or more area characteristics in the area administration and the Area Administrator confirms it.</p> <p>Changed area characteristics are notified from the Area Administrator to Entitled Parties.</p>
beginsWhen	The Content Responsible Party has the need to change the area characteristics.
preCondition	The Content Responsible Party must be linked to and responsible for the area.
endsWhen	When the change of area characteristics is confirmed by the Area Administrator to the Content Responsible Party and all Entitled Parties are notified.
postCondition	The requested change of area characteristics has been aligned between the area administration, the Content Responsible Party and Entitled Parties.
exceptions	The request for change of area characteristics is rejected.
actions	See 1.2.2.2.2

### 1.2.2.2.2. Business Process

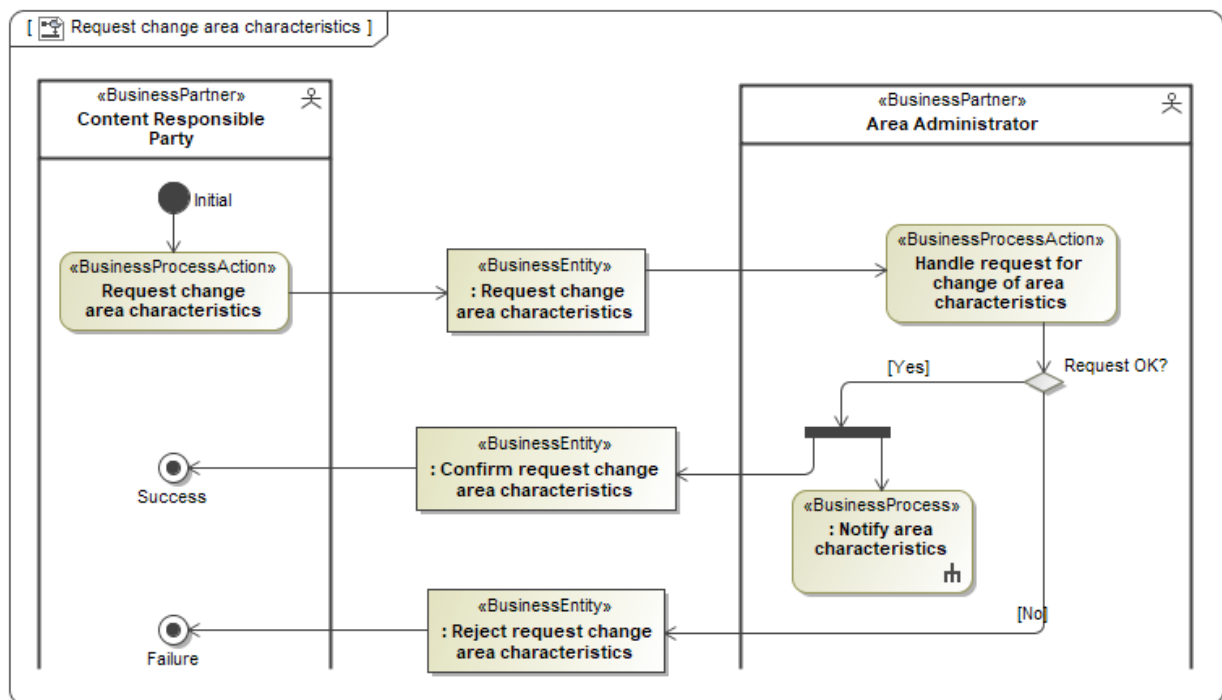


Figure 5 Business Process: Request change area characteristics

### 1.2.2.2.3. Notify area characteristics (Business Process UseCase)

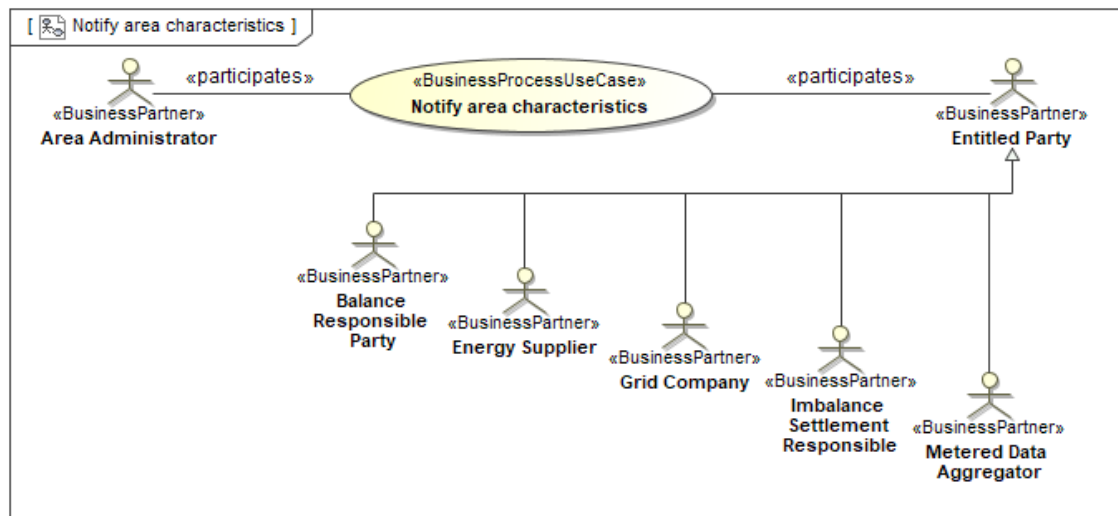


Figure 6 UseCase: Notify area characteristics

#### 1.2.2.2.3.1. Description

UseCase description: Notify area characteristics	
definition	<p>In this process, the Area Administrator distributes area characteristics to the Entitled Parties:</p> <ul style="list-style-type: none"> <li>• Balance Responsible Party</li> <li>• Energy Supplier</li> <li>• Grid Company</li> <li>• Imbalance Settlement Responsible</li> <li>• Metered Data Aggregator</li> </ul> <p>after update of one or more of the characteristics of an area.</p>
beginsWhen	When there have been changes to one or more area characteristics.
preCondition	One or more of the area characteristics have been changed.
endsWhen	When the Entitled Parties have received the area characteristics from the Area Administrator.
postCondition	The area characteristics are aligned with all Entitled Parties.
exceptions	None.
actions	See 1.2.2.2.3.2

### 1.2.2.2.3.2. Business Process

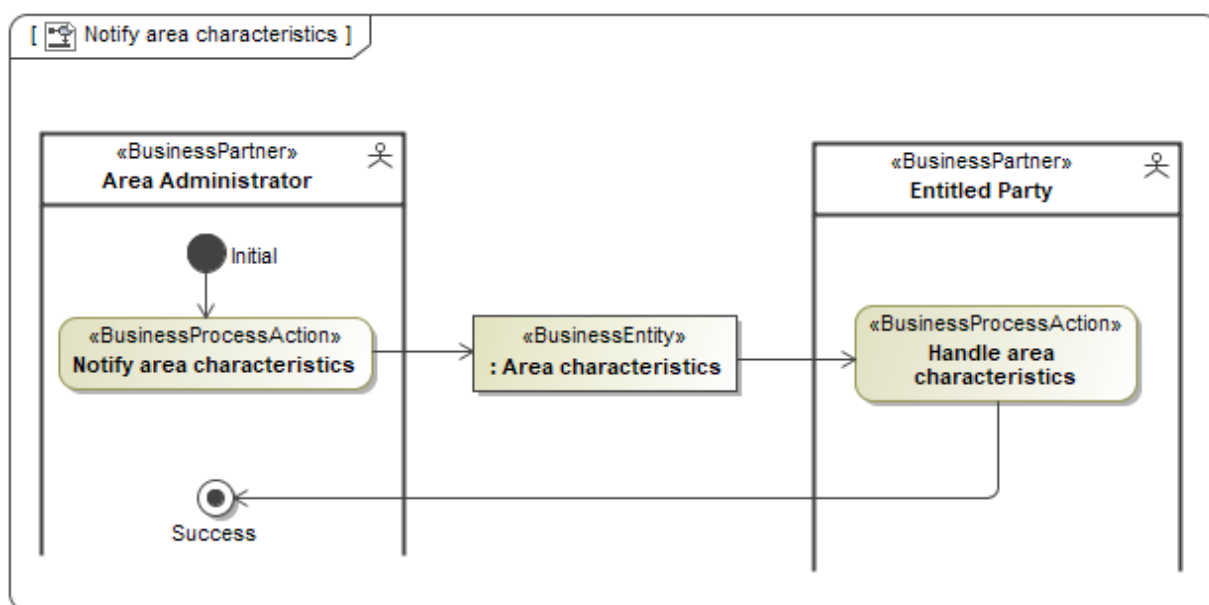


Figure 7 Business Process: Notify area characteristics

### 1.2.2.3. Request area characteristics (Business Process UseCase)

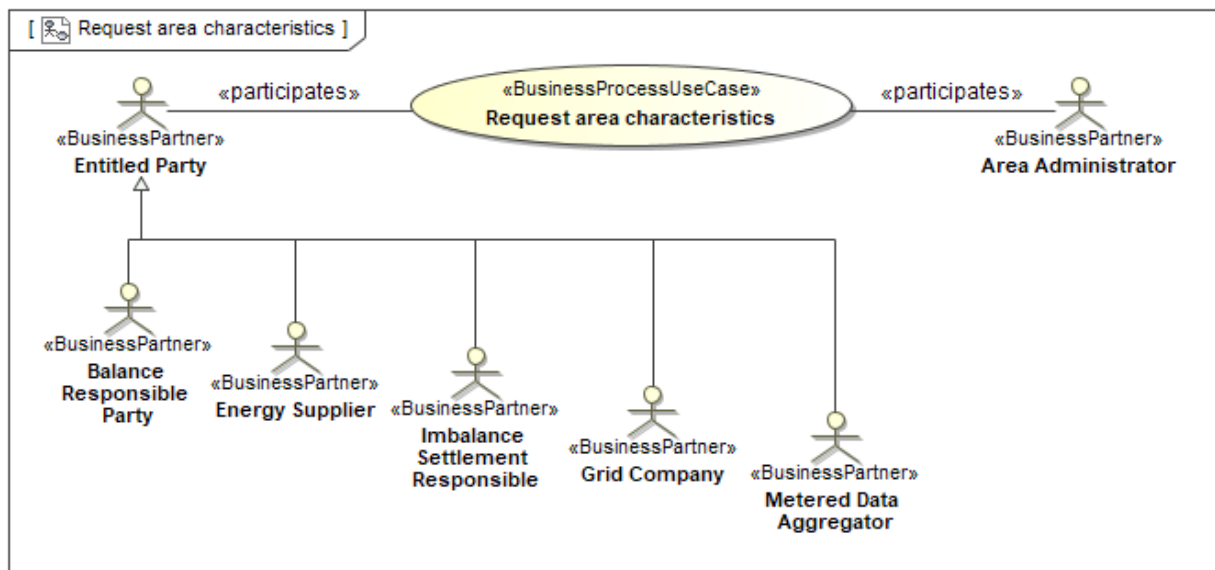


Figure 8 UseCase: Request area characteristics

#### 1.2.2.3.1. Description

UseCase description: Request area characteristics	
definition	<p>In this process an Entitled Party, i.e.:</p> <ul style="list-style-type: none"> <li>• Balance Responsible Party</li> <li>• Energy Supplier</li> <li>• Grid Company</li> <li>• Imbalance Settlement Responsible</li> <li>• Metered Data Aggregator</li> </ul> <p>requests area characteristics from the Area Administrator.</p>
beginsWhen	An Entitled Party has the need to align its area characteristics.
preCondition	The Entitled Party is entitled to receive the area characteristic
endsWhen	When the area characteristics has been received by the Entitled Party.
postCondition	The Entitled Party has aligned its area characteristics.
exceptions	The request for area characteristics is rejected.
actions	See 1.2.2.3.2

### 1.2.2.3.2. Business Process

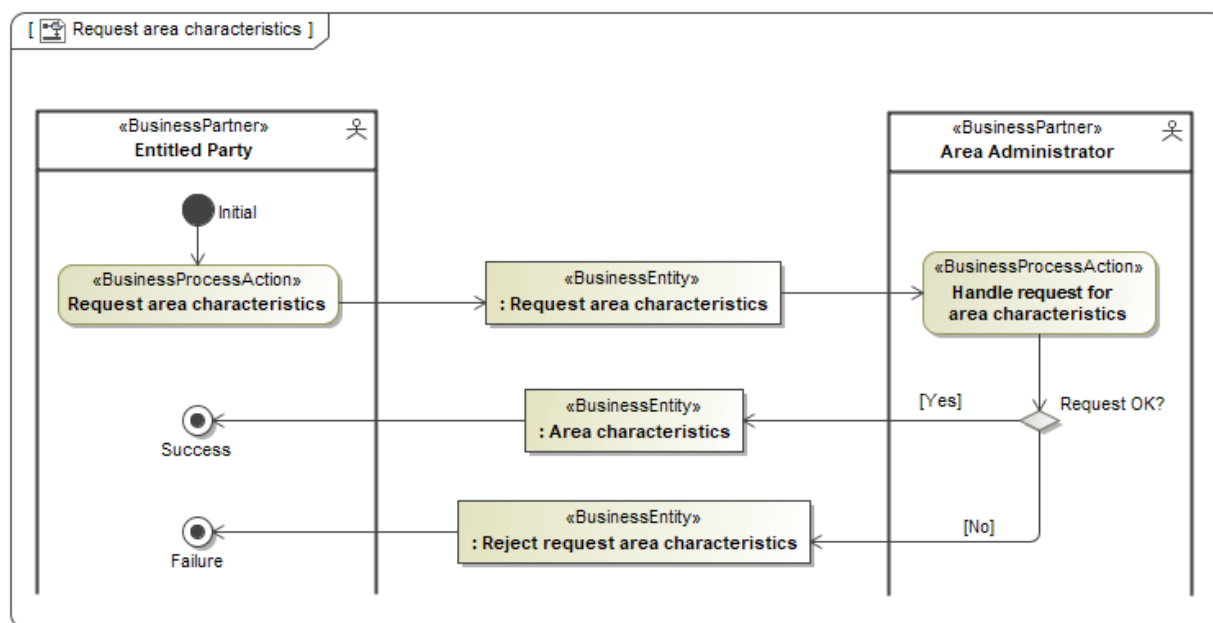


Figure 9 Business Process: Request area characteristics

### 1.2.3. Manage area relations (Business Process UseCase)

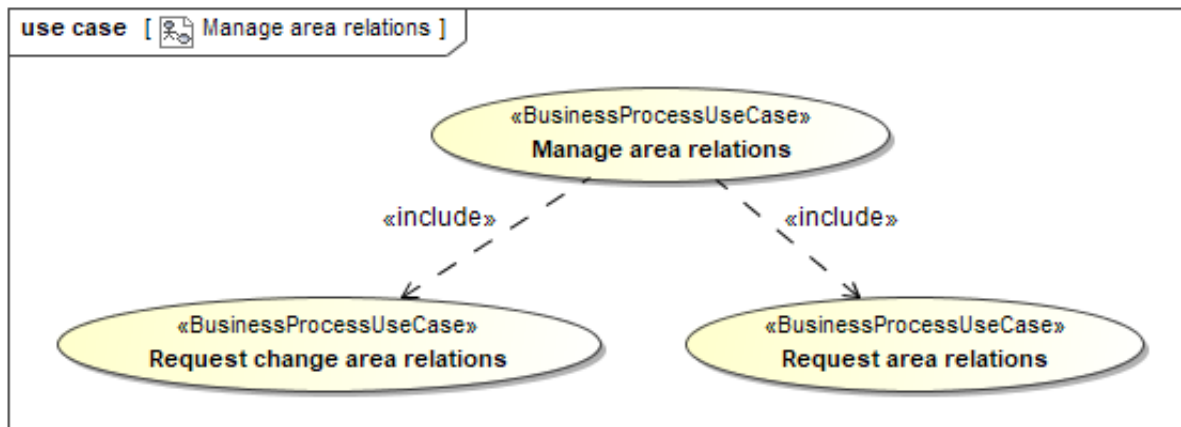


Figure 10 UseCase: Manage area relations

#### 1.2.3.1. Description

UseCase description: Manage area relations	
definition	<p>This is the process where a Content Responsible Party, i.e. the Grid Company, requests change of area relations to the Area Administrator, who thereafter notify the changes to Entitled Parties.</p> <p>Further, the Entitled Parties may request the area relations at the Area Administrator.</p>
beginsWhen	When there is a need to change area relations or when an Entitled Party requests it.
preCondition	There is a need to update the area relations or an Entitled Party needs to align its area relations.
endsWhen	When the Entitled Party (or Parties) has received area relations.
postCondition	The area relations are aligned between the Area Administrator, Content Responsible Party and the Entitled Party (or Parties).
exceptions	None
actions	Not relevant at this level.

### 1.2.3.2. Request change area relations (Business Process UseCase)

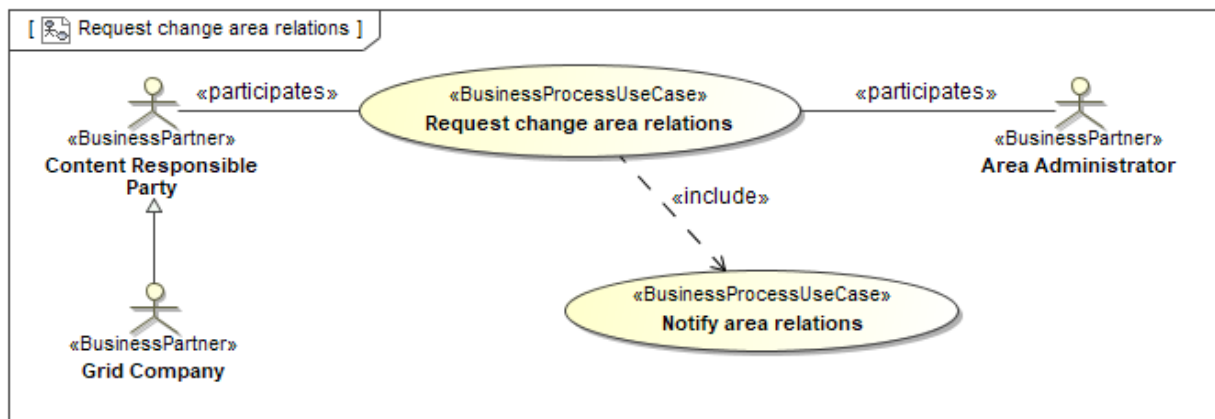


Figure 11 UseCase: Request change area relations

#### 1.2.3.2.1. Description

UseCase description: Request change area relations	
definition	<p>In this process the Content Responsible Party, i.e. the Grid Company, requests the Area Administrator to change one or more area relations in the area administration and the Area Administrator confirms it.</p> <p>Changed area relations are notified from the Area Administrator to Entitled Parties.</p>
beginsWhen	The Content Responsible Party has the need to change the area relations.
preCondition	The Content Responsible Party must be linked to and responsible for the area.
endsWhen	When the change of area relations is confirmed by the Area Administrator to the Content Responsible Party and all Entitled Parties are notified.
postCondition	The requested change of area relations has been aligned between the area administration, the Content Responsible Party and Entitled Parties.
exceptions	The request for change of area relations is rejected.
actions	See 1.2.3.2.2



### 1.2.3.2.2. Business Process

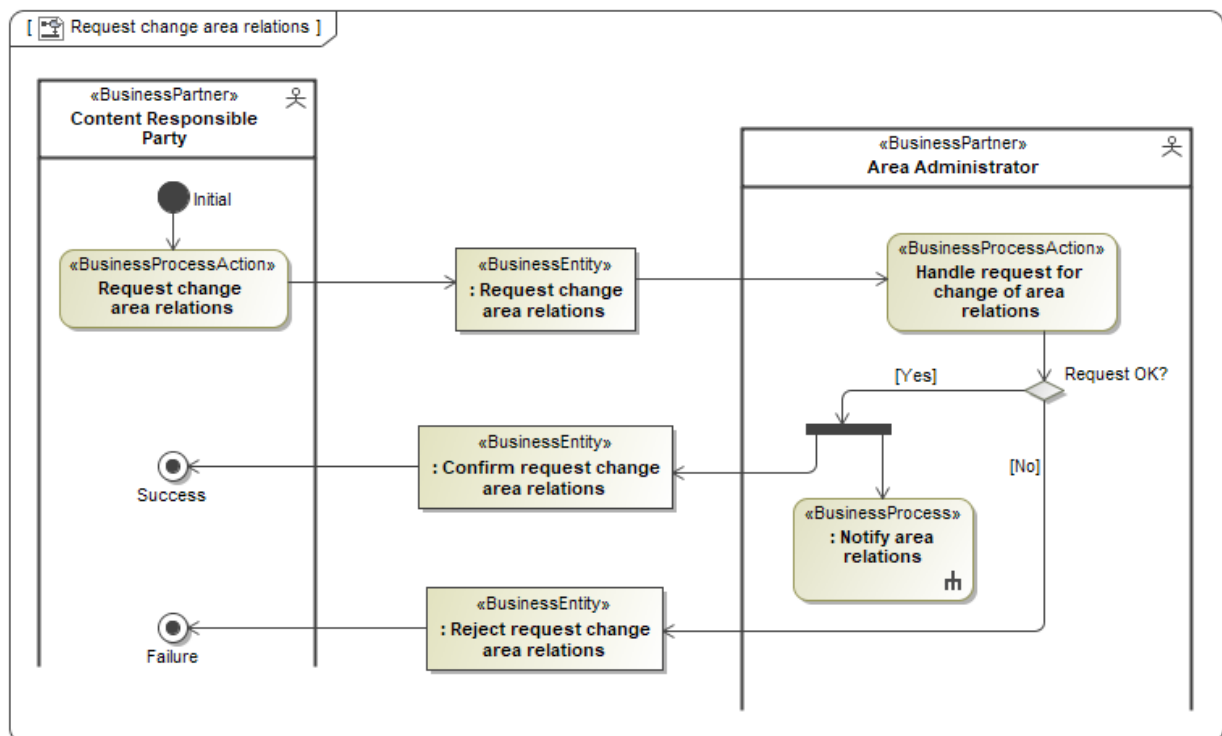


Figure 12 Business Process: Request change area relations

### 1.2.3.2.3. Notify area relations (Business Process UseCase)

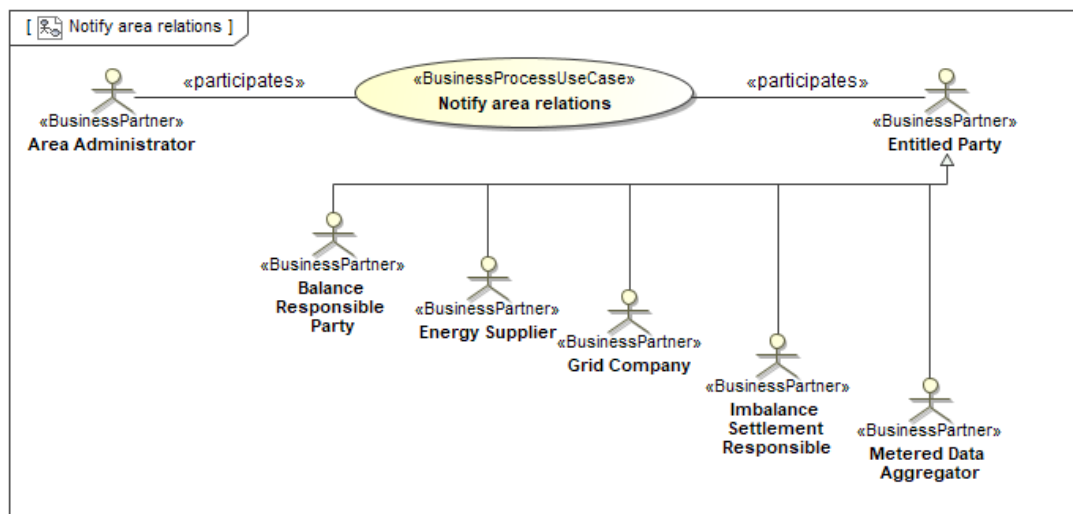


Figure 13 UseCase: Notify area relations

#### 1.2.3.2.3.1. Description

UseCase description: Notify area relations	
definition	<p>In this process, the Area Administrator distributes area relations to the Entitled Parties;</p> <ul style="list-style-type: none"> <li>• Balance Responsible Party</li> <li>• Energy Supplier</li> <li>• Grid Company</li> <li>• Imbalance Settlement Responsible</li> <li>• Metered Data Aggregator</li> </ul> <p>after update of area relations.</p>
beginsWhen	When there have been changes to one or more area relations.
preCondition	One or more of the area relations have been changed.
endsWhen	When the Entitled Parties have received the area relations.
postCondition	The area relations have been notified by the Area Administrator to the Entitled Parties.
exceptions	None
actions	See 1.2.3.2.3.2

### 1.2.3.2.3.2. Business Process

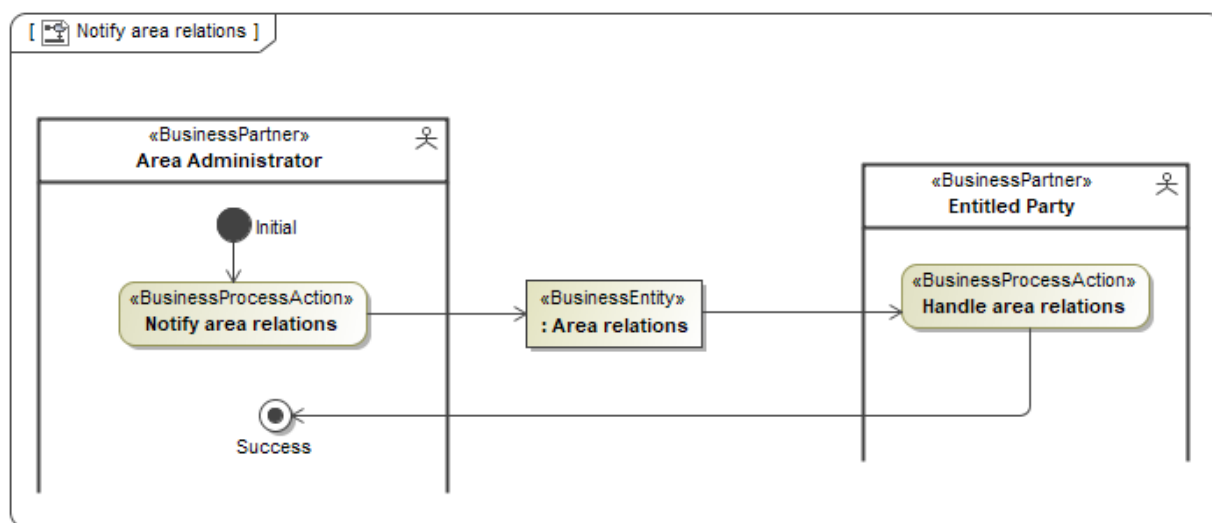


Figure 14 Business Process: Notify area relations

### 1.2.3.3. Request area relations (Business Process UseCase)

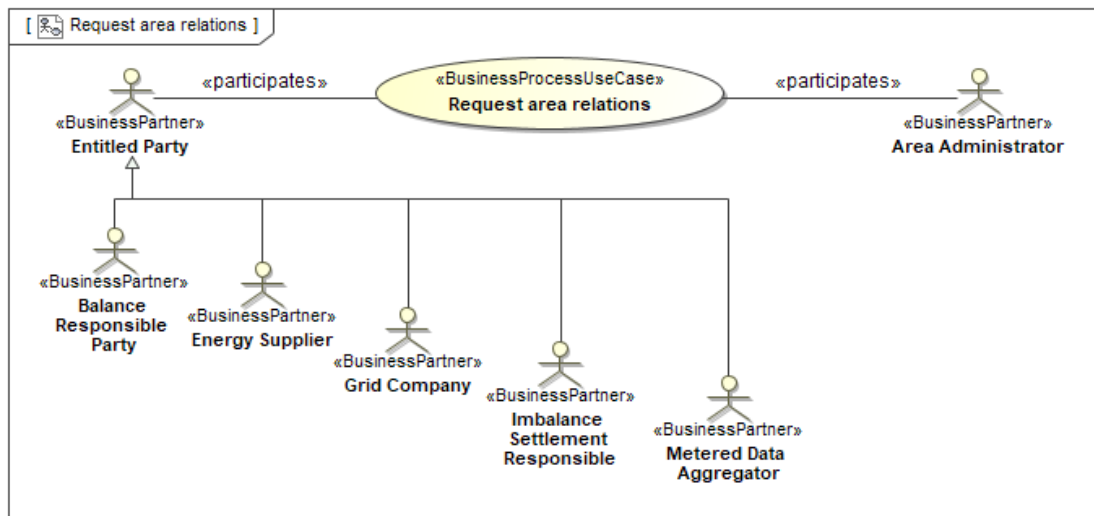


Figure 15 UseCase: Request area relations

#### 1.2.3.3.1. Description

UseCase description: Request area relations	
definition	<p>In this process an Entitled Party, i.e.:</p> <ul style="list-style-type: none"> <li>• Balance Responsible Party</li> <li>• Energy Supplier</li> <li>• Grid Company</li> <li>• Imbalance Settlement Responsible</li> <li>• Metered Data Aggregator</li> </ul> <p>requests area relations from the Area Administrator.</p> <p>All relevant relations to other areas (linked to, consist of and/or belongs to) for the requested area are returned in the answer.</p>
beginsWhen	An Entitled Party has the need to align its area relations.
preCondition	None.
endsWhen	When the area relations have been received by the Entitled Party.
postCondition	The Entitled Party has aligned its area relations.
exceptions	The request for area relations is rejected.
actions	See 1.2.3.3.2

### 1.2.3.3.2. Business Process

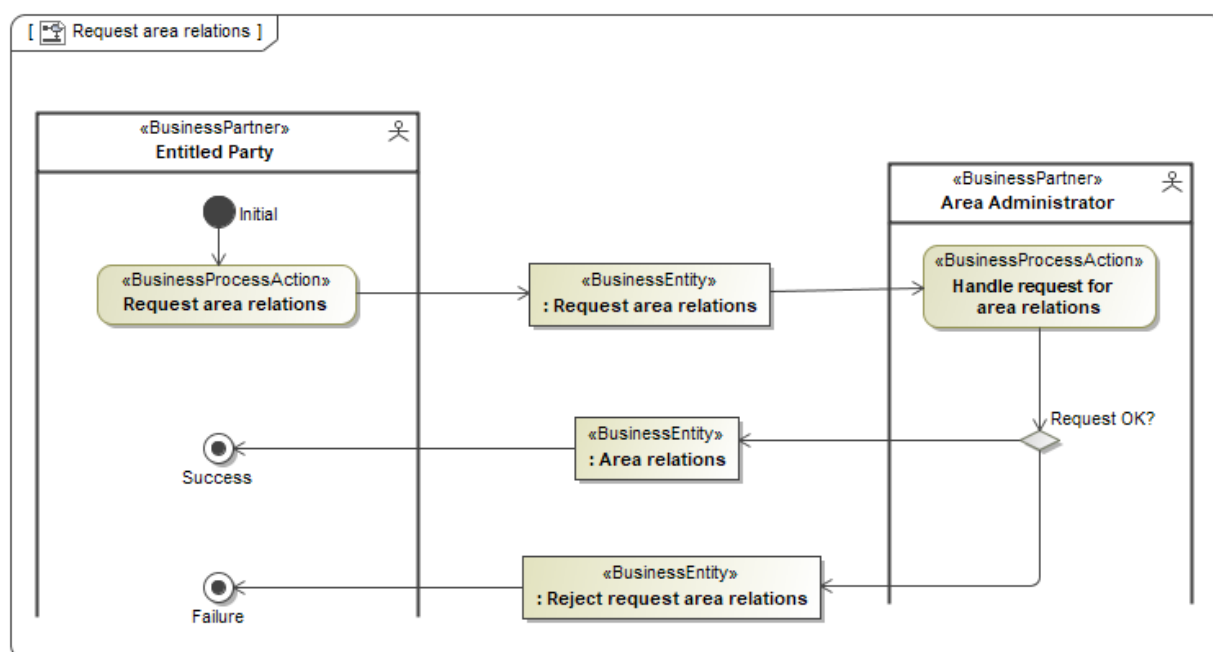


Figure 16 Business Process: Request area relations

## 1.3. Business Partner View

### 1.3.1. Business Partners for alignment of area characteristics

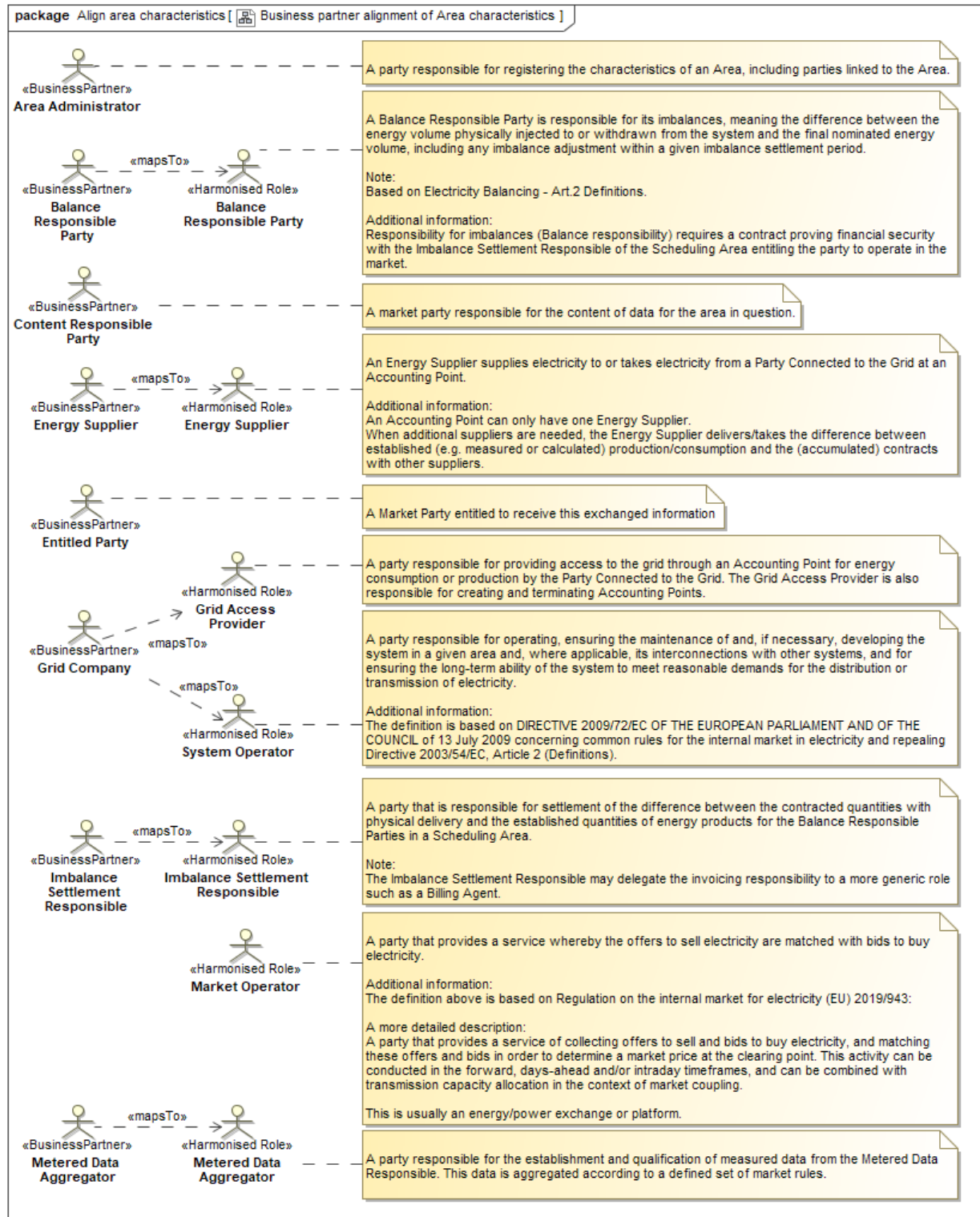


Figure 17 Business Partners related to alignment of area characteristics

## 1.4. Business Entity View

A general introduction to the Business Entity View can be found in the Introduction to ebIX® Business Requirements and Business Information Models ([www.ebix.org](http://www.ebix.org)) [4].

### 1.4.1. Request change area characteristics (Class Diagram)

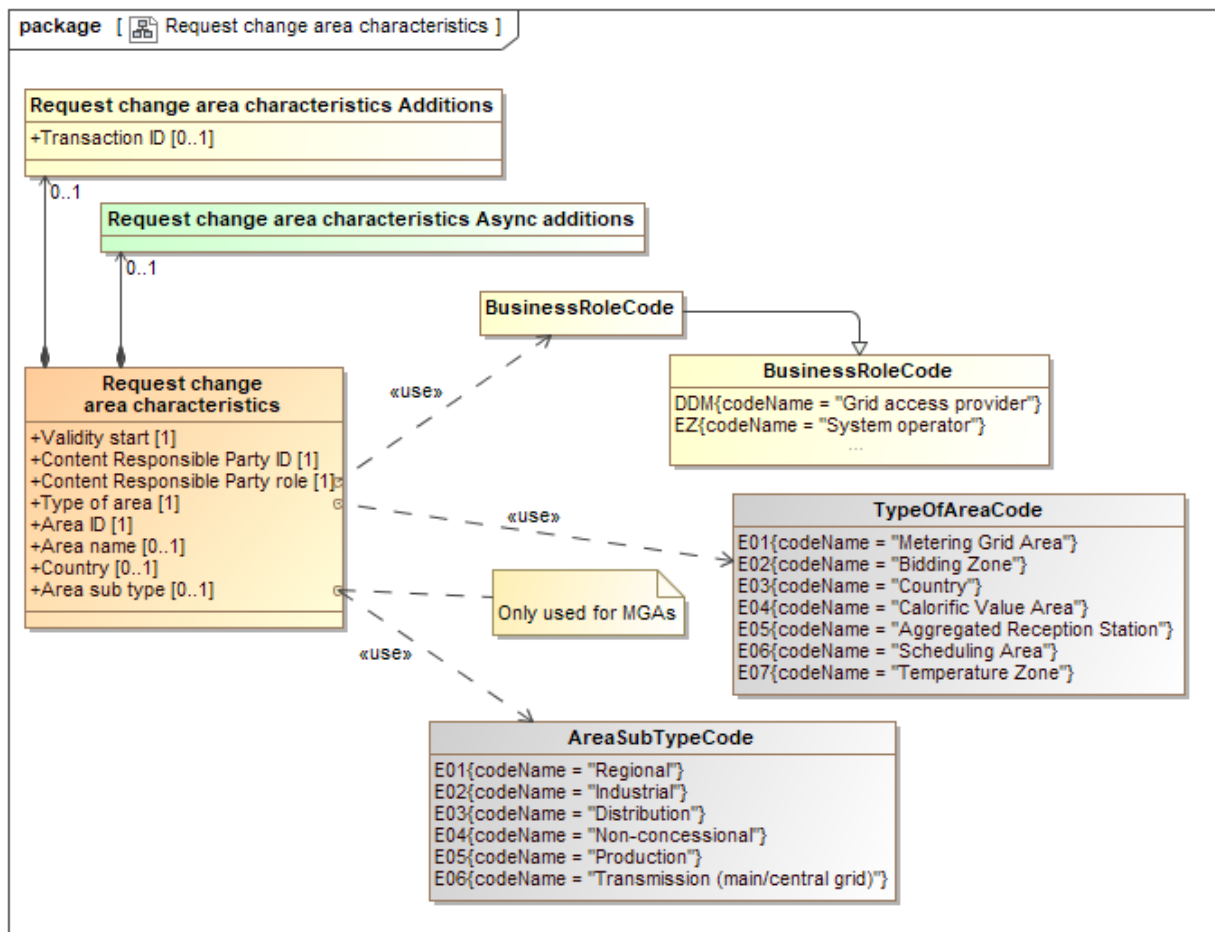


Figure 18 Class Diagram: Request change area characteristics

#### 1.4.1.1. Element definitions, Request change area characteristics

Class/attribute	Sector 1	Description
«Business entity» Request change area characteristics		The information set to be sent from a Content Responsible Party, i.e. the Grid Company, to the Area Administrator when requesting change of area characteristics.
Validity start		The date when the set of information, for this area, in this business document, becomes or became valid.
Content Responsible Party ID		The unique identification of the party that is responsible for the area characteristics in this document.

<sup>1</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.



Class/attribute	Sector 1	Description
Content Responsible Party role		The role of the Content Responsible Party.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>2</sup> .
Area ID		The unique identification of the area.
Area name		The name, in clear text, of the area.
Country		The unique identifier of the country, for this area, using ISO 3166 (UN/ECE Rec 3).
Area sub type		The detailing (differentiating) of Metering Grid Areas (MGA).
Request change area characteristics Additions		Additional information related to these area characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Business process ID		The unique identification, given by the Responsible Party for this set of information, of this instance of the process in question.
Request change area characteristics Async Additions		Additional information related to these area characteristics, needed when using asynchronous communication.

<sup>2</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

### 1.4.2. Confirm request change area characteristics (Class Diagram)

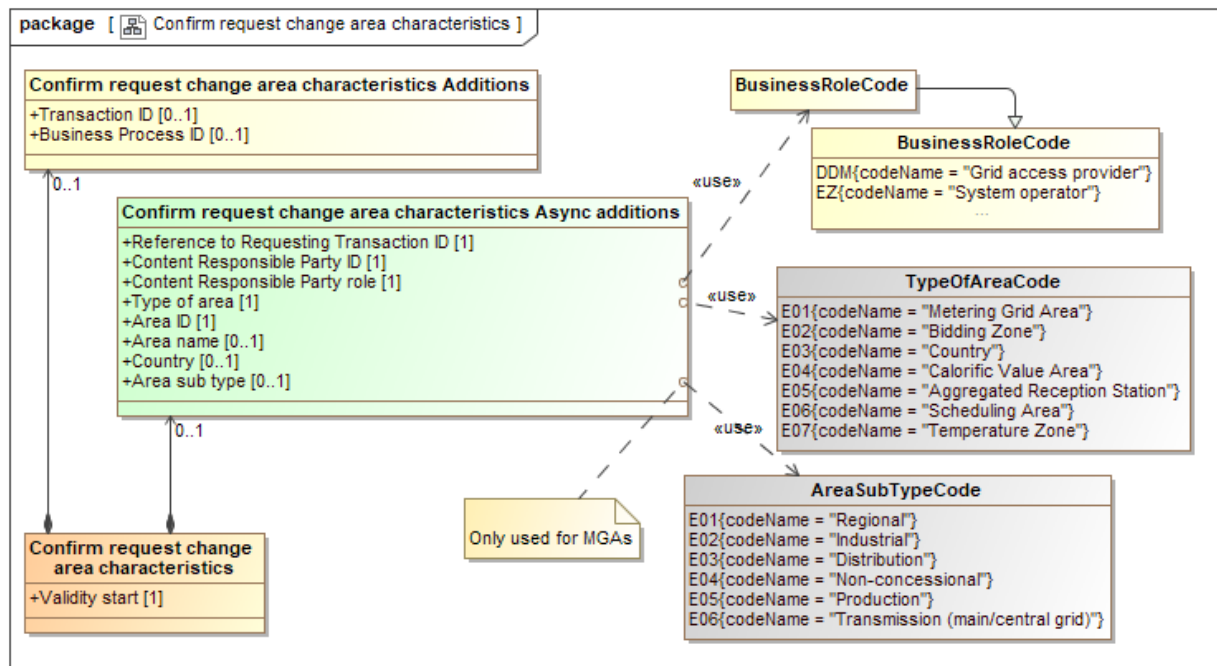


Figure 19 Class Diagram: Confirm request change area characteristics

#### 1.4.2.1. Element definitions, Confirm request change area characteristics

Class/attribute	Sector <sup>3</sup>	Description
«Business entity» Confirm request change area characteristics		The information set to be sent from an Area Administrator to a Content Responsible Party, i.e. the Grid Company, when confirming a request for change of area characteristics.
Validity start		The confirmed date when the set of information, for this area, in this business document, becomes or became valid.
Confirm request area characteristics Additions		Additional information related to these area characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Area Administrator for this set of information.
Business process ID		The unique identification, given by the Area Administrator for this set of information, of this instance of the process in question.
Confirm request area characteristics, Async Additions		Additional information related to these area characteristics, needed when using asynchronous communication.

<sup>3</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector <sup>3</sup>	Description
Reference to requesting Transaction ID		A reference to the requesting business document.
Content Responsible Party ID		The unique identification of the party that is responsible for the area characteristics in this document.
Content Responsible Party role		The role of the Content Responsible Party.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>4</sup> .
Area ID		The unique identification of the area.
Area Name		The name, in clear text, of the area.
Country		The unique identifier of the country, for this area, using ISO 3166 (UN/ECE Rec 3).
Area sub type		The detailing (differentiating) of Metering Grid Areas (MGA).

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<sup>4</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

### 1.4.3. Reject request change area characteristics (Class Diagram)

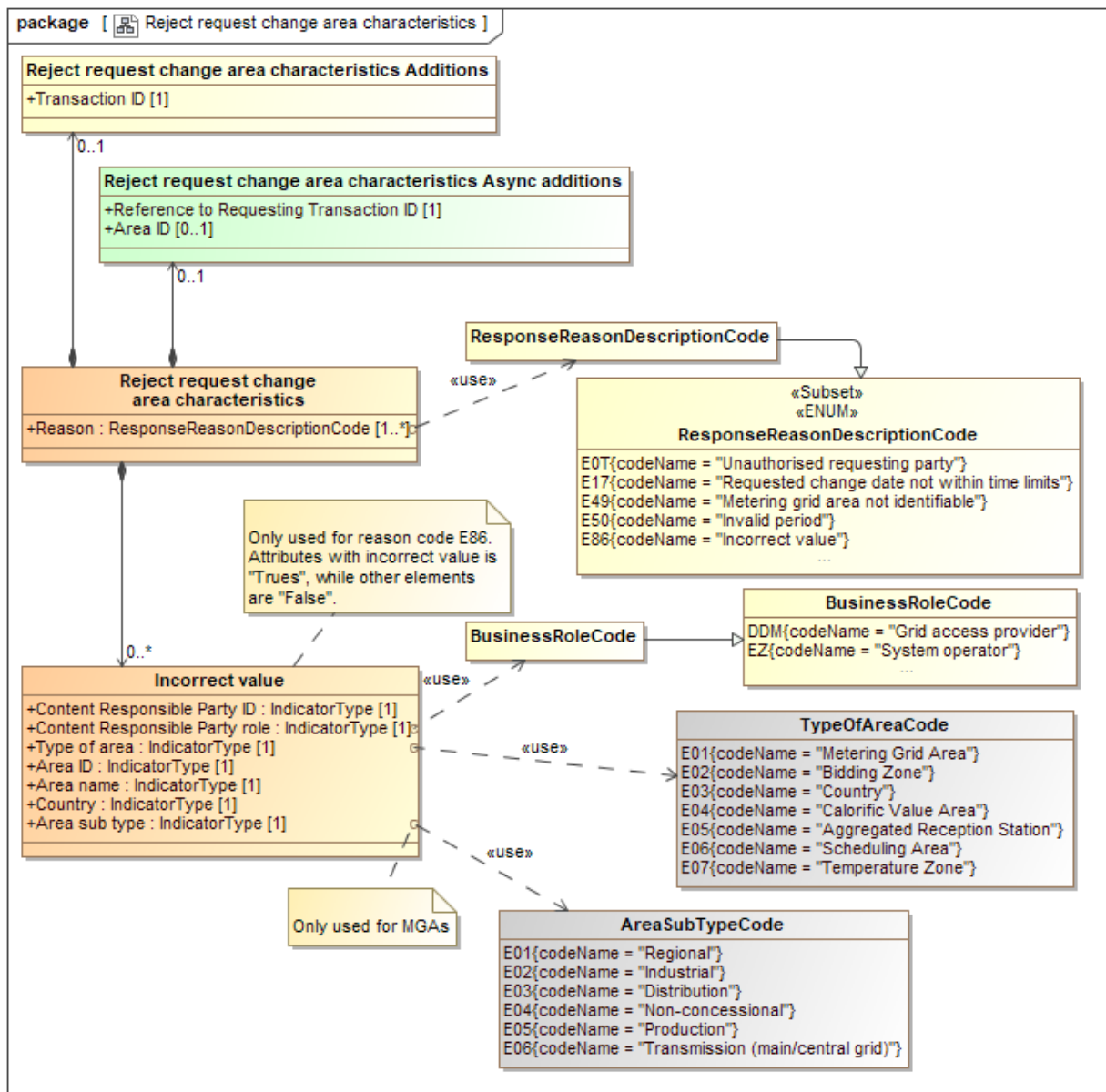


Figure 20 Class Diagram: Reject request change area characteristics

### 1.4.3.1. Element definitions, Reject request change area characteristics

Class/attribute	Sector <sup>5</sup>	Description
«Business entity» Reject request change area characteristics		The information set to be sent from an Area Administrator to a Content Responsible Party, i.e. the Grid Company, when rejecting a request for change of area characteristics.
Reason		A code specifying (one of) the reason(s) for the rejection of the request for change of area characteristics.
Incorrect value		Attributes with incorrect value is "Trues", while other elements are "False". Only used for reason code "E86, Incorrect value".
Content Responsible Party ID		Indicator for incorrect Content Responsible Party ID.
Content Responsible Party role		Indicator for incorrect Content Responsible Party role.
Type of area		Indicator for incorrect type of area.
Area ID		Indicator for incorrect area ID.
Area name		Indicator for incorrect area Name.
Country		Indicator for incorrect country.
Area sub type		Indicator for incorrect area sub type.
Reject request change area characteristics Additions		Additional information related to these area characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Reject request change area characteristics Async Additions		Additional information related to these area characteristics, needed when using asynchronous communication.
Reference to Requesting Transaction ID		A reference to the requesting business document, used in the responding business document in a business transaction.
Area ID		The unique identification of the area.

<sup>5</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.

#### 1.4.4. Request area characteristics (Class Diagram)

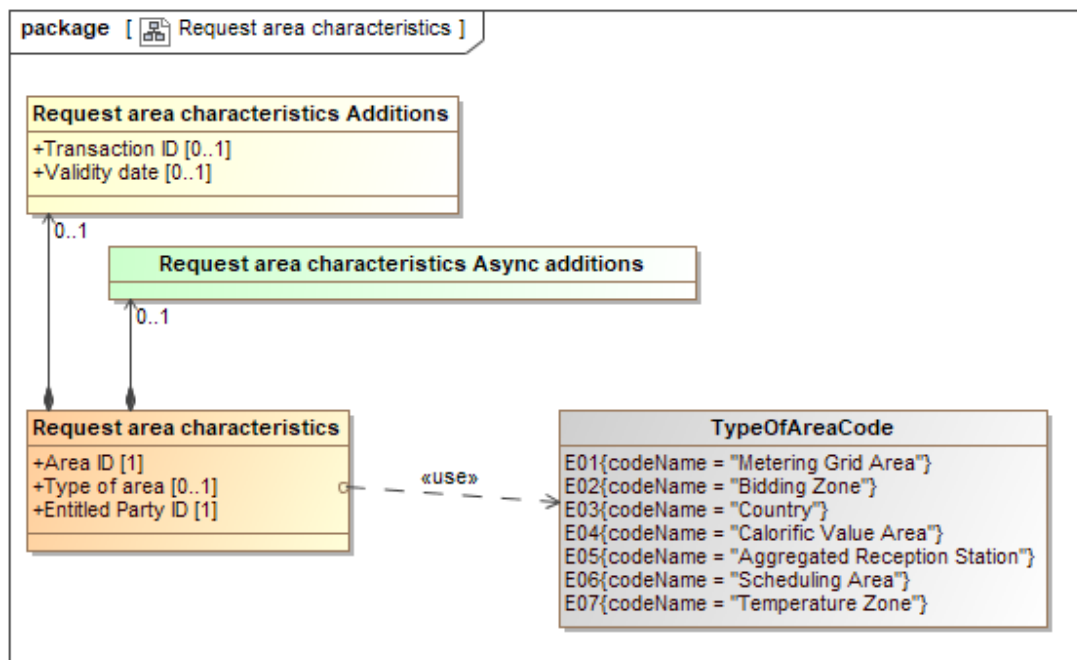


Figure 21 Class Diagram: Request area characteristics

##### 1.4.4.1. Element definitions, Request area characteristics

Class/attribute	Sector 6	Description
«Business entity» Request area characteristics		The information set to be sent from an Entitled Party to the Area Administrator when requesting area characteristics.
Area ID		The unique identification of the area the characteristics are requested for.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>7</sup> .
Entitled Party ID		The unique identification of the Entitled Party that requests the area characteristics.
Request area characteristics Additions		Additional information related to request for area characteristics, to be agreed on a national level.

<sup>6</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.

<sup>7</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

Class/attribute	Sector 6	Description
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Validity date		The date for when the requested area characteristics shall be valid.
Request area characteristics Async Additions		Additional information related to these area characteristics needed when using asynchronous communication.

### 1.4.5. Area characteristics (Class Diagram)

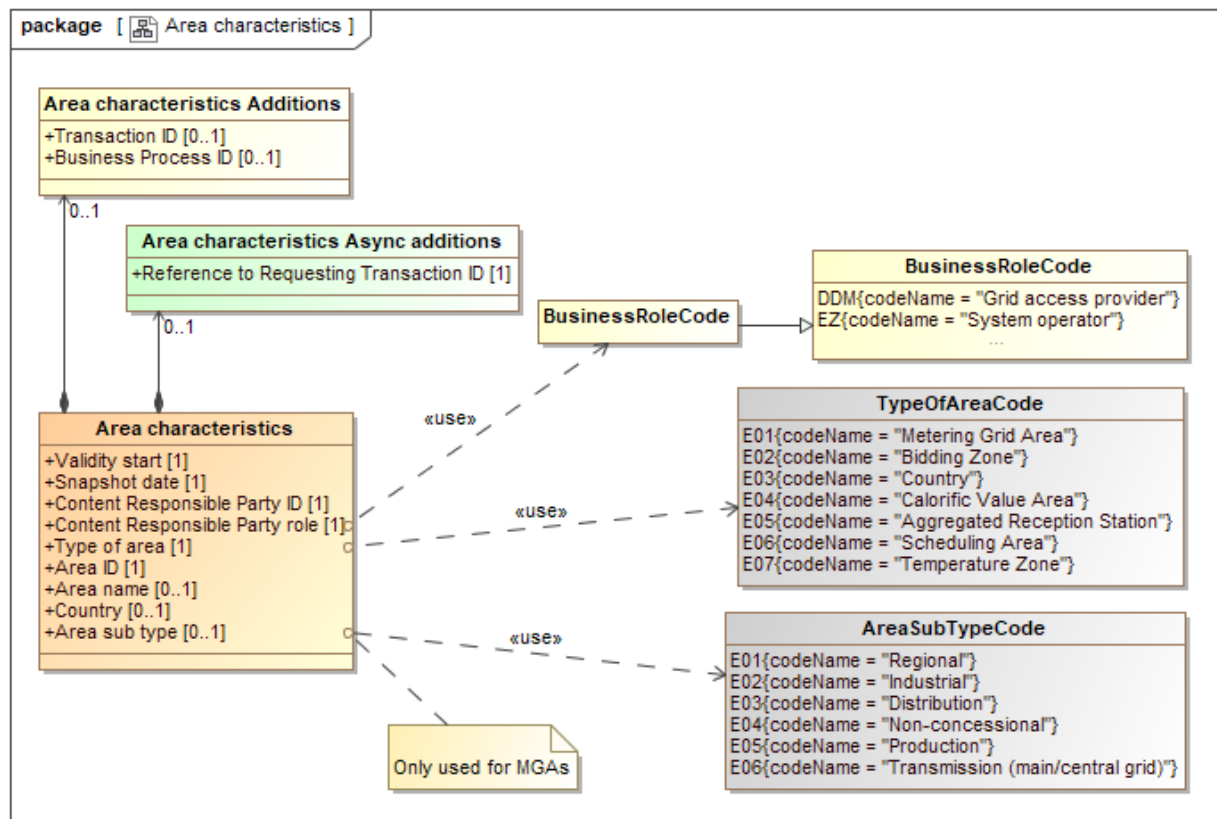


Figure 22 Class Diagram: Area characteristics

#### 1.4.5.1. Element definitions, Area characteristics

Class/attribute	Sect or <sup>8</sup>	Description
«Business entity» Area characteristics		The information set to be sent from the Area Administrator to an Entitled Party when notifying area characteristics.
Validity start		The date when the set of information, for this area, in this business document, becomes or became valid.
Snapshot date		The date and time when the set of information was extracted from the area register.
Content Responsible Party ID		The unique identification of the party that is responsible for the area characteristics in this document.

<sup>8</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.



Class/attribute	Sect or <sup>8</sup>	Description
Content Responsible Party role		The role of the Content Responsible Party.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>9</sup> .
Area ID		The unique identification of the area.
Area Name		The name, in clear text, of the area.
Country		The unique identifier of the country, for this area, using ISO 3166 (UN/ECE Rec 3).
Area sub type		The detailing (differentiating) of Metering Grid Areas (MGA).
Area characteristics Additions		Additional information related to these area characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Business process ID		The unique identification, given by the Responsible Party for this set of information, of this instance of the process in question.
Area characteristics, Async Additions		Additional information related to these area characteristics, needed when using asynchronous communication.
Reference to requesting Transaction ID		A reference to the requesting business document, used in the responding business document in a business transaction. Only used when responding to a request.

<sup>9</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

### 1.4.6. Reject request area characteristics (Class Diagram)

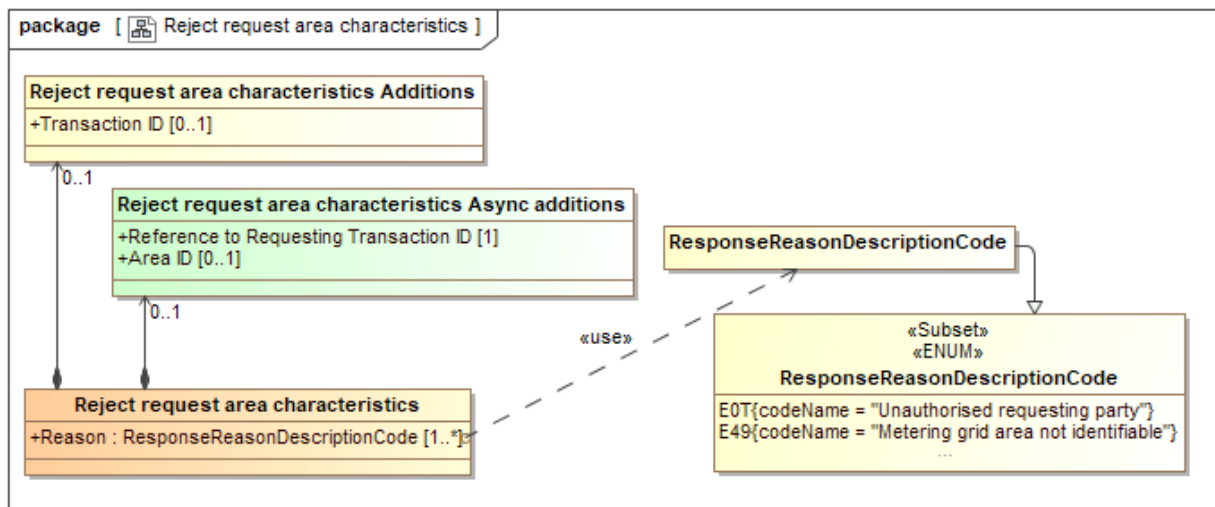


Figure 23 Class Diagram: Reject request area characteristics

#### 1.4.6.1. Element definitions, Reject request area characteristics

Class/attribute	Sector 10	Description
«Business entity» Reject request area characteristics		The information set to be sent from the Area Administrator to the Entitled Party when rejecting a request for area characteristics.
Reason		A code specifying (one of) the reason(s) for the rejection of the request for area characteristics.
Reject request area characteristics Additions		Additional information related to these area characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Reject request area characteristics Async Additions		Additional information related to these area characteristics, needed when using asynchronous communication.
Reference to Requesting Transaction ID		Reference to the requesting business document.
Area ID		The unique identification of the area the request was rejected for.

<sup>10</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.

### 1.4.7. Request change area relations (Class Diagram)

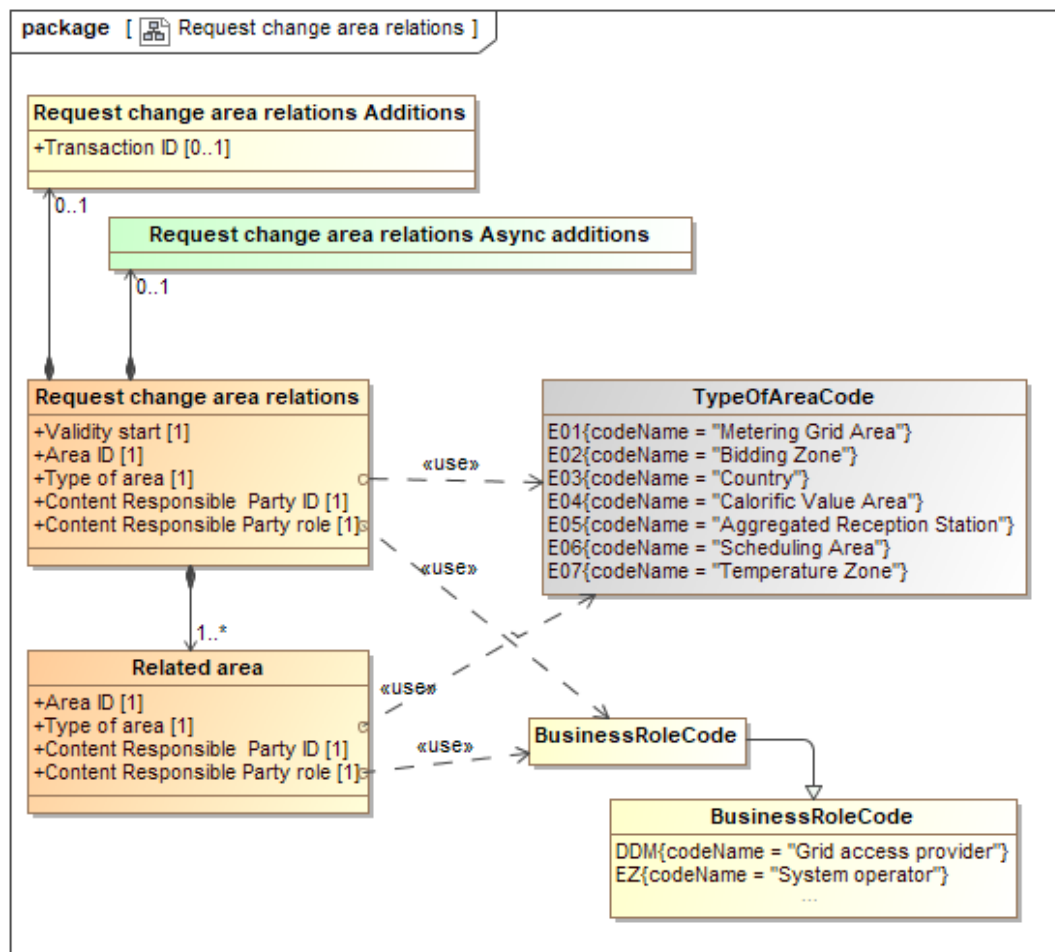


Figure 24 Class Diagram: Request change area relations

#### 1.4.7.1. Element definitions, Request change area relations

Class/attribute	Sector <sup>11</sup>	Description
«Business entity» Request change area relations		The information set to be sent from a Content Responsible Party, i.e. the Grid Company, to the Area Administrator when requesting change of Area relations.
Validity start		The date when the set of information, in this business document, becomes or became valid.
Area ID		The unique identification of the area the relation to other areas is given for.

<sup>11</sup> <sup>11</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector <sup>11</sup>	Description
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>12</sup> .
Content Responsible Party ID		The unique identification of the party that is responsible for the area relations.
Content Responsible Party role		The role of the Content Responsible Party.
Related area		An area connected to the area in question.
Area ID		The unique identification of the area that is related or linked to the area the relation is given for.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>13</sup> .
Content Responsible Party ID		The unique identification of the party that is responsible for the area relations.
Content Responsible Party role		The role of the Content Responsible Party.
Request change area relations Additions		Additional information related to this business document, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Business process ID		The unique identification, given by the Responsible Party for this set of information, of this instance of the process in question.
Request change area relations Async Additions		Additional information related to this business document needed when using asynchronous communication.
Reference to Requesting Transaction ID		A reference to the requesting business document, used in the responding business document in a business transaction.

<sup>12</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

<sup>13</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

### 1.4.8. Confirm request change area relations (Class Diagram)

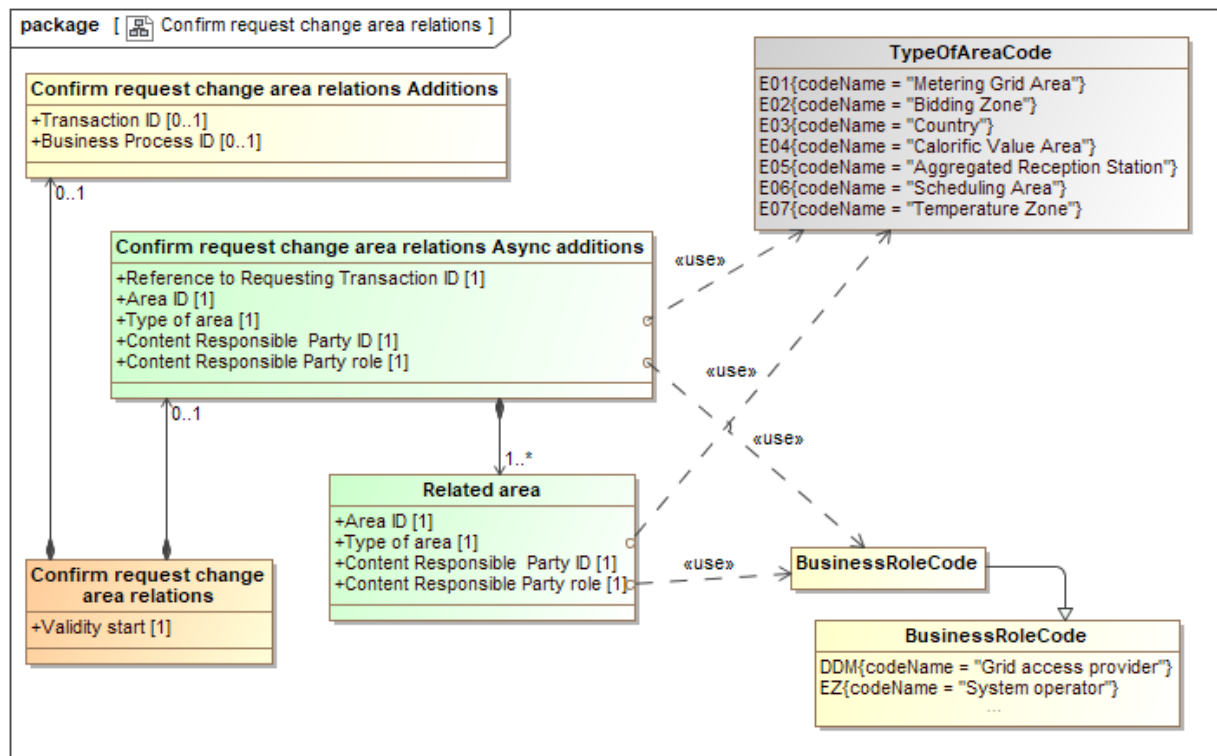


Figure 25 Class Diagram: Confirm request change area relations

#### 1.4.8.1. Element definitions, Confirm request change area relations

Class/attribute	Sector 14	Description
«Business entity» Confirm request change area relations		The information set to be sent from the Area Administrator to the Content Responsible Party, i.e. the Grid Company, when confirming a requesting for change of Area relations.
Validity start		The date when the set of information, in this business document, becomes or became valid.
Confirm request change area relations Additions		Additional information related to this business document, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Business process ID		The unique identification, given by the Responsible Party for this set of information, of this instance of the process in question.

<sup>14 14</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector <sup>14</sup>	Description
Confirm request change area relations Async Additions		Additional information related to this business document needed when using asynchronous communication.
Reference to Requesting Transaction ID		A reference to the requesting business document, used in the responding business document in a business transaction.
Area ID		The unique identification of the area the relation to other areas is given for.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, Country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>15</sup> .
Content Responsible Party ID		The unique identification of the party that is responsible for the area relations.
Content Responsible Party role		The role of the Content Responsible Party.
Related area		An area connected to the area in question.
Area ID		The unique identification of the area that is related or linked to the area the relation is given for.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, Country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>16</sup> .
Content Responsible Party ID		The unique identification of the party that is responsible for the area relations.
Content Responsible Party role		The role of the Content Responsible Party.

<sup>15</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

<sup>16</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

### 1.4.9. Reject request change area relations (Class Diagram)

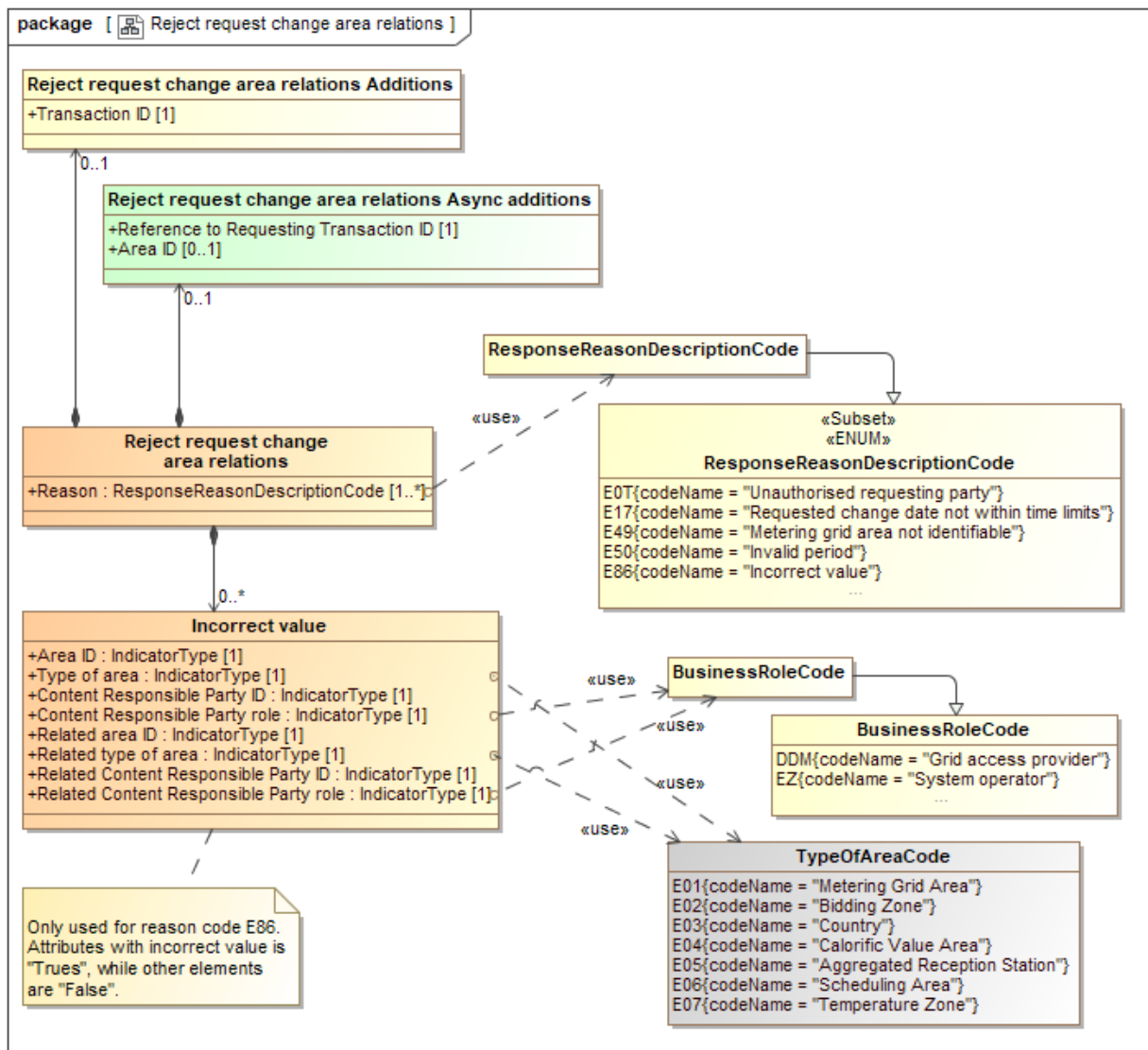


Figure 26 Class Diagram: Reject request change area relations

## 1.4.9.1. Element definitions, Reject request change area relations

Class/attribute	Sector <sup>17</sup>	Description
«Business entity» Reject request change area relations		The information set to be sent from the Area Administrator to the Content Responsible Party, i.e. the Grid Company, when rejecting a requesting for change of Area relations.
Reason		A code specifying (one of) the reason(s) for the rejection of the request for change of area characteristics.
Incorrect value		Attributes with incorrect value is "True", while other elements are "False". Only used for reason code "E86, Incorrect value".
Area ID		Indicator for incorrect area ID.
Type of area		Indicator for incorrect type of area.
Content Responsible Party ID		Indicator for incorrect Content Responsible Party ID.
Content Responsible Party role		Indicator for incorrect Content Responsible Party role.
Related area ID		Indicator for incorrect related area ID.
Related type of area		Indicator for incorrect related type of area.
Related Content Responsible Party ID		Indicator for incorrect related Content Responsible Party ID.
Related Content Responsible Party role		Indicator for incorrect related Content Responsible Party role.
Reject request change area relations Additions		Additional information related to this business document, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Reject request change area relations Async Additions		Additional information related to this business document needed when using asynchronous communication.
Reference to Requesting Transaction ID		A reference to the requesting business document, used in the responding business document in a business transaction.
Area ID		The unique identification of the area the relation to other areas is given for.

<sup>17</sup> <sup>17</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.



### 1.4.10. Request area relations (Class Diagram)

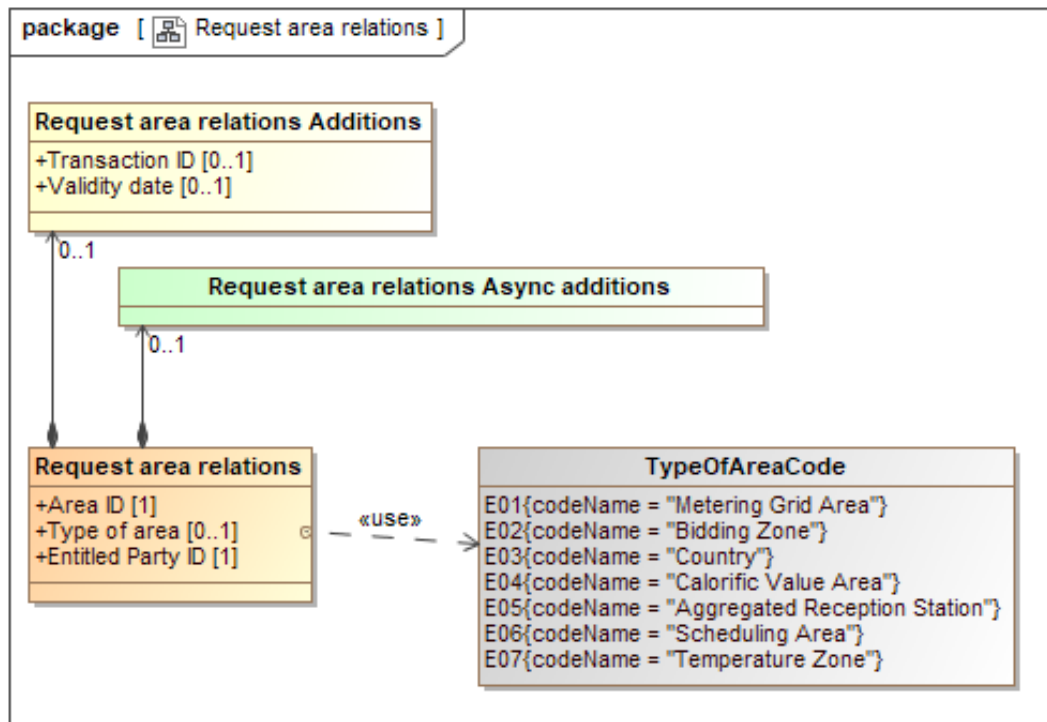


Figure 27 Class Diagram: Request area relations

#### 1.4.10.1. Element definitions, Request area relations

Class/attribute	Sector 18	Description
«Business entity» Request area relations		The information set to be sent from an Entitled Party to the Area Administrator when requesting area relations.
Area ID		The unique identification of the area relations to other areas are requested for.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>19</sup> .
Entitled Party ID		The unique identification of the Entitled Party that requests area relations.
Request area relations Additions		Additional information related to request for area relations, to be agreed on a national level.

<sup>18</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.

<sup>19</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

Class/attribute	Sector 18	Description
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Validity date		The date for when the requested area relations shall be valid.
Request area relations Async Additions		Additional information related to these area relations needed when using asynchronous communication.

### 1.4.11. Area relations (Class Diagram)

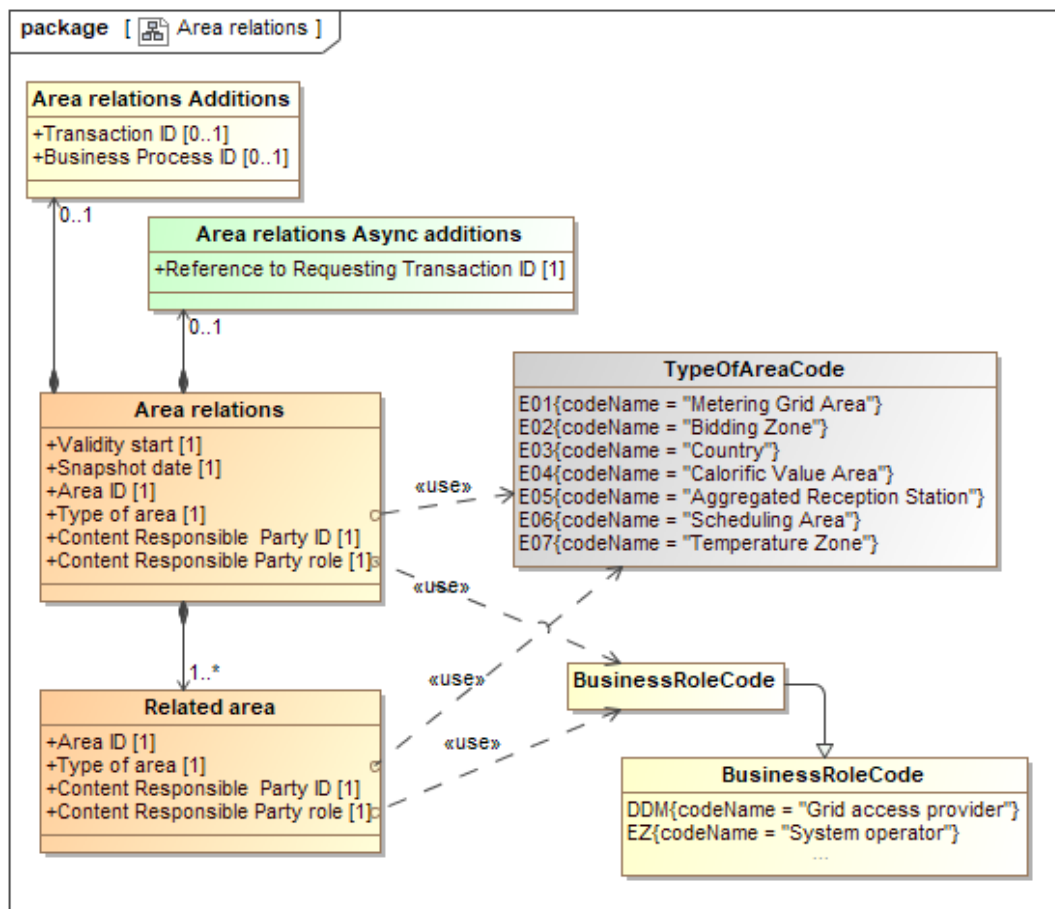


Figure 28 Class Diagram: Area relations

#### 1.4.11.1. Element definitions, Area relations

Class/attribute	Sector 20	Description
«Business entity» Area relations		The information set to be sent from the Area Administrator to an Entitled Party when notifying area relations.
Validity start		The date when the set of information, in this business document, becomes or became valid.
Snapshot date		The date and time when the set of information was extracted from the area register.
Area ID		The unique identification of the area the relation to other areas is given for.

<sup>20 20</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector 20	Description
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station, Temperature Zone or Scheduling Area <sup>21</sup> .
Content Responsible Party ID		The type of area, such as Metering Grid Area, Bidding Zone or Scheduling Area.
Content Responsible Party role		The role of the Content Responsible Party.
Related area		An area connected to the area in question.
Area ID		The unique identification of the area that is related or linked to the area the relation is given for.
Type of area		The type of the area, such as Metering Grid Area, Bidding Zone, country, Calorific Value Area, Aggregated Reception Station or Scheduling Area <sup>22</sup> .
Content Responsible Party ID		The type of area, such as Metering Grid Area, Bidding Zone or Scheduling Area.
Content Responsible Party role		The role of the Content Responsible Party.
Area relations Additions		Additional information related to this business document, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Business process ID		The unique identification, given by the Responsible Party for this set of information, of this instance of the process in question.
Area relations Async Additions		Additional information related to this business document needed when using asynchronous communication.
Reference to Requesting Transaction ID		A reference to the requesting business document, used in the responding business document in a business transaction.

<sup>21</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

<sup>22</sup> Calorific Value Area and Aggregated Reception Station are only valid for the gas sector.

### 1.4.12. Reject request area relations (Class Diagram)

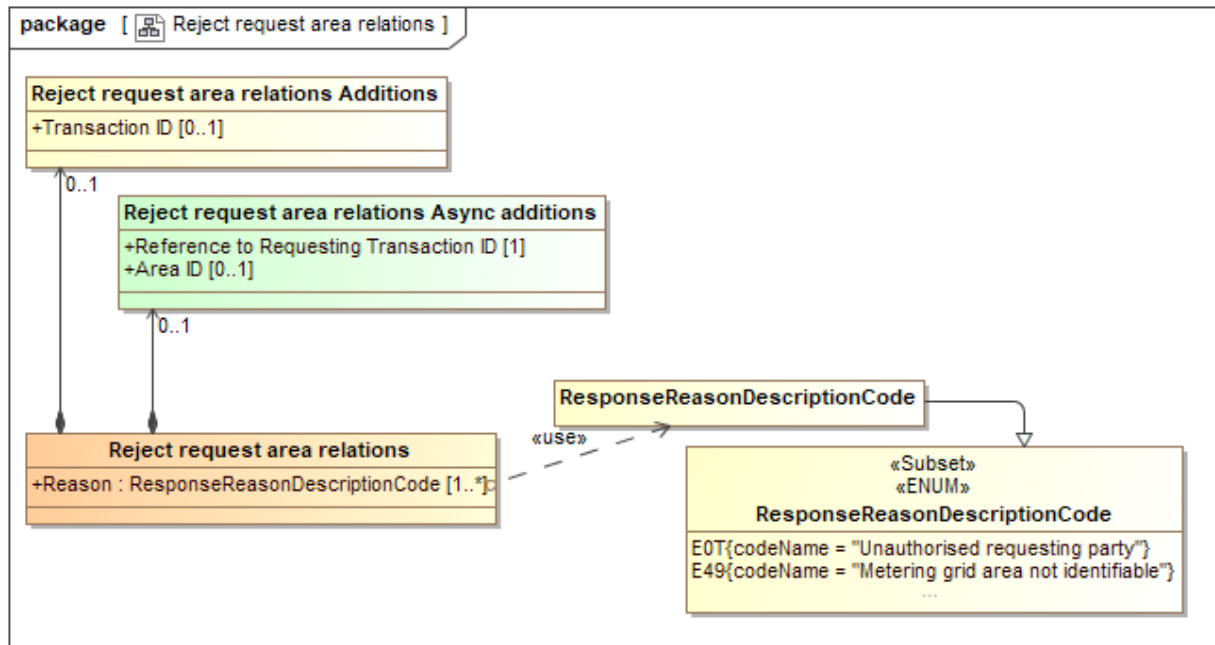


Figure 29 Class Diagram: Reject request area relations

#### 1.4.12.1. Element definitions, Reject request area relations

Class/attribute	Sector 23	Description
«Business entity» Reject request area relations		The information set to be sent from the Area Administrator to the Entitled Party when rejecting a requesting for area relations.
Reason		A code specifying (one of) the reason(s) for the rejection of the request for area relations.
Reject request area relations Additions		Additional information related to these area relations, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Responsible Party for this set of information.
Reject request area relations Async Additions		Additional information related to these area relations, needed when using asynchronous communication.
Reference to Requesting Transaction ID		A reference to the requesting business document.

<sup>23</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector 23	Description
Area ID		The unique identification of the area the request for was rejected for.

## Appendix A. Header and Context information for the class diagrams

### A.1. Header and Context Information attributes definitions

Class/attribute	Sector <sup>24</sup>	Description
Header and Context Information		The set of information specifying the information to be added to this payload to enable the exchange as a document.
Document Type		A code representing the document type used for the exchange of this set of information.
Business Reason		A code representing the business reason for the exchange of this set of information.
Ancillary Business Process Role		A code representing the market role taking part in this exchange together with the Responsible Party, responsible for the process/this exchange.

### A.2. Request change area characteristics

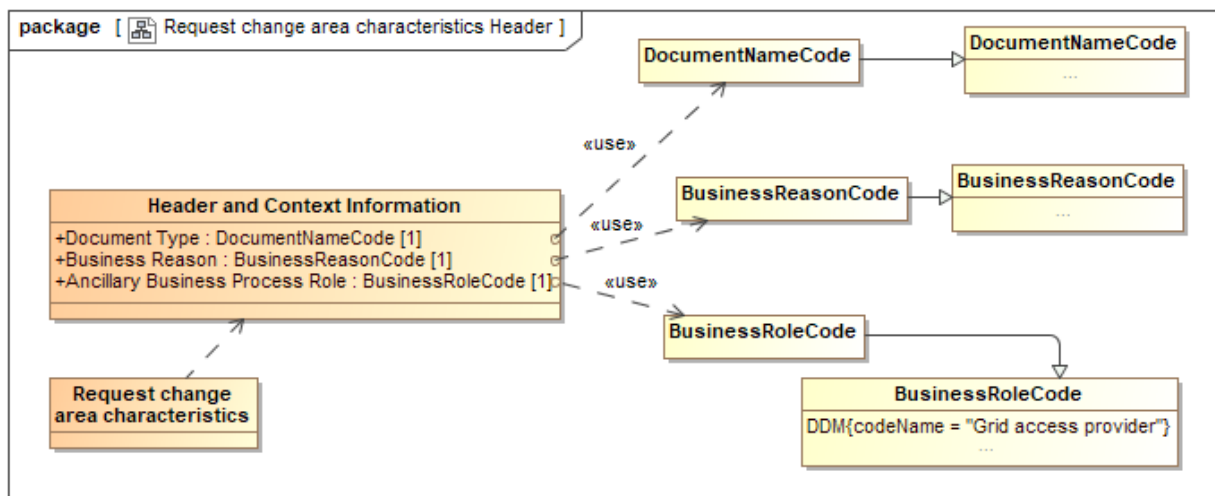


Figure 1 Class diagram: Header and Context information: Request change area characteristics

<sup>24</sup> It is assumed that areas are uniquely dedicated to either electricity or to gas.

### A.3. Confirm request change area characteristics

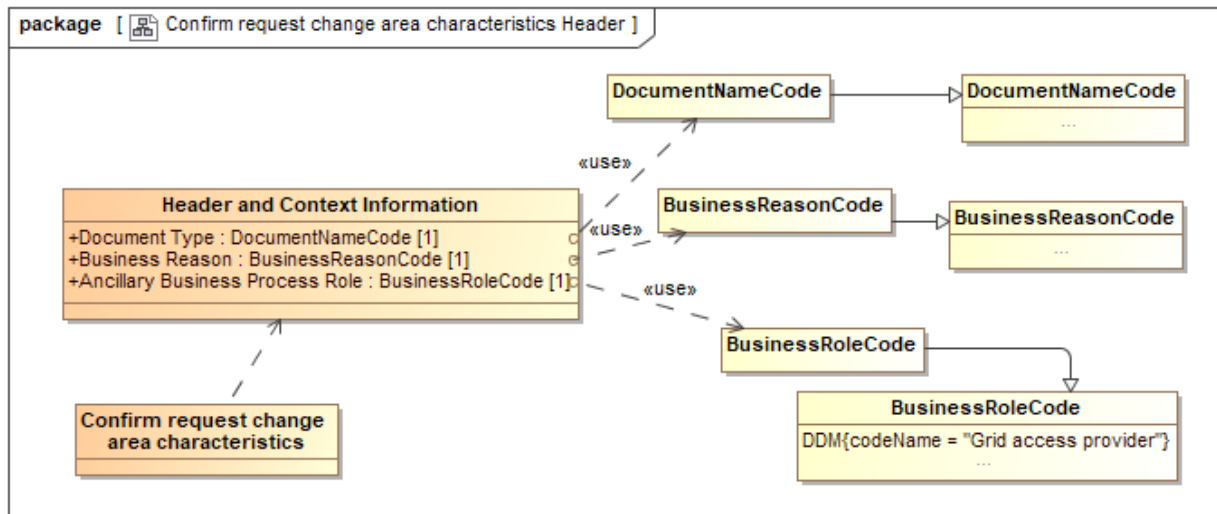


Figure 2 Class diagram: Header and Context information: Confirm request change area characteristics

### A.4. Reject request change area characteristics

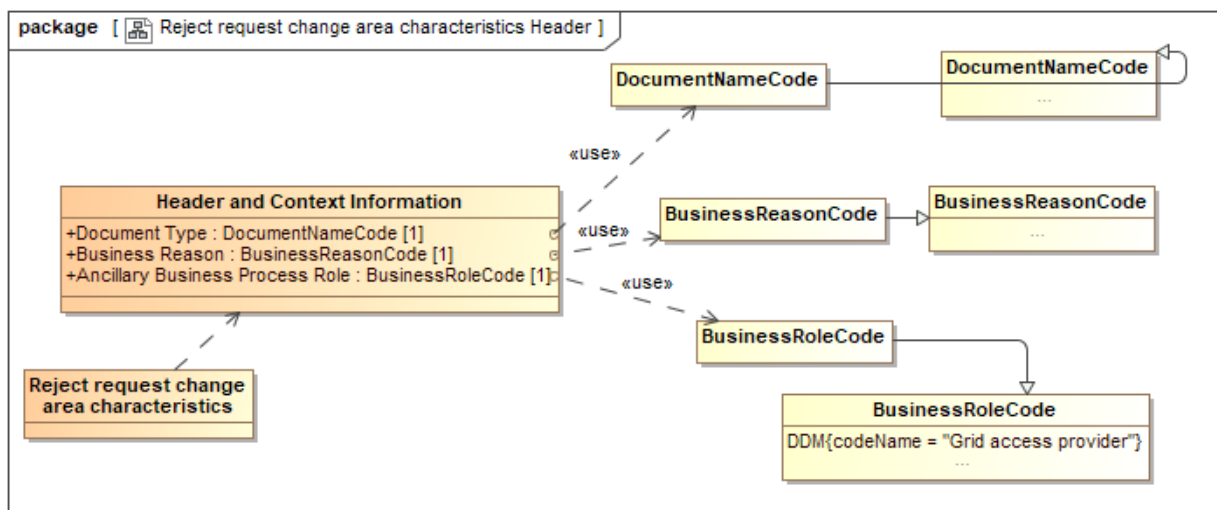


Figure 3 Class diagram: Header and Context information: Reject request change area characteristics



### A.5. Request area characteristics

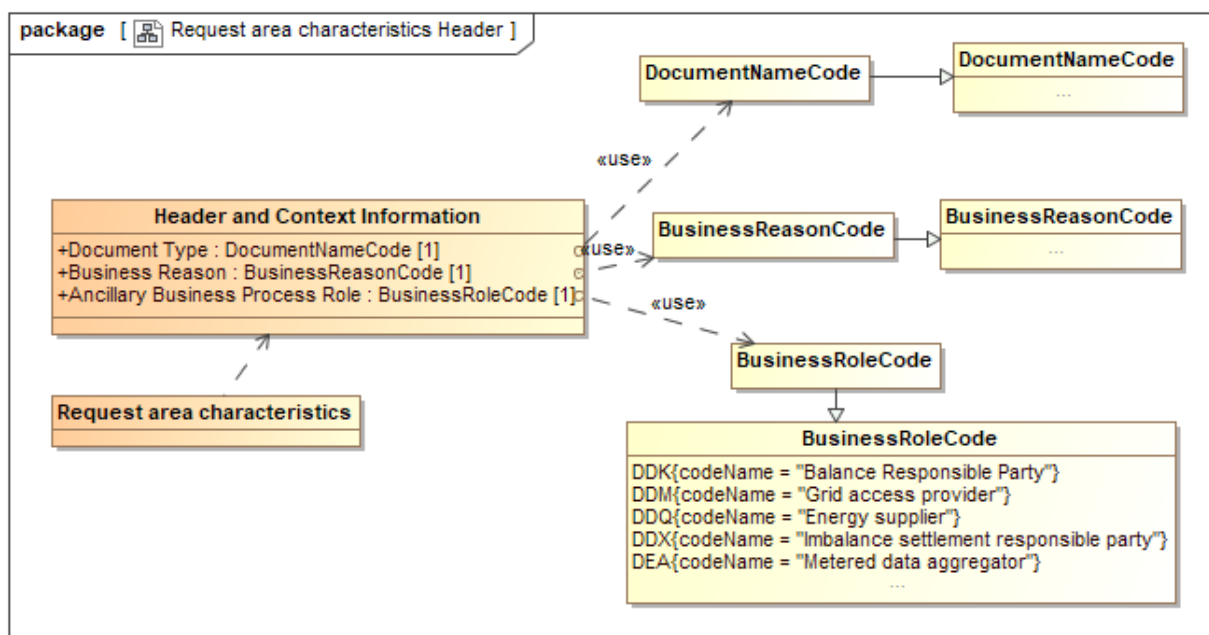


Figure 4 Class diagram: Header and Context information: Request area characteristics

### A.6. Area characteristics

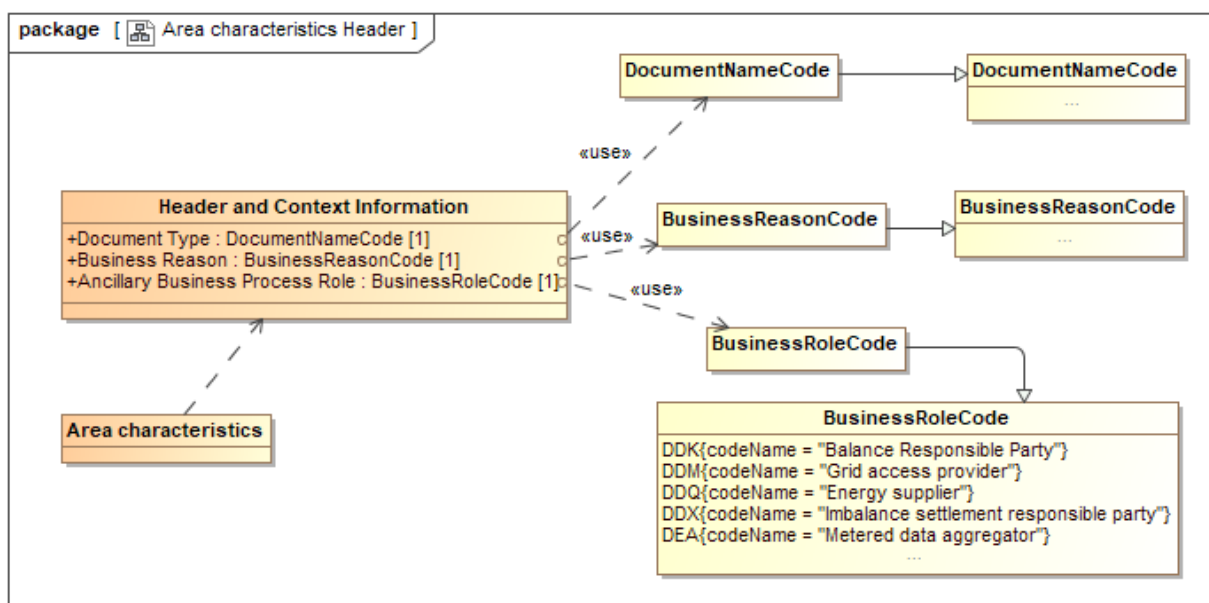


Figure 5 Class diagram: Header and Context Information: Area characteristics

### A.7. Reject request area characteristics

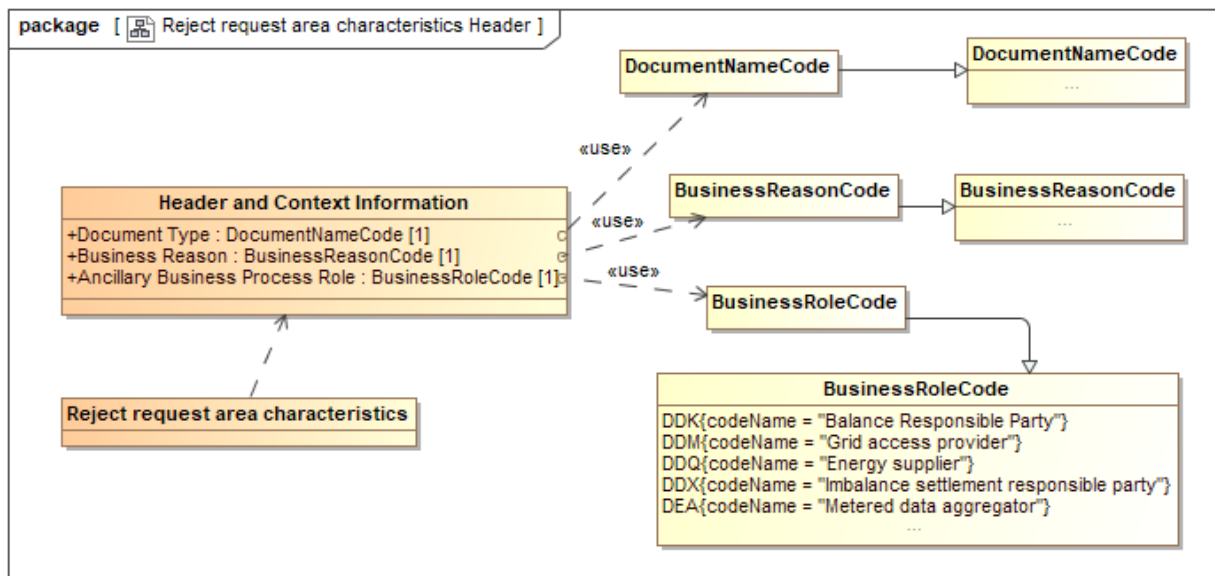


Figure 6 Class diagram: Header and Context information: Reject request area characteristics

### A.8. Request change area relations

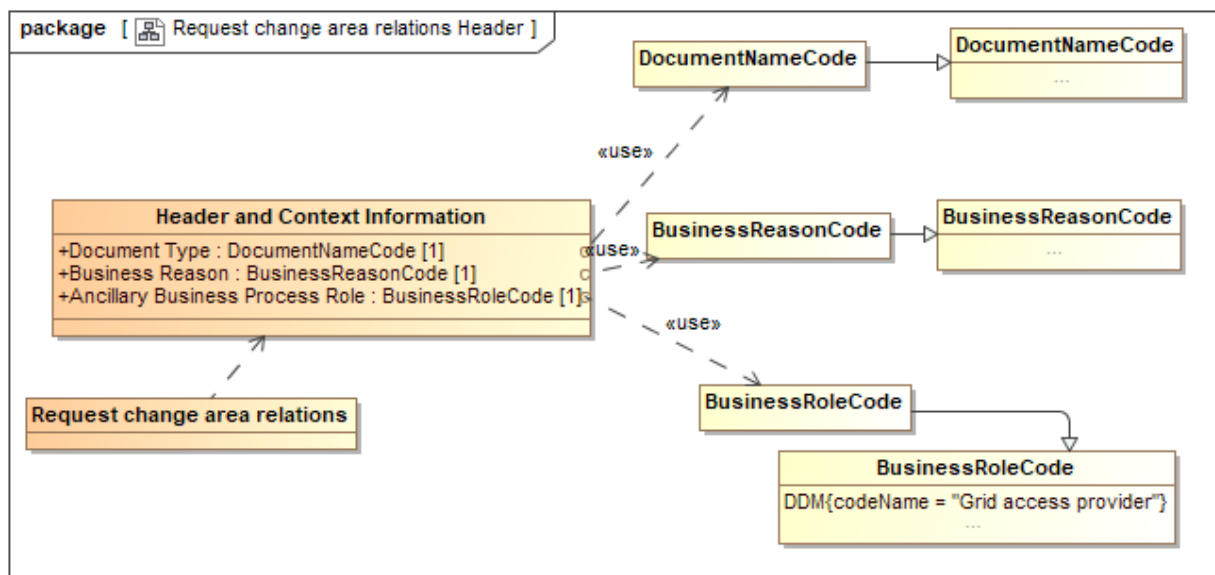


Figure 7 Class diagram: Header and Context information: Request change area relations

### A.9. Confirm request change area relations

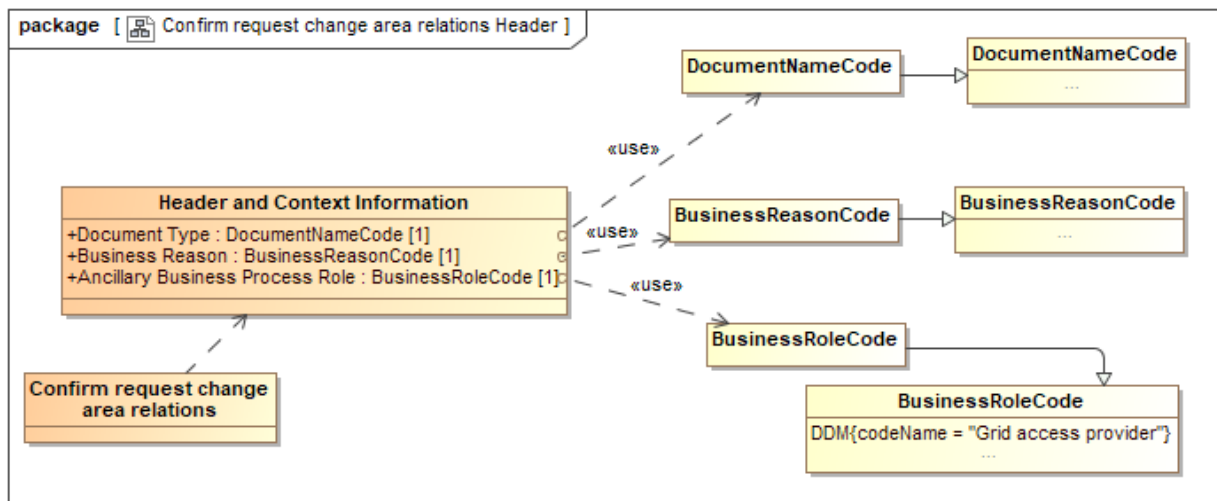


Figure 8 Class diagram: Header and Context information: Confirm request change area relations

### A.10. Reject request change area relations

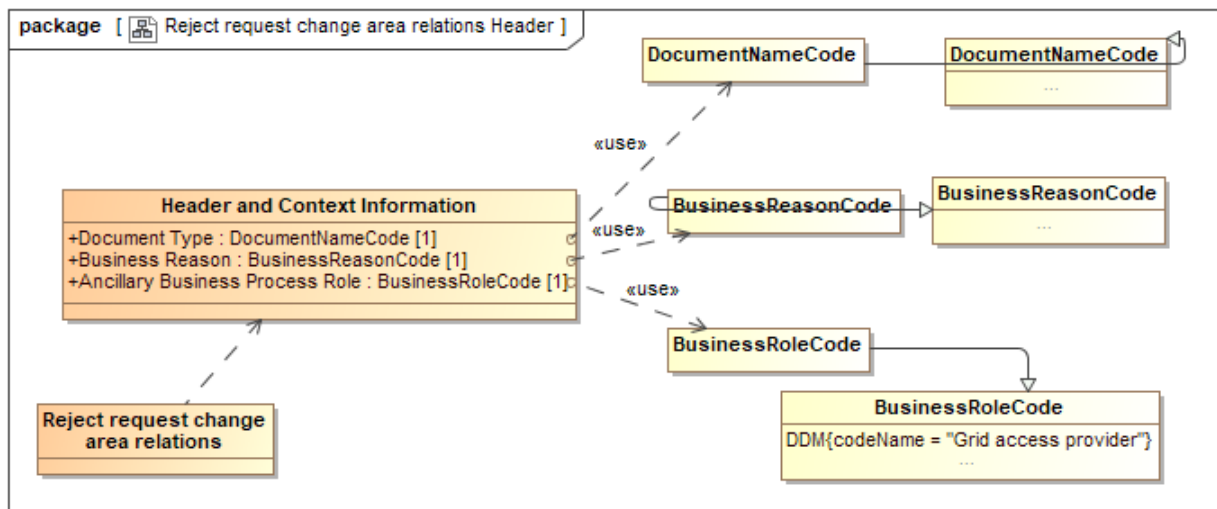


Figure 9 Class diagram: Header and Context information: Reject request change area relations

### A.11. Request area relations

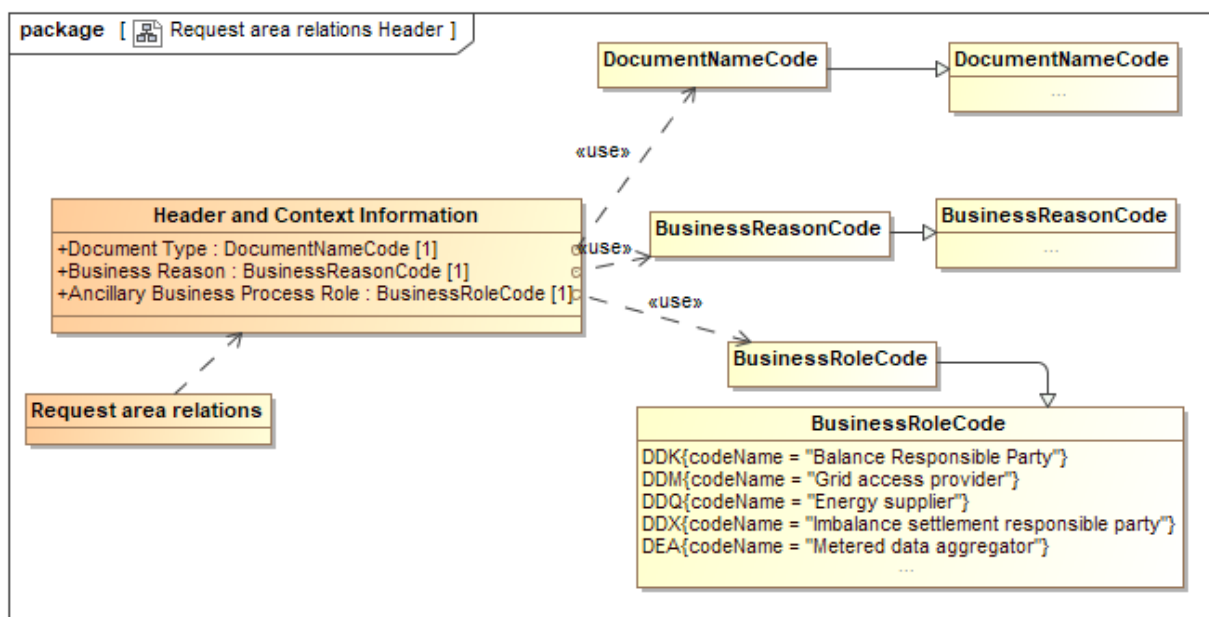


Figure 10 Class diagram: Header and Context information: Request area relations

### A.12. Area relations

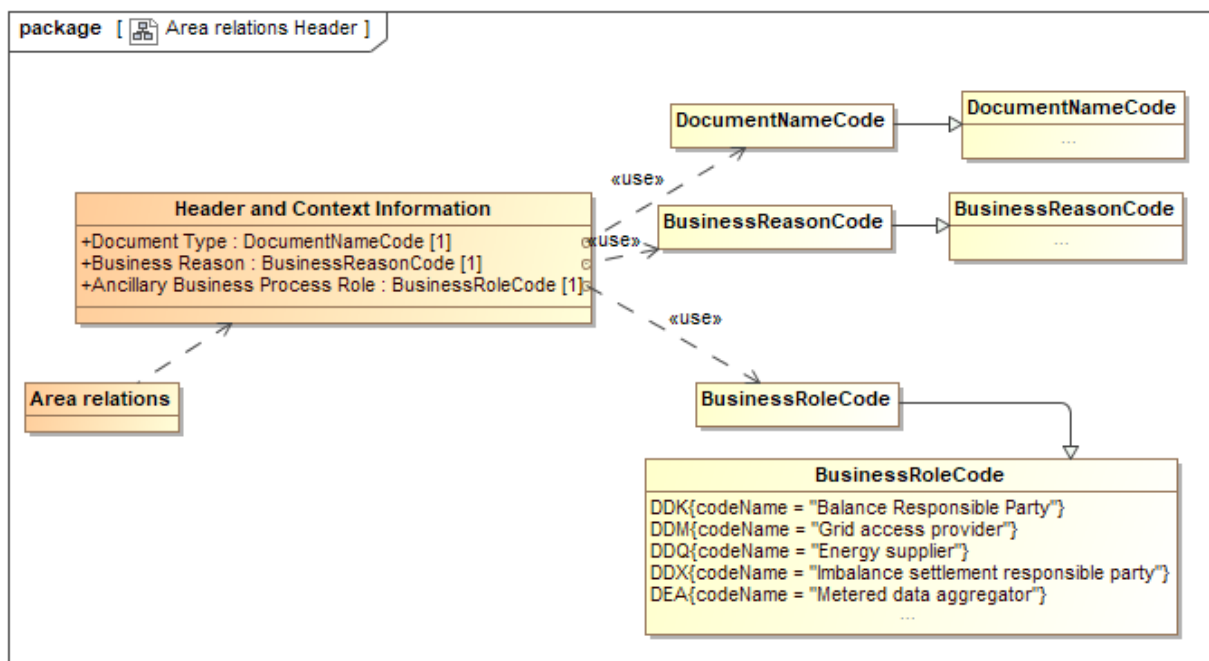


Figure 11 Class diagram: Header and Context information: Area relations

### A.13. Reject request area relations

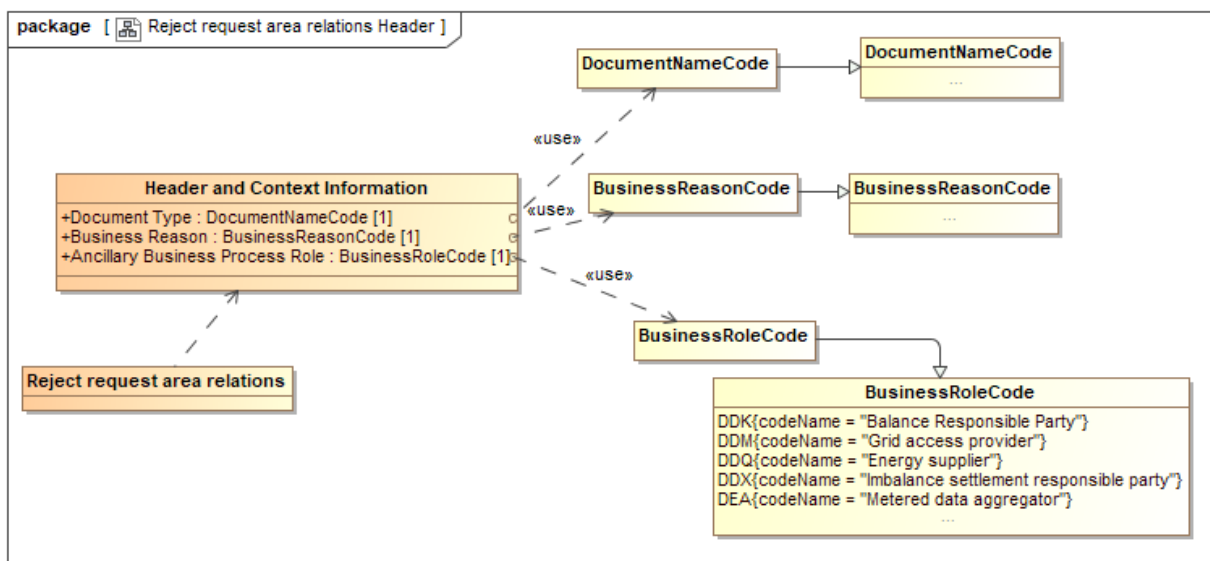


Figure 12 Class diagram: Header and Context information: Reject request area relations