



Business Requirements for Bulk change of Shipper

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A. About this document

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

The bulk change of Shipper is a process where an Energy Supplier can request change of Shipper for a bulk of Accounting Points or all Accounting Points in an area, such as a Metering Grid Area (MGA), a Calorific Value Area or an Aggregated Reception Station.

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. For comments to the document please contact the 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).

A.2.2. ebIX® Documents

- [4] Introduction to ebIX® Business Requirements and Business Information Models (www.ebix.org);
- [5] Recommended Identification Schemes for the European Energy Market (www.ebix.org)
- [6] ebIX® code lists (www.ebix.org);
- [7] ebIX® Business Requirements for measure for determine meter read (www.ebix.org);
- [8] ebIX® Business Requirements for Alignment of Accounting Point Characteristics (www.ebix.org).

A.3. Main changes since last version

Old	New	Clarification	Date
Version 1.0.A			
	1.0.A	First published version of the BRS.	20190502
Version 1.0.B			
1.0.A	1.0.B	<ul style="list-style-type: none">• Harmonised the introduction with other ebIX® BRSs.• Moved Reference to requesting Transaction ID to Async Additions.• Hiding attributes from the root class in Appendix A, to make the class diagrams more readable.• Correction of spelling errors.• Update of roles to be in line with the ebIX®, EFET and ENTSO-E Harmonised Electricity Market Role Model version 2022-01.	20230815

1. Business Requirements View: Bulk change of Shipper

1.1 Bulk change of Shipper (Business Process UseCase)

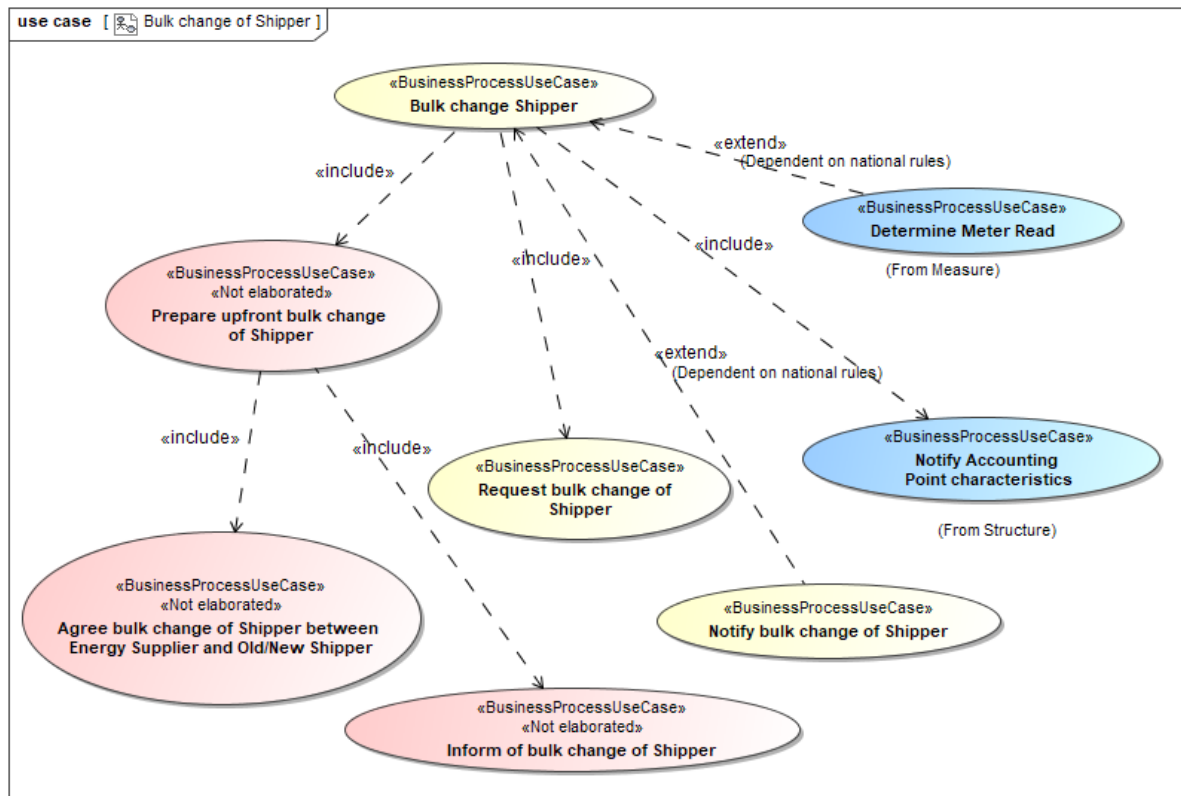


Figure 1 UseCase: Bulk change of Shipper

The process “Bulk change of Shipper” is modelled based on changes to multiple Accounting Points or on all Accounting Points of a Shipper in an area. Which principle to use must be based on national situation or rules. When the request is confirmed or rejected, it must be for all Accounting Points in the request. In the rejection, the rejected Accounting Points may be listed for information.

1.1.1 Description

UseCase description: Bulk change of Shipper	
definition	<p>This is the process where an Energy Supplier can change the Shipper for multiple Accounting Points at one time.</p> <p>The Metering Point Administrator makes all necessary updates for the change, notifies Affected Parties, including distribution of master data for alignment of the business partner administrations.</p>
beginsWhen	When the Energy Supplier decides to change, at the same moment, the Shipper for a large number of Accounting Points he is serving.
preCondition	<ul style="list-style-type: none"> • The Energy Supplier supplies the Accounting Points; • The New Shipper is authorised; • Change of Shipper has been prepared, i.e.: <ul style="list-style-type: none"> ○ Change of Shipper is agreed between the Energy Supplier and the Old and New Shipper; ○ The Metering Point Administrator timely has been informed of the bulk change of Shipper by the Energy Supplier.
endsWhen	When the bulk change of Shipper is confirmed, and all relevant parties have been notified and have received master data and, when needed for national reasons, measured data was determined and communicated.
postCondition	The New Shipper is linked to the indicated Accounting Points and all relevant parties have received master data for alignment. And, when needed for national reasons, measured data was determined and communicated.
exceptions	<p>The request was rejected.</p> <p>The bulk change of Shipper may at a national level be handled by other roles than the Energy Supplier, such as the Shipper itself.</p>
actions	See 1.1.1.1

1.1.1.1 Business Process

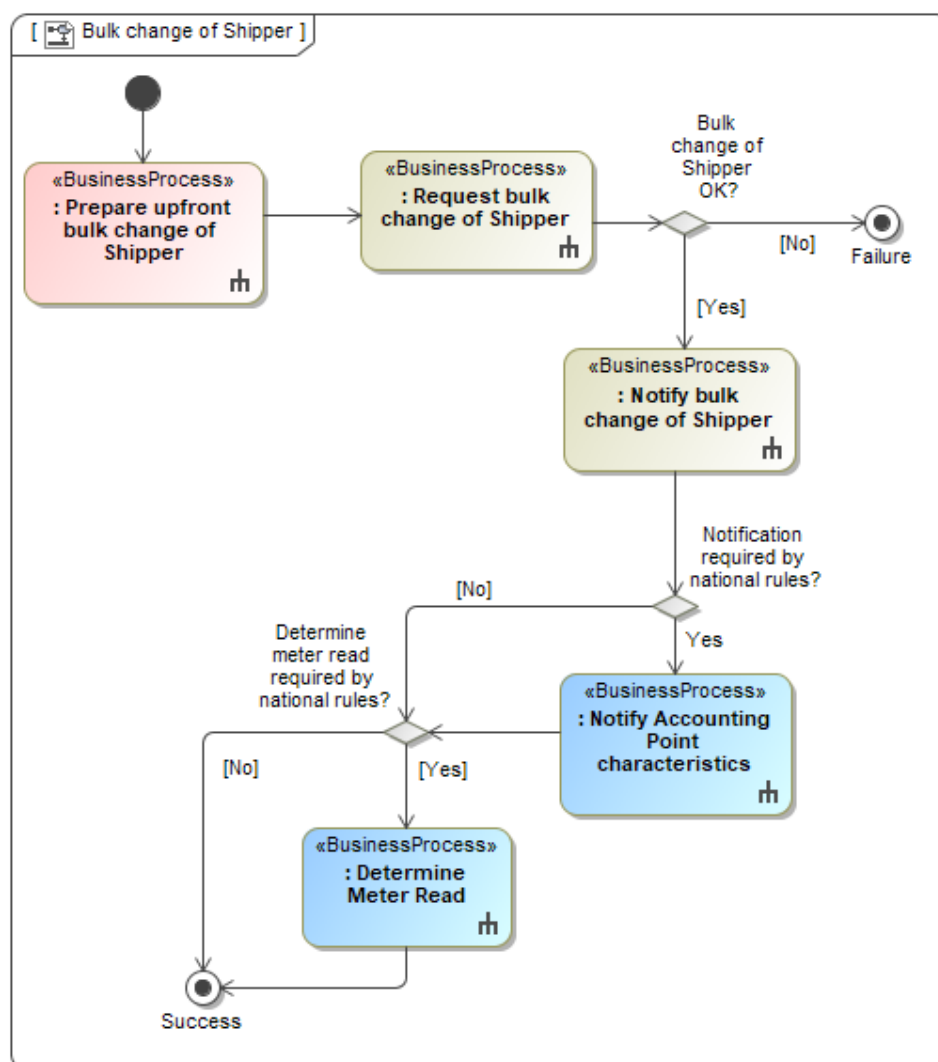


Figure 2 Business Process: Bulk change of Shipper

1.1.2 Prepare upfront bulk change of Shipper (Business Process UseCase)

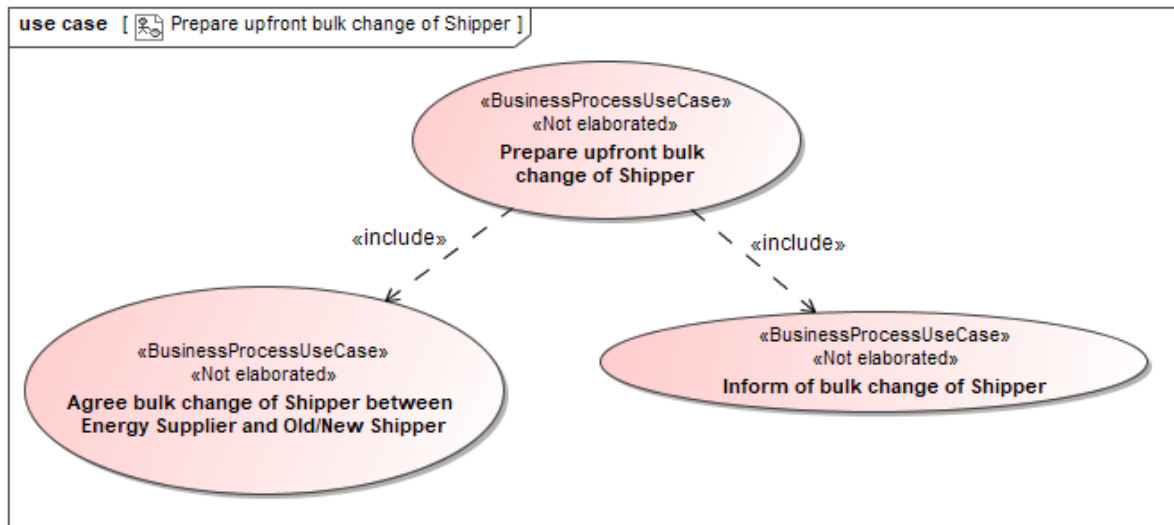


Figure 3 UseCase diagram: Prepare upfront bulk change of Shipper

1.1.2.1 Description

UseCase description: Prepare upfront bulk change of Shipper	
definition	<p>This is a preparation process where the Energy Supplier agrees with the New and Old Shippers the bulk change of Shipper. In addition, the Energy Supplier informs the Metering Point Administrator and the Other Affected Party timely about the change.</p> <p>The process is expected to be a manual process, not handled by standardised message exchange.</p>
beginsWhen	When the Energy Supplier decides to change Shipper for a set of Accounting Points at the same time.
preCondition	The Energy Supplier has decided to change Shipper for a set of Accounting Points at the same time.
endsWhen	When the Old and New Shippers and the Metering Point Administrator are informed timely about the scheduled bulk change of Accounting Points.
postCondition	The preparatory work for bulk change of Shipper are accepted by all involved parties and the process “Request bulk change of Shipper” can start.
exceptions	The bulk change of Shipper is rejected by one or more of the involved Parties and the bulk change of Shipper has been cancelled and the process of rearrangement of Accounting Point(s) is stopped.

	Timelines for informing parties before the intended switch moment are dependent on national rules.
actions	The actions of this UseCase will not be elaborated by ebIX®.

1.1.2.2 Agree bulk change of Shipper between Energy Supplier and Old/New Shipper (Business Process UseCase)

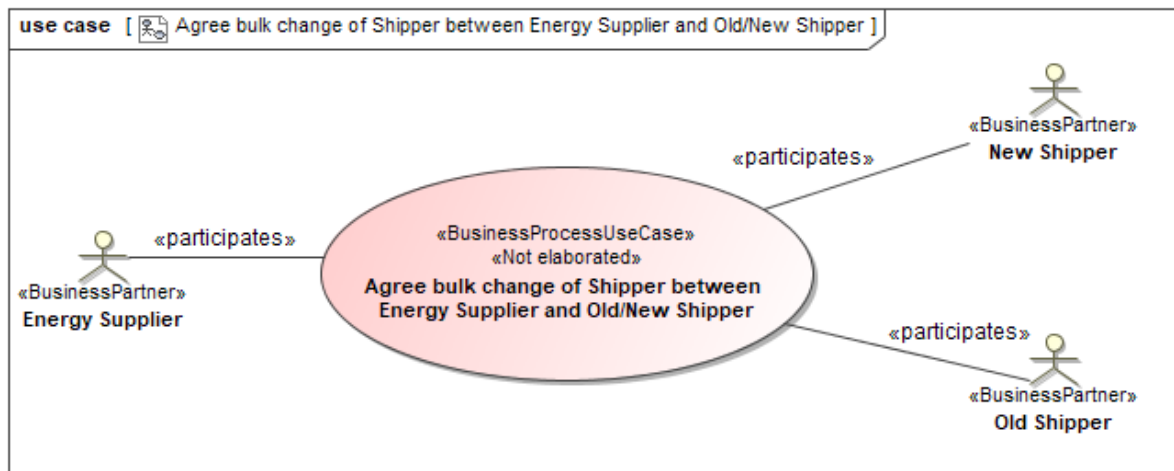


Figure 4 UseCase diagram: Agree bulk change of Shipper between Energy Supplier and Old/New Shipper

UseCase description: Agree bulk change of Shipper between Energy Supplier and Old/New Shipper	
definition	<p>This is a preparation process where the Energy Supplier agrees with the New and Old Shippers the bulk change of Shipper.</p> <p>The process is expected to be a manual process, not handled by standardised message exchange.</p>
beginsWhen	When the Energy Supplier decides to change Shipper for a set of Accounting Points at the same time.
preCondition	The Energy Supplier has decided to change Shipper for a set of Accounting Points at the same time.
endsWhen	When the Old and New Shippers are informed timely and agreed about the scheduled bulk change of Accounting Points.
postCondition	The bulk change of Shipper is accepted by the Old and New Shipper.
exceptions	<p>The bulk change of Shipper is rejected by one or more of the involved Shippers and the bulk change of Shipper has been cancelled and the process of rearrangement of Accounting Point(s) is stopped.</p> <p>Timelines for informing parties before the intended switch moment are dependent on national rules.</p>
actions	The actions of this UseCase will not be elaborated by ebIX®.

1.1.2.3 Inform of bulk change of Shipper (Business Process UseCase)

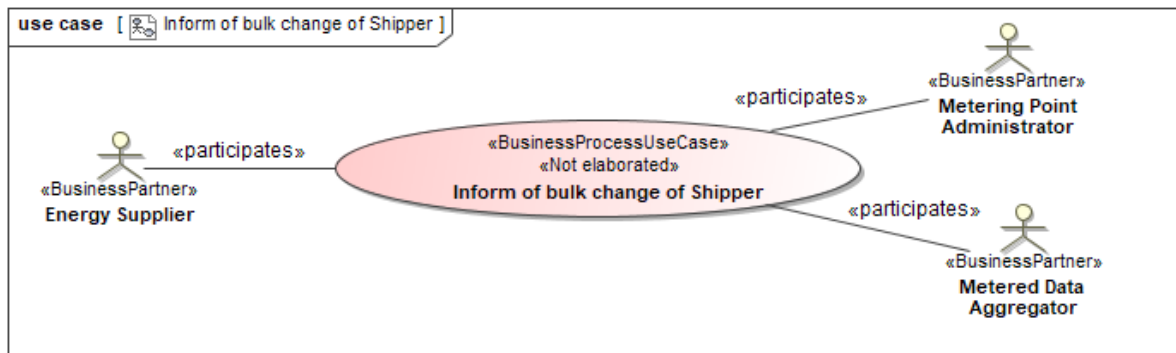


Figure 5 UseCase diagram: Inform Metering Point Administrator of bulk change of Shipper

UseCase description: Inform of bulk change of Shipper	
definition	<p>This is a preparation process where the Energy informs the Metering Point Administrator and the Other Affected Party timely about the bulk change.</p> <p>The process is expected to be a manual process, not handled by standardised message exchange.</p>
beginsWhen	When the Energy Supplier agreed with the Old and New Shipper to change Shipper for a set of Accounting Points at the same time.
preCondition	<p>The Energy Supplier has agreed with the Old and New Shipper to change Shipper for a set of Accounting Points at the same time.</p> <p>The Old and New Shipper have agreed to the bulk switch.</p>
endsWhen	When the Metering Point Administrator and the Other Affected Party are informed timely about the scheduled bulk change of Accounting Points.
postCondition	The bulk change of Shipper is accepted by the Metering Point Administrator and the Other Affected Party and the process “Request bulk change of Shipper” can start.
exceptions	<p>The bulk change of Shipper is rejected by one or more of the involved Parties and the bulk change of Shipper has been cancelled and the process of rearrangement of Accounting Point(s) is stopped.</p> <p>Timelines for informing parties before the intended switch moment are dependent on national rules.</p>
actions	The actions of this UseCase will not be elaborated by ebIX®.

1.1.3 Request bulk change of Shipper

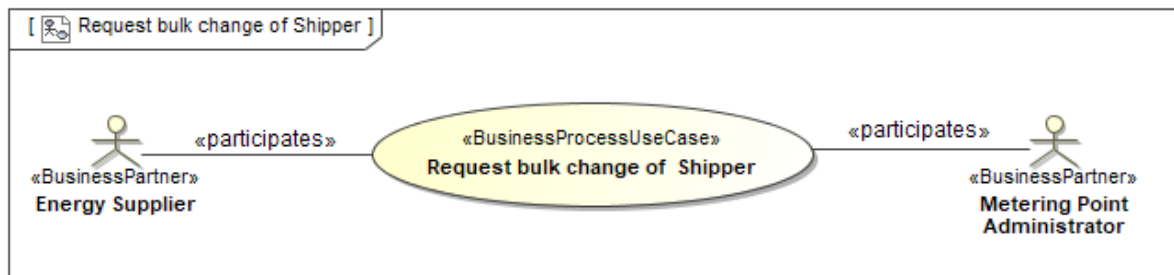


Figure 1 UseCase: Request bulk change of Shipper

1.1.3.1 Description

UseCase description: Request bulk change of Shipper	
definition	<p>In this process, the Energy Supplier requests a bulk change of Shipper for (a lot of) Accounting Points at the Metering Point Administrator.</p> <p>The Metering Point Administrator confirms it.</p>
beginsWhen	When the Energy Supplier has prepared with all needed Parties for the bulk change of Shipper and sends the request to the Metering Point Administrator.
preCondition	<p>The Energy Supplier is linked to the Accounting Points.</p> <p>The New Shipper is authorised.</p> <p>Change of Shipper has been prepared, i.e.:</p> <ul style="list-style-type: none"> Change of Shipper is agreed between the Energy Supplier and the Old and New Shipper; The Metering Point Administrator timely has been informed of the bulk change of Shipper by the Energy Supplier.
endsWhen	When the request for bulk change of Shipper is confirmed.
postCondition	The request for bulk change of Shipper has been confirmed by the Metering Point Administrator to the Energy Supplier.
exceptions	<p>The request of bulk change of Shipper has been rejected by the Metering Point Administrator.</p> <p>The bulk change of Shipper may at a national level be handled by other roles than the Energy Supplier, such as the Shipper itself.</p>

	Based on national rules there may be time constraints on the preparation process versus the requesting process.
actions	See 1.1.3.2

1.1.3.2 Business Process

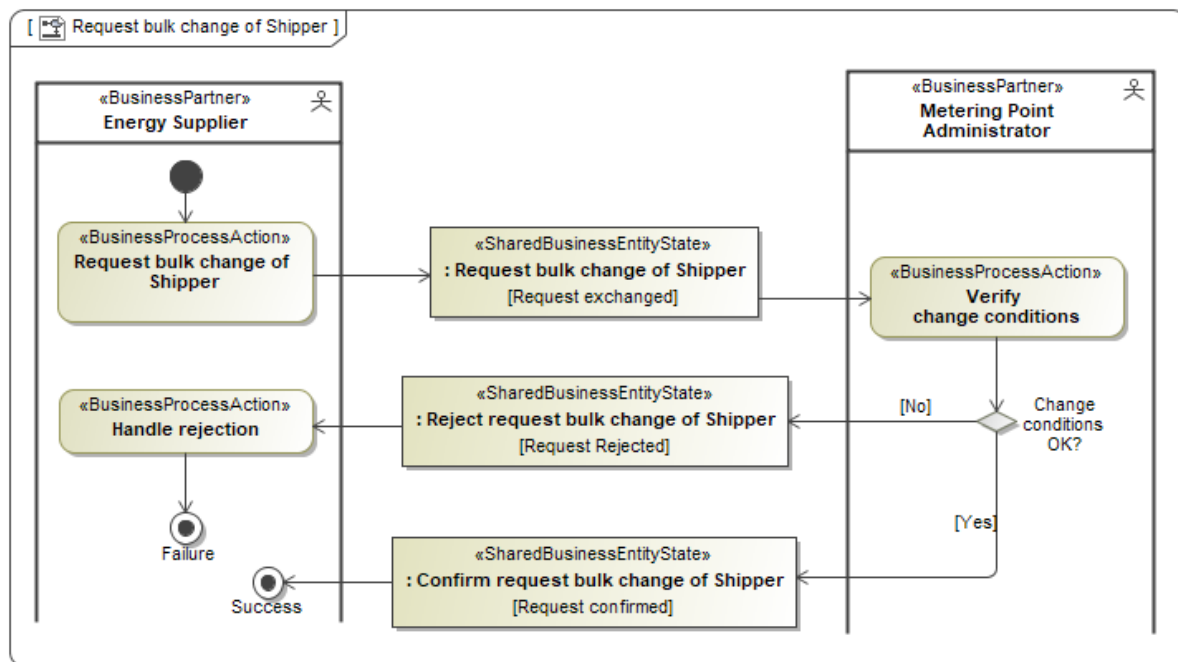


Figure 2 Business Process: Request bulk change of Shipper

1.1.4 Notify bulk change of Shipper (Business Process UseCase)

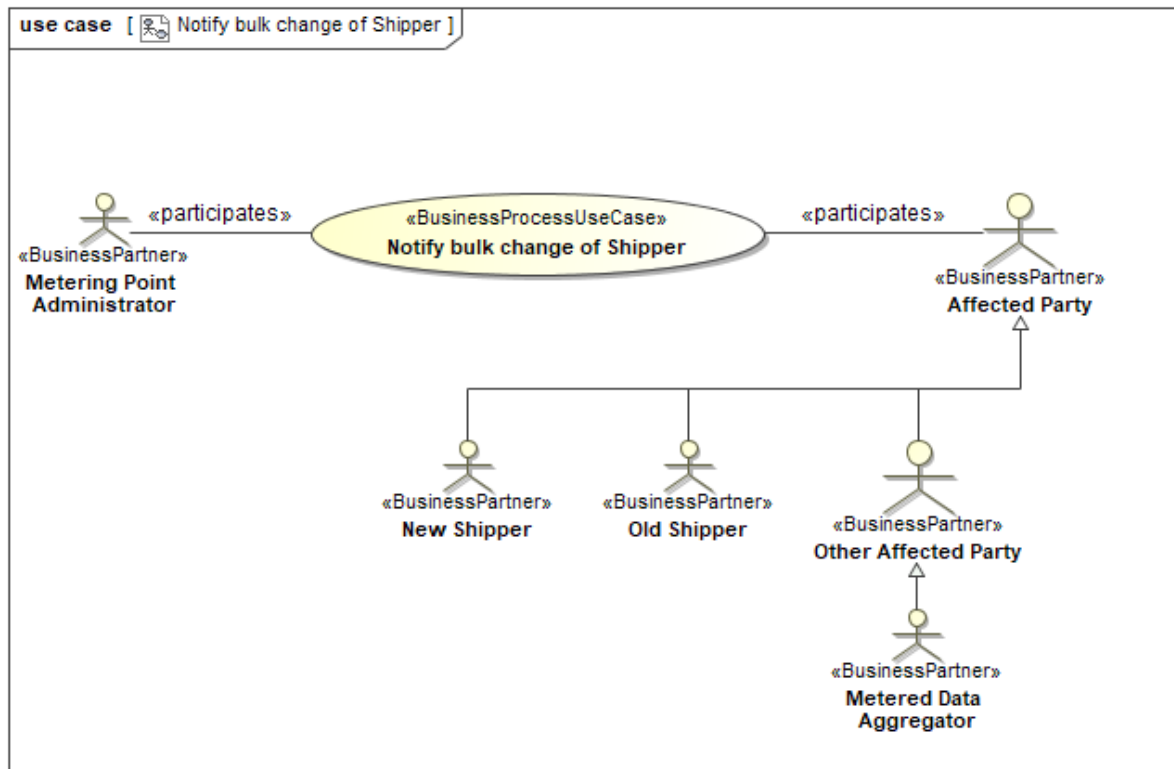


Figure 3 UseCase: Notify bulk change of Shipper

1.1.4.1 Description

UseCase description: Notify bulk change of Shipper	
definition	The Metering Point Administrator notifies the bulk change of Shipper for the specified Accounting Points to all Affected Parties, i.e. the New and Old Shipper and Other Affected Party.
beginsWhen	Depending on national rules, when the bulk change of Shipper has been confirmed by the Metering Point Administrator.
preCondition	The Request bulk change of Shipper has been confirmed by the Metering Point Administrator.
endsWhen	When the Old and the New Shippers, and the Other Affected Party have received the notification.
postCondition	The bulk change of Shipper has been notified to the Old and the New Shippers, and the Other Affected Party.
exceptions	The process may not be used, i.e. dependent on national rules.

	Time lines for the bulk process may differ from the individual change of Shipper.
actions	See 1.1.4.2

1.1.4.2 Business Process

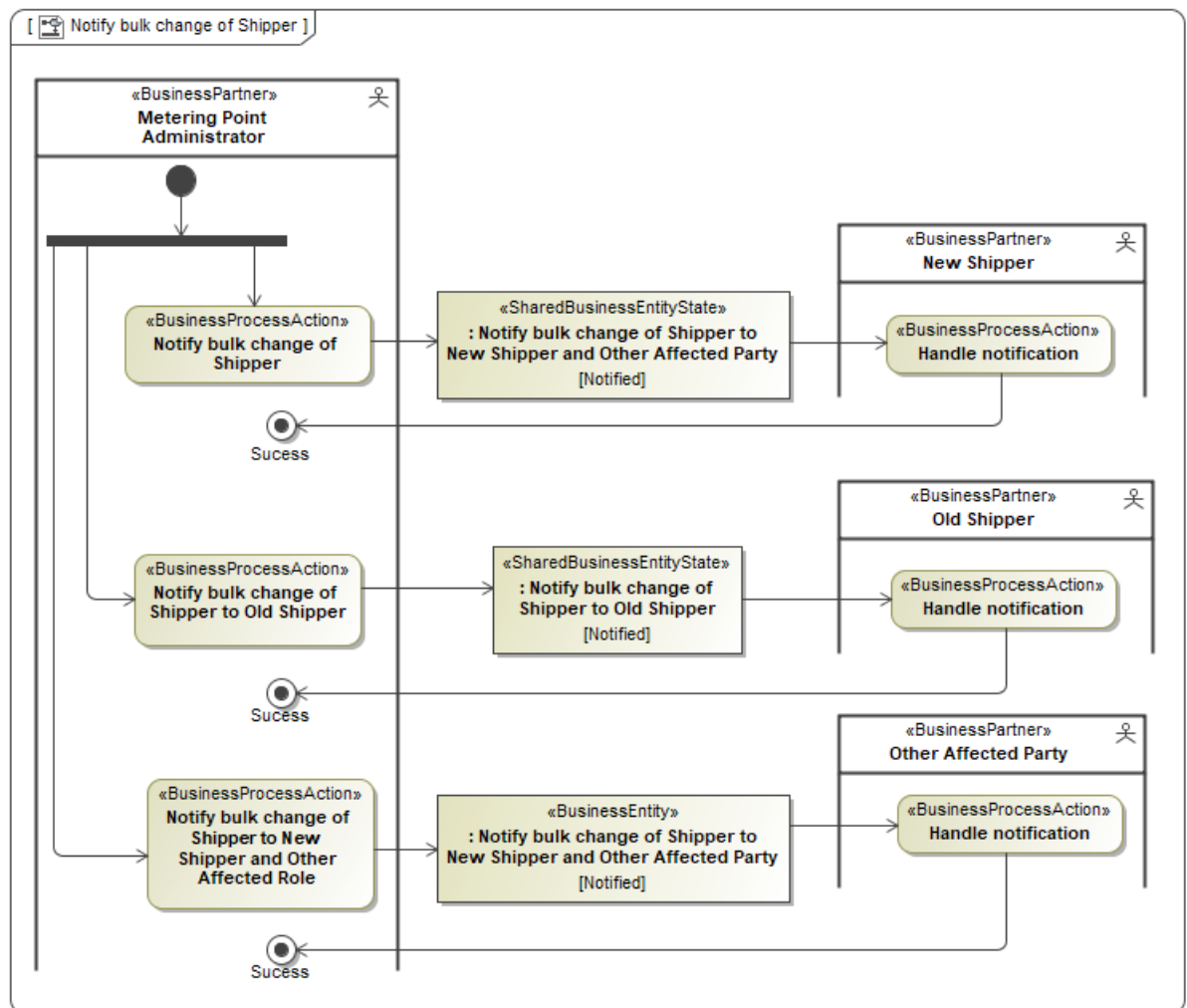


Figure 4 Business Process: Notify bulk change of Shipper

1.1.5 Notify Accounting Point Characteristics

In order for all Linked Parties to operate properly they will be notified with Accounting Point characteristics. *Notify Accounting Point Characteristics* is documented in a separate document, see A.1. In that BRS (Alignment of Accounting Point Characteristics), the “Linked Parties” are specified.

Dependent on national rules the update of characteristics can be in a bulk file.

1.1.6 Determine Meter Read

Based on national rules meter reads may be needed. The Process Area Determine Meter Read is documented in the ebIX® model Measure [7].

1.2 Business Partner View

1.2.1 Business Partners Bulk change of Shipper

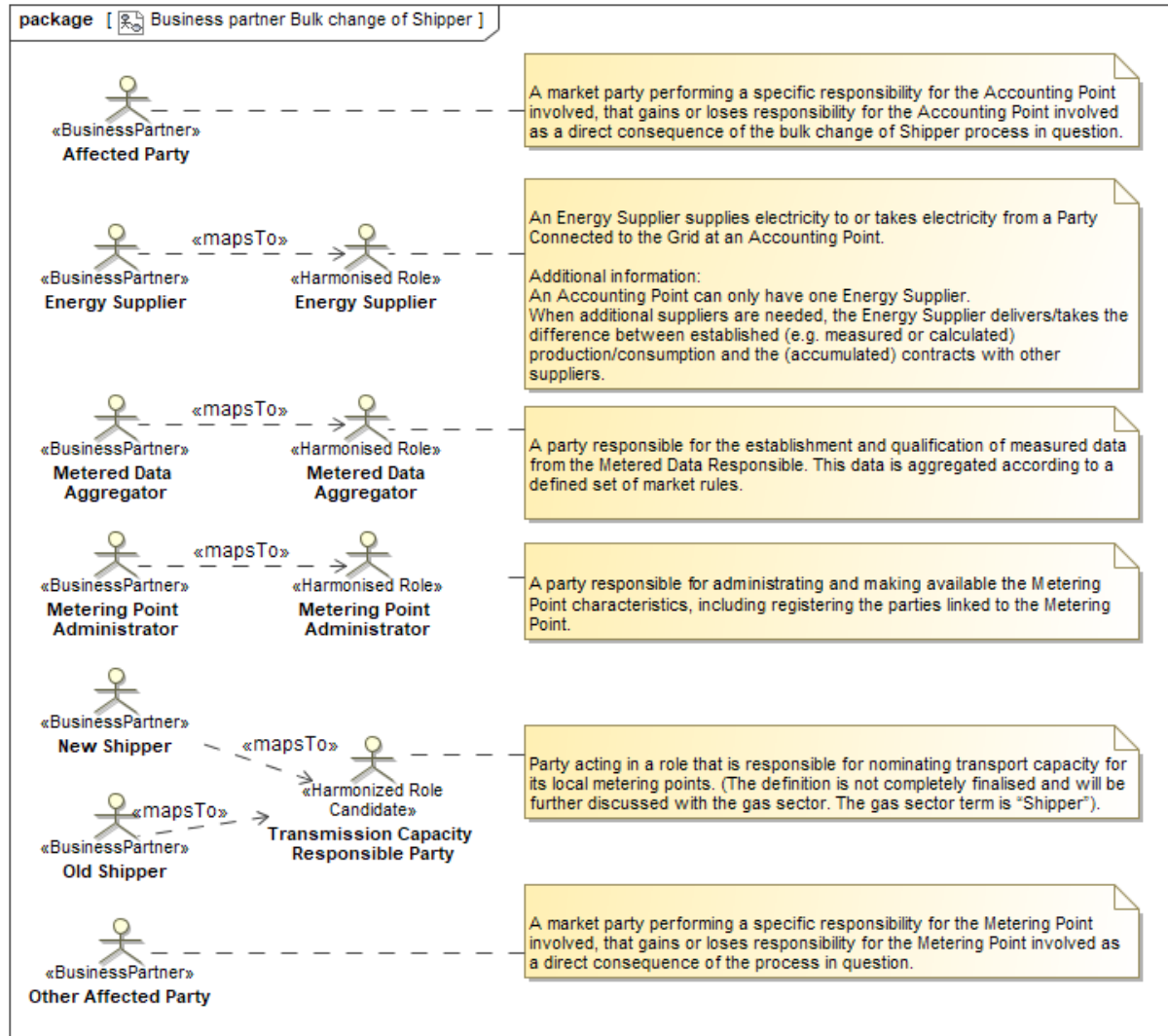


Figure 5 Business Partners. Bulk change of Shipper

1.3 Business Entity View

1.3.1 Short introduction

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

1.3.2 Request bulk change of Shipper (Class Diagram)

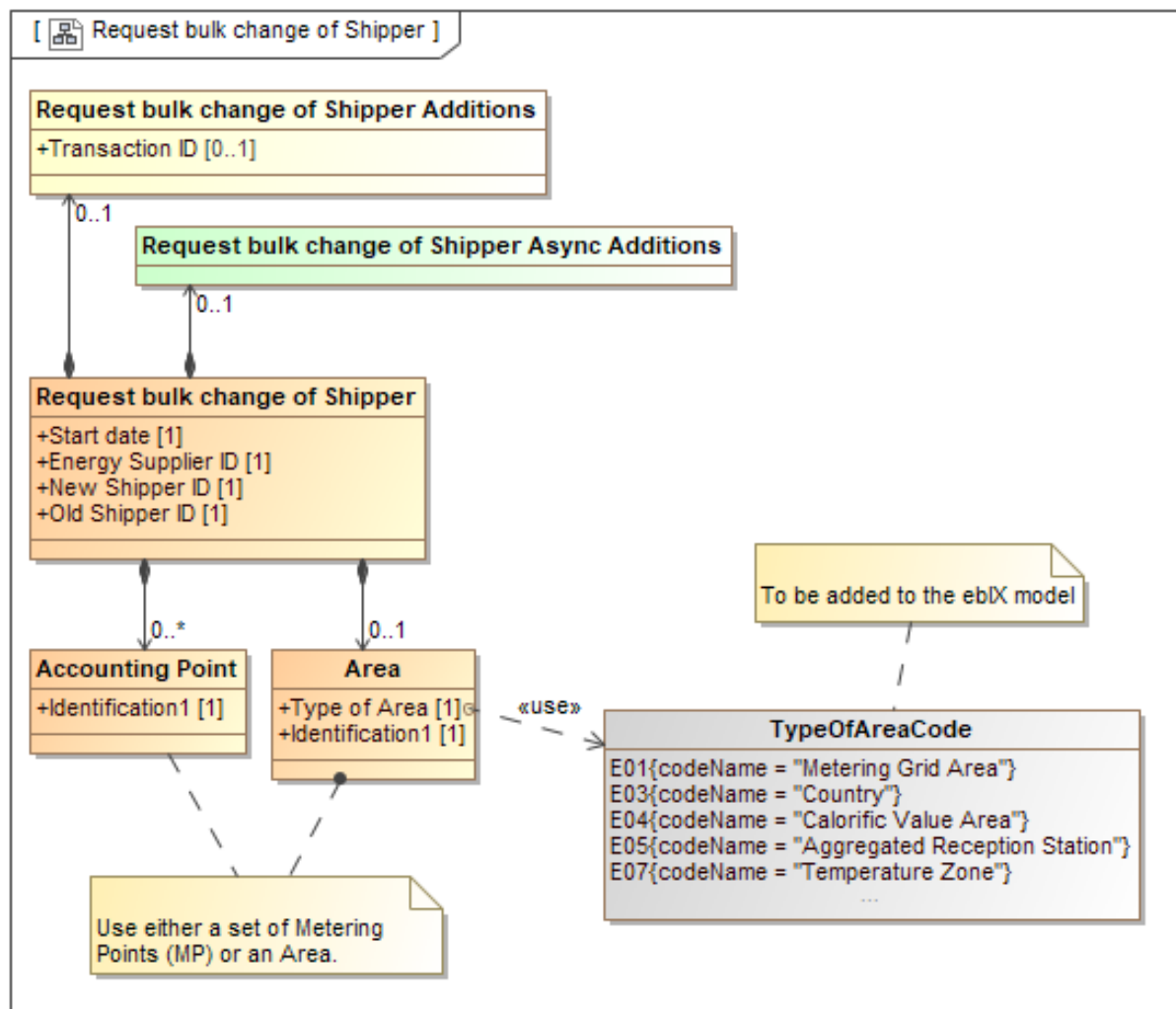


Figure 6 Class Diagram: Request bulk change of Shipper

1.3.2.1 Element definitions: Request bulk change of Shipper

Class/attribute	Sector ¹	Description
«Business entity» Request bulk change of Shipper		The information set sent by an Energy Supplier to the Metering Point Administrator when requesting bulk change of Shipper.
Start date		The requested date for the New Shipper to take over the balance responsibility for these Accounting Points.
Energy Supplier ID		The unique identification of the requesting and responsible Energy Supplier.
New Shipper ID		The unique identification of the requested New Shipper.

¹ It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ¹	Description
Old Shipper ID		The unique identification of the Old Shipper, that no longer will be balance responsible for these Accounting Points.
«Business entity» Accounting Point		An entity where energy products are measured or computed, under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined.
Identification		The unique identification of an Accounting Point in this bulk change of Shipper.
Area		A Domain containing a set of Accounting Points
Type of Area		A code indicating the type of Area in question, such as a Metering Grid Area, an Aggregated Reception Station or a country.
Identification		The unique identification of the Area in question.
Request bulk change of Shipper Additions		Additional information related to bulk change of Shipper to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the requesting Energy Supplier.
Request bulk change of Shipper Async Additions		Additional information, related to bulk change of Shipper, needed when using asynchronous communication, however not used in this request.

1.3.3 Confirm request bulk change of Shipper (Class Diagram)

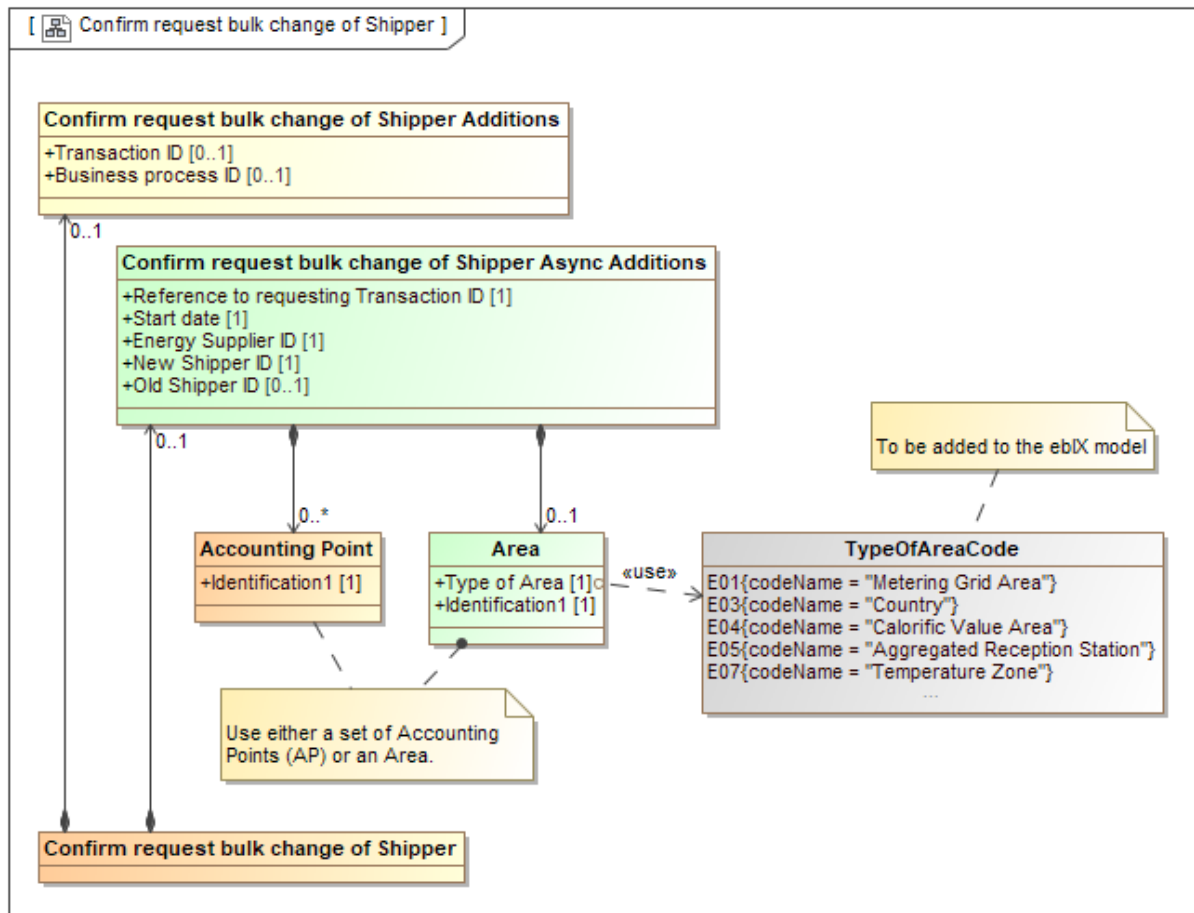


Figure 7 Class Diagram: Confirm request bulk change of Shipper

1.3.3.1 Element definitions: Confirm request bulk change of Shipper

Class/attribute	Sector ²	Description
«Business entity» Confirm request bulk change of Shipper		The information set sent by the Metering Point Administrator to the requesting Energy Supplier to confirm this bulk change of Shipper.
Confirm request bulk change of Shipper Additions		Information related to confirmation of bulk change of Shipper to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Metering Point Administrator.
Business process ID		The unique identification, given by the Metering Point Administrator, of this Request bulk change of Shipper process that this response is part of.

² It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ²	Description
Confirm request bulk change of Shipper Async Additions		Information related to the confirmation of bulk change of Shipper, needed when using an asynchronous communication.
Reference to requesting Transaction ID		The Transaction ID from the request given by the requesting Energy Supplier.
Start date		The confirmed date for the New Shipper to take over the balance responsibility for these Accounting Points.
Energy Supplier ID		The unique identification of the requesting Energy Supplier.
New Shipper ID		The unique identification of the confirmed New Shipper.
Old Shipper ID		The unique identification of the Old Shipper, that no longer will have balance responsibility for these Accounting Points.
«Business entity» Accounting Point		An entity where energy products are measured or computed, under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined.
Identification		The unique identification of an Accounting Point in the bulk for the confirmed request of change of Shipper
Area		A Domain containing a set of Accounting Points
Type of Area		A code indicating the type of Area in question, such as a Metering Grid Area, an Aggregated Reception Station or a country.
Identification		The unique identification of the Area in question.

1.3.4 Reject request bulk change of Shipper (Class Diagram)

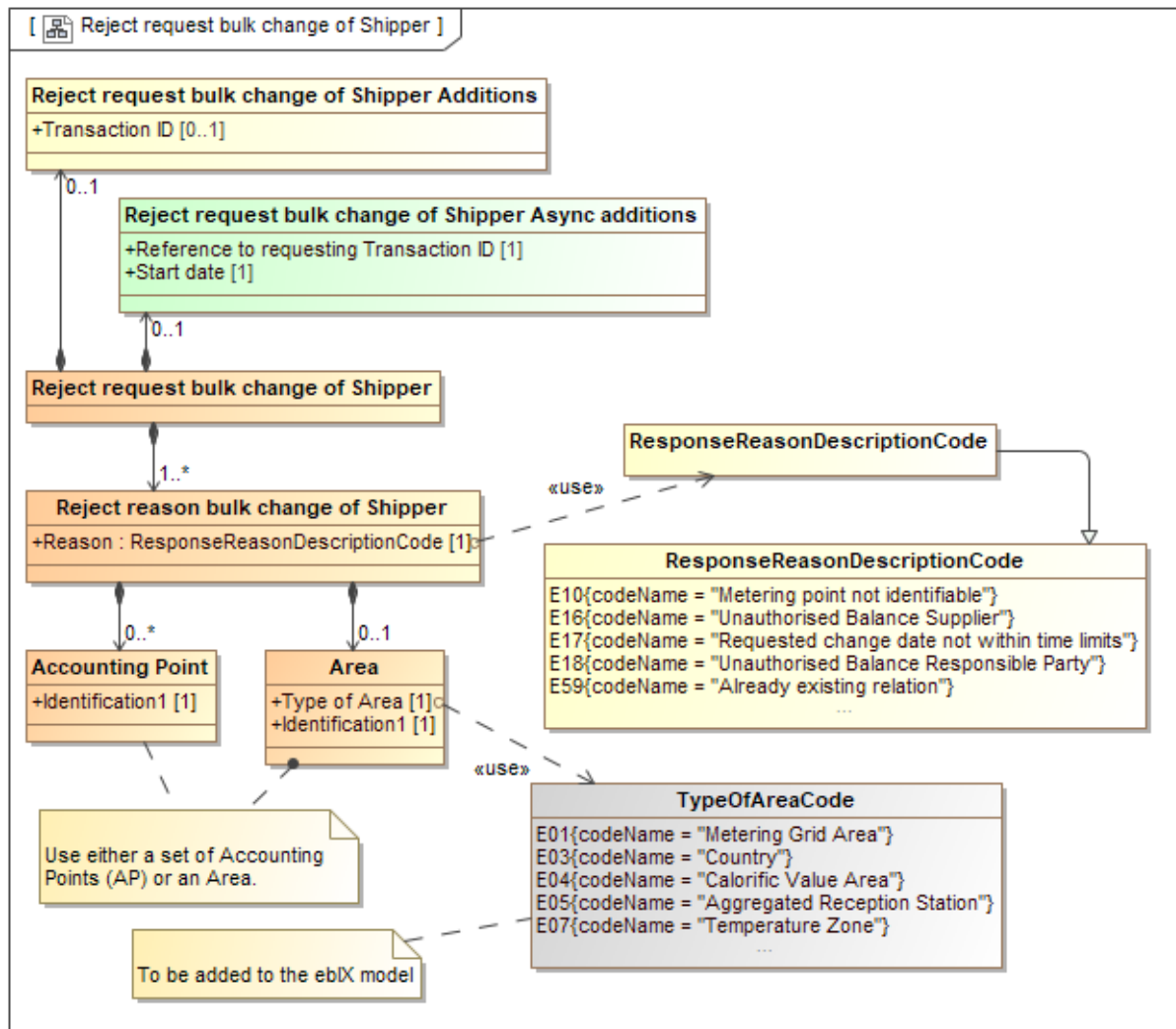


Figure 8 Class Diagram: Reject request bulk change of Shipper

1.3.4.1 Element definitions: Reject request bulk change of Shipper

Class/attribute	Sector ³	Description
«Business entity» Reject request bulk change of Shipper		The information set sent by the Metering Point Administrator to the requesting Energy Supplier to reject this bulk change of Shipper.
Reject reason bulk change of Shipper		A class containing one or more reasons for rejecting the bulk change of Shipper.
Reason		A code specifying the reason for the rejection of the Request bulk change of Shipper.

³ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ³	Description
«Business entity» Accounting Point		An entity where energy products are measured or computed, under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined.
Identification		The unique identification of an Accounting Point for which this bulk change of Shipper is rejected, for the indicated reason.
Area		A Domain containing a set of Accounting Points
Type of Area		A code indicating the type of Area in question, such as a Metering Grid Area, an Aggregated Reception Station or a country.
Identification		The unique identification of the Area in question.
Reject request bulk change of Shipper Additions		Information related to rejection of bulk change of Shipper, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Metering Point Administrator.
Reject request bulk change of Shipper Async Additions		Additional information, related to the bulk change of Shipper, needed when using asynchronous communication.
Reference to requesting Transaction ID		The Transaction ID from the request given by the requesting Energy Supplier.
Start date		The requested date for the bulk change of Shipper that is rejected.

1.3.5 Notify bulk change of Shipper to New Shipper and Other Affected Party (Class Diagram)

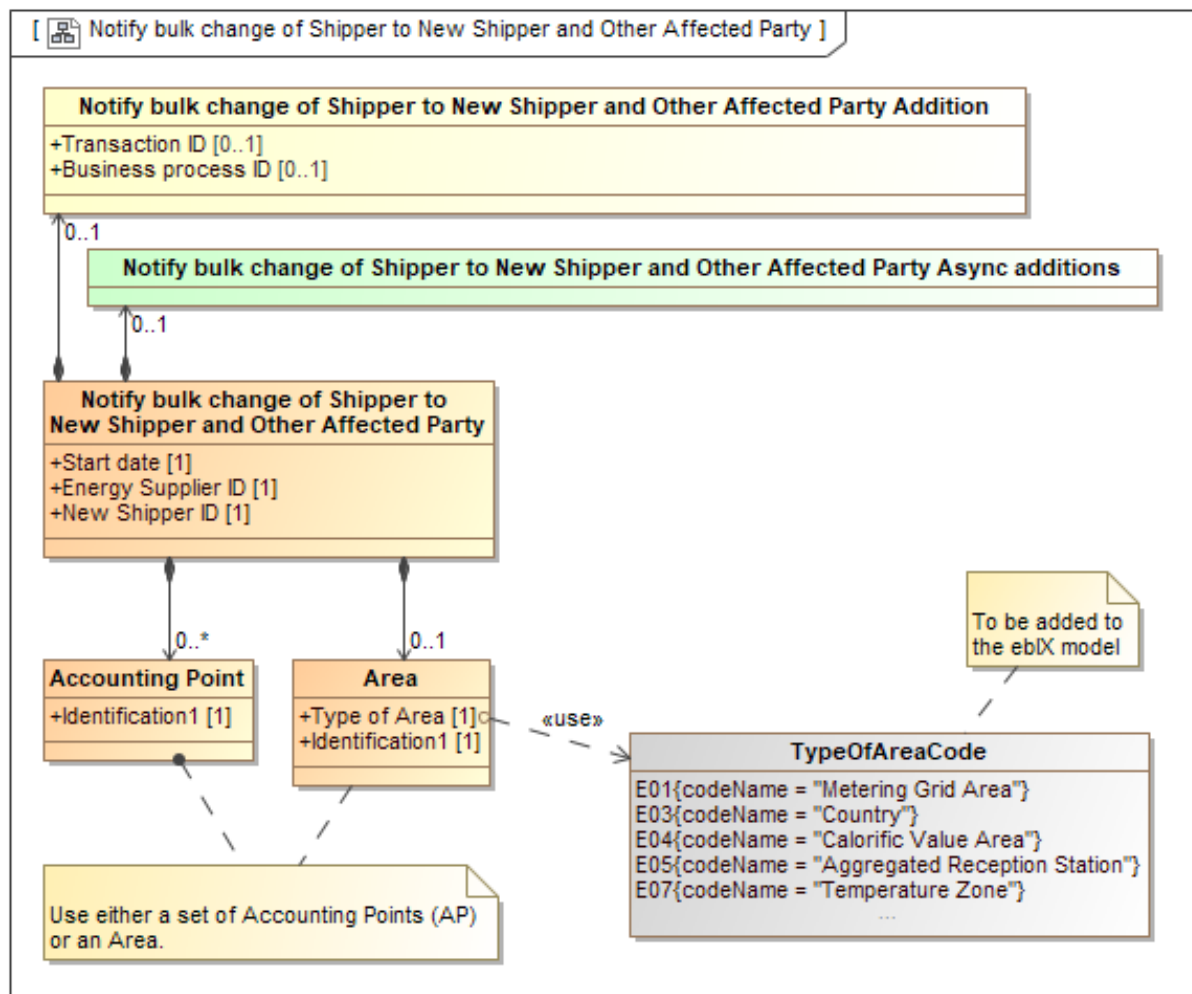


Figure 9 Class Diagram: Notify bulk change of Shipper to New Shipper and Other Affected Party

1.3.5.1 Element definitions: Notify bulk change of Shipper to New Shipper and Other Affected Party

Class/attribute	Sector ⁴	Description
«Business entity» Notify bulk change of Shipper to New Shipper and Other Affected Party		The information set sent by the Metering Point Administrator to the New Shipper and the Other Affected Party to notify this bulk change of Shipper.
Start date		The date for the New Shipper to take over the balance responsibility for these Accounting Points.

⁴ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ⁴	Description
Energy Supplier ID		The unique identification of the Energy Supplier that is supplying the Accounting Points.
New Shipper ID		The unique identification of the New Shipper that takes over the balance responsibility for these Accounting Points.
«Business entity» Accounting Point		An entity where energy products are measured or computed, under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined.
Identification		The unique identification of an Accounting Point this bulk change of Shipper is notified for.
Area		A Domain containing a set of Accounting Points
Type of Area		A code indicating the type of Area in question, such as a Metering Grid Area, an Aggregated Reception Station or a country.
Identification		The unique identification of the Area in question.
Notify bulk change of Shipper to New Shipper and Other Affected Party Additions		Additional information, related to the notification of bulk change of Shipper, to the New Shipper and Other Affected Party, agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Metering Point Administrator.
Business process ID		The unique identification, given by the Metering Point Administrator, of this bulk change of Shipper process that this notification is a part of.
Notify bulk change of Shipper to New Shipper and Other Affected Party Async Additions		Additional information, related to the Notify bulk change of Shipper, when using asynchronous communication, however not used in this notification.

1.3.6 Notify bulk change of Shipper to the Old Shipper (Class Diagram)

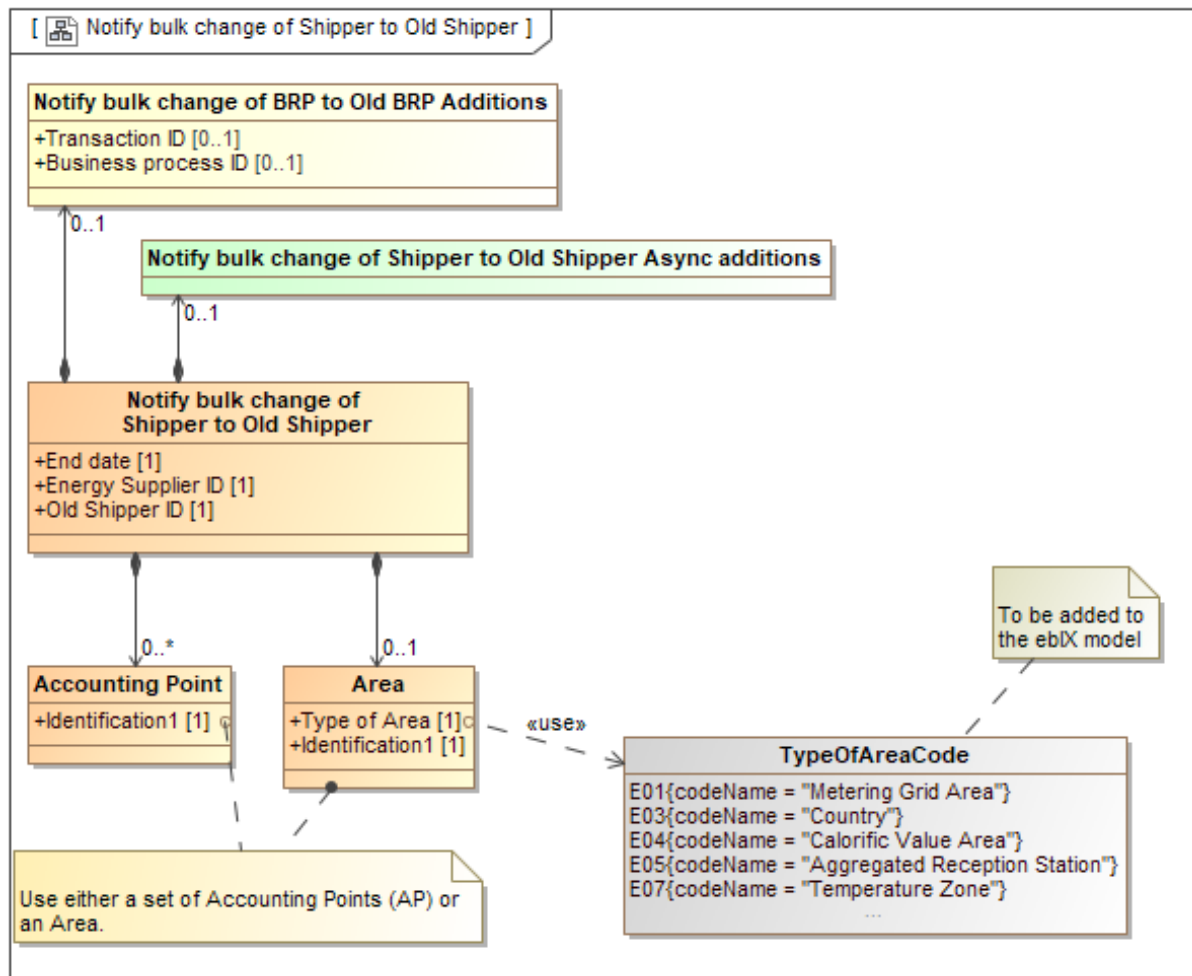


Figure 10 Class Diagram: Notify bulk change of Shipper to the Old Shipper

1.3.6.1 Element definitions: Notify bulk change of Shipper to the Old Shipper

Class/attribute	Sector	Description
«Business entity» Notify bulk change of Shipper to Old Shipper		The information set sent by the Metering Point Administrator to the Old Shipper to notify this bulk change of Shipper.
End date		The date from when the Old Shipper no longer has the balance responsibility for these Accounting Points.
Energy Supplier ID		The unique identification of the Energy Supplier that is supplying the Accounting Point at the date for which this bulk change of Shipper takes place.
Old Shipper ID		The unique identification of the Old Shipper that no longer from the end date onwards has the balance responsibility for these Accounting Points.

Class/attribute	Sector	Description
«Business entity» Accounting Point		An entity where energy products are measured or computed, under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined.
Identification		The unique identification of an Accounting Point this bulk change of Shipper is notified for.
Area		A Domain containing a set of Accounting Points
Identification		The unique identification of the Area in question.
Type of Area		A code indicating the type of Area in question, such as a Metering Grid Area, an Aggregated Reception Station or a country.
Notify bulk change of Shipper to Old Shipper Additions		Additional information, related to the notification of bulk change of Shipper, to the Old Shipper, agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Metering Point Administrator.
Business process ID		The unique identification, given by the Metering Point Administrator, of this bulk change of Shipper process that this notification is a part of.
Notify bulk change of Shipper to Old Shipper Async Additions		Additional information, related to the Notify bulk change of Shipper, to Affected Party, when using asynchronous communication, however not used in this notification.

Appendix A. Header and Context information for the class diagrams

A.1. Header and Context Information attributes definitions

Class/attribute	Sector ⁵	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 Role, responsible for the process/this exchange.

A.2. Request bulk change of Shipper

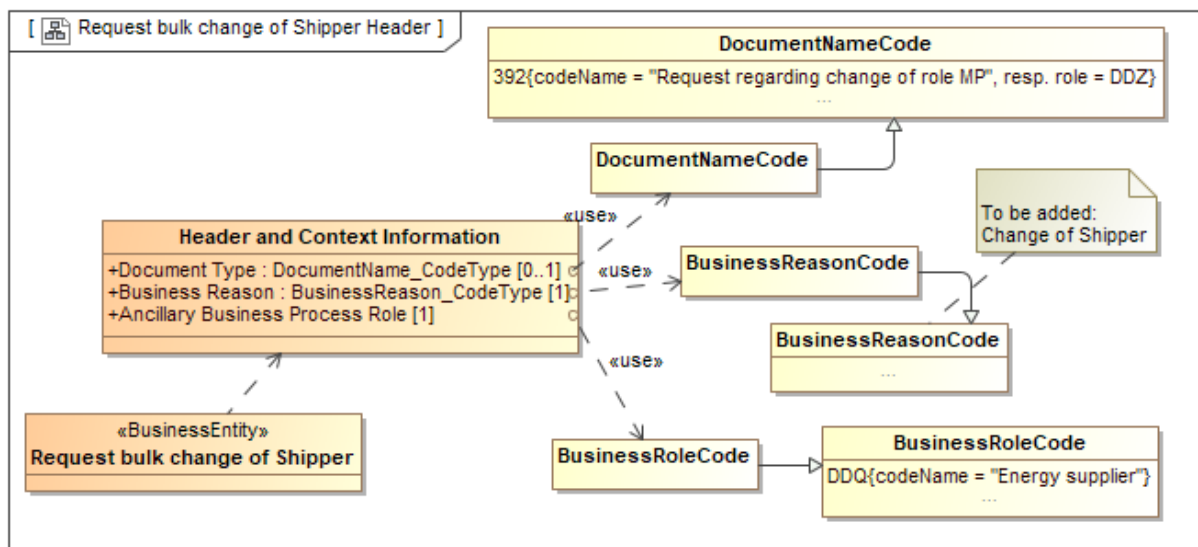


Figure 11 Class diagram: Header and Context Information Request bulk change of Shipper

⁵ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

A.3. Confirm request bulk change of Shipper

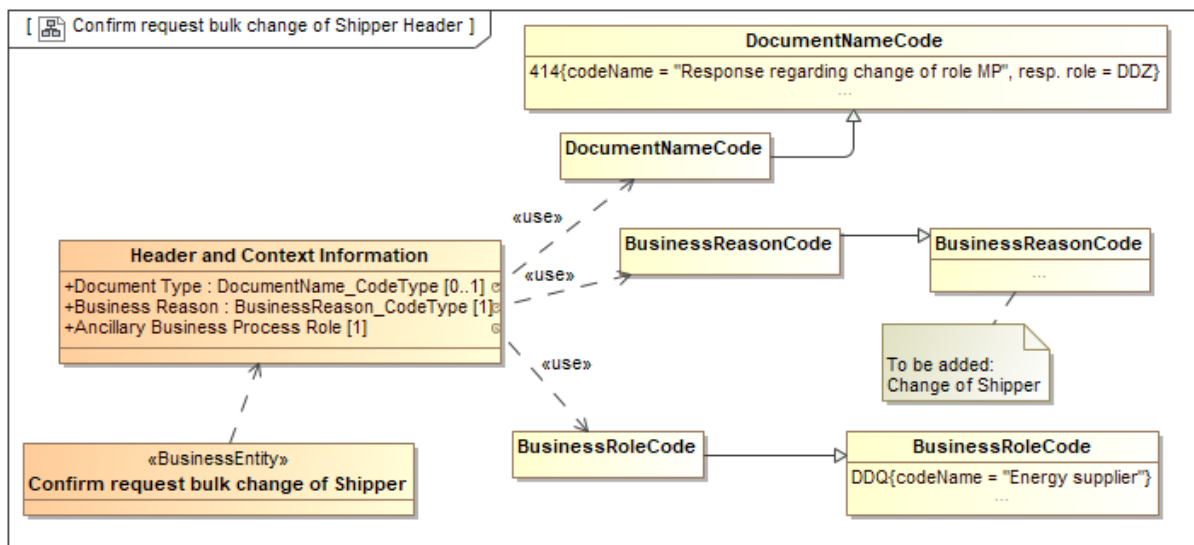


Figure 12 Class diagram: Header and Context Information Confirm request bulk change of Shipper

A.4. Reject request bulk change of Shipper

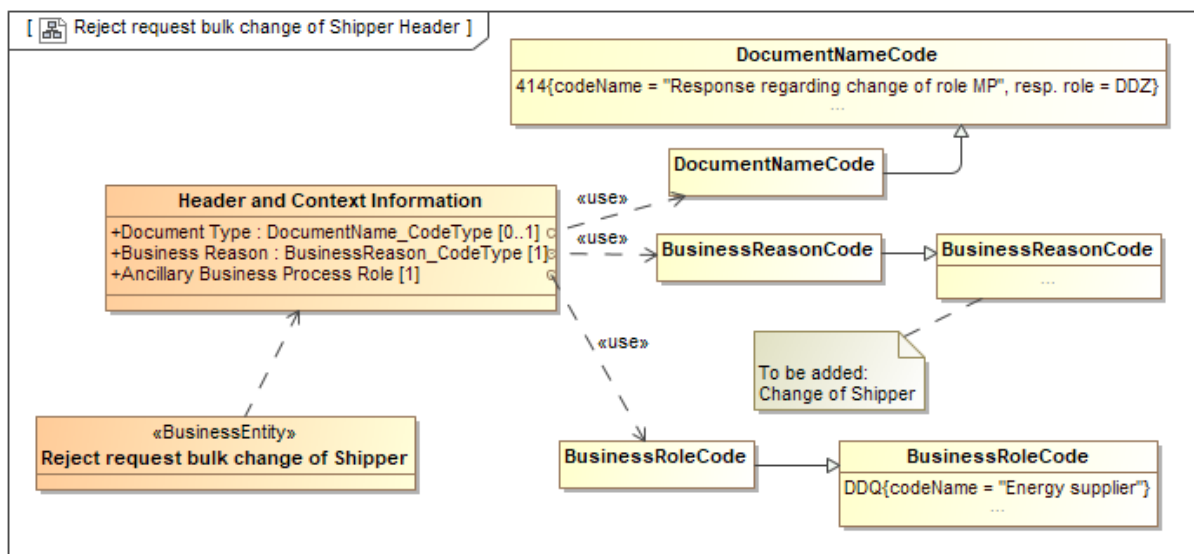


Figure 13 Class diagram: Header and Context Information Reject request bulk change of Shipper

A.5. Notify bulk change of Shipper to New Shipper and Other Affected Party

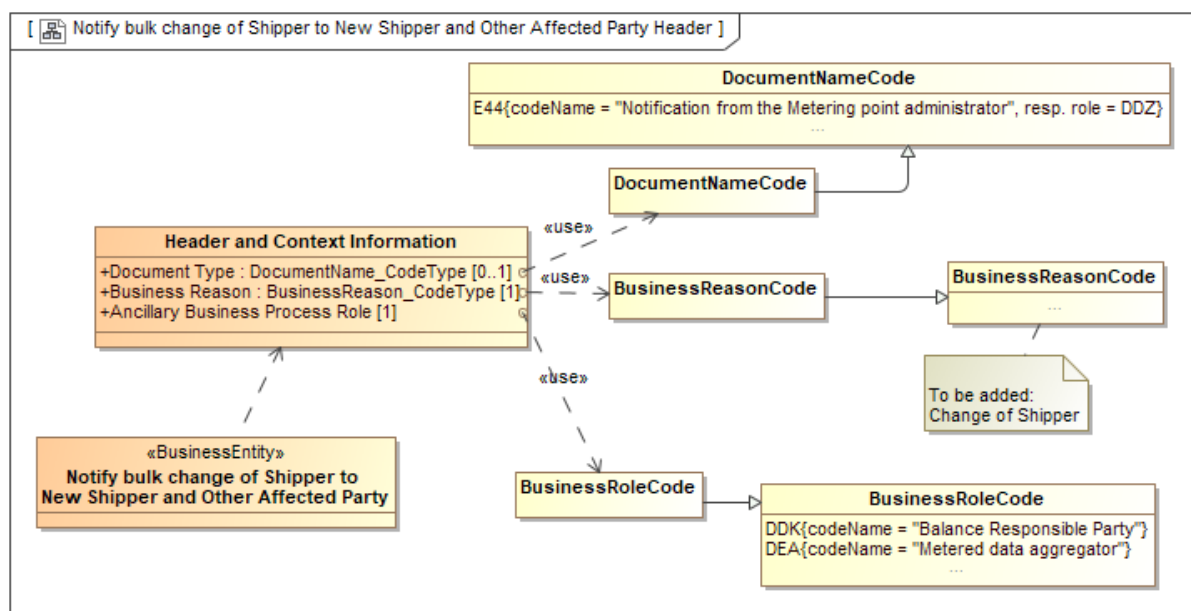


Figure 14 Class diagram: Header and Context Information Notify bulk change of Shipper to New Shipper and Other Affected Party

A.6. Notify bulk change of Shipper Old Shipper

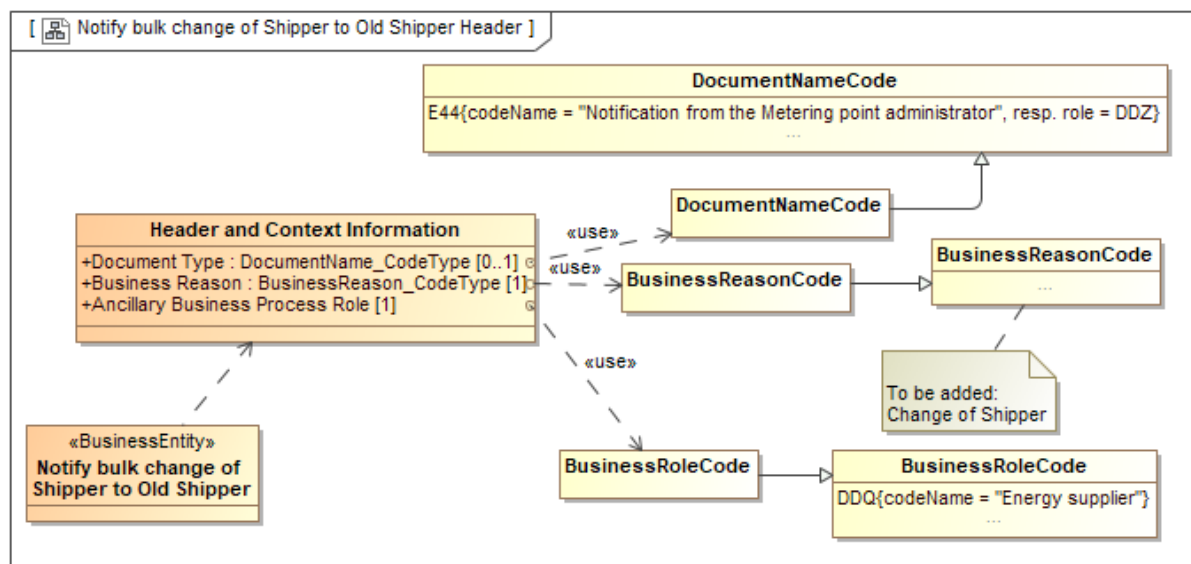


Figure 15 Class diagram: Header and Context Information Notify bulk change of Shipper to Old Shipper