



Business information model
for
Change of Supplier

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C O N T E N T

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A. About this document

This document contains the Business Information Model for Change of Supplier. This model is based on the ebIX® Business Requirements for Change of Supplier [9].

The model is drafted using the ebIX® Rules for the use of UN/CEFACT Modelling Methodology version 2.0 (UMM-2). UMM-2 uses UML as the Modelling Language.

This part of the ebIX® Model for the European Energy Market is made by ebIX® ETC and is based on business requirements as specified by ebIX® CuS (Change of Supplier) working group.

If you have comments or suggestions to the model please contact any member of the project group, see ebIX® website.

A.1. References

A.1.1. International open standards used

- [1] UML Profile for UN/CEFACT's Modelling Methodology (UMM), Base Module 2.0, (http://www.unece.org/cefact/umm/umm_index.html)
- [2] UML Profile for UN/CEFACT's Modelling Methodology (UMM), Foundation Module (http://www.unece.org/cefact/umm/umm_index.html)
- [3] UN/CEFACT Core Components Technical Specification Version 3.0, (http://www1.unece.org/cefact/platform/download/attachments/44204212/Specification_UPCC3_od_p5_draft_20110221_3rd_iteration.pdf)
- [4] UN/CEFACT UML Profile for Core Components Technical Specification 3.0, (http://www.unece.org/cefact/codesfortrade/ccts_index.html)
- [5] UN/CEFACT XML Naming and Design Rules Technical Specification Version 3.0, (http://www.unece.org/cefact/xml/xml_index.html)
- [6] UN/CEFACT Core Components Data Type Catalogue, (http://www.unece.org/cefact/codesfortrade/unccl/ccl_index.html)
- [7] Object Constraint Language, OMG Available Specification Version 2.0 formal, (<http://www.omg.org/spec/OCL/2.0/>)

A.1.2. ebIX® Document references

- [8] Introduction to ebIX® Models (www.ebix.org)
- [9] ebIX® Business Requirements, especially Business Requirements for Change of Supplier (www.ebix.org)
- [10] ebIX® Business Information Models for other business areas (www.ebix.org)
- [11] The Harmonized Role Model (for the Electricity Market) by ebIX®, ENTSO-E, and EFET (www.ebix.org)

[12] ebIX® Rules for the use of OCL statements (www.ebix.org)

A.2. Main changes since last version

	Subject	Old	New	Clarification	Date
Version 2014.A					
				Restructured the entire document	20151109
Version 2011.A					
				1 st version, changes not tracked	20110720
				Update of OCL	20120124
				Minor textual clarifications and update of web addresses	20120401

1. Introduction

1.1. Place in the overall model for the European Energy Market

This document contains the Business Information Model for the Change of Supplier in the European Energy Market. This model is part of the overall ebIX® business domain for *Structure*, including change of consumer and maintenance of master data.

1.2. About the ebIX® Model

The documents for the domain *Structure* describe a model for the exchange of master data in the European Energy Market. The model will, when the modelling project have been completed, be a part of a common ebIX® model for the European Energy Market. The model is important for having a common and agreed understanding on how the exchange of business information in the European Energy Market works.

In line with UMM-2 the ebIX® model contains 3 main parts:

1. Business Requirements View
2. Business Choreography View
3. Business Information View

The Business Requirements for *Request change of Supplier* are specified in a separate document, see [9].

This document contains the Business Choreography View and the Business Information View for the *Change of Supplier* processes.

In the annexes to this model document, you will find the technology dependent specifications that are derived from the UML-model and that are required for actual implementations.

1.3. Objectives

This ebIX® Business Information Model shall specify the *Change of Supplier* business information in line with the ebIX® business requirements for the *Change of Supplier* processes, see [9], in line with the UN/CEFACT Modelling Methodology version 2.0, [1] and [2].

From the information specification in the Business Information View syntax, dependent exchange formats are derived for publication as recommendation by ebIX®.

From the process specifications in the Business Choreography View, web service definitions are derived for publication as recommendation by ebIX®.

1.4. Scope

This model belongs to the *Structure* domain of the overall ebIX® model and focuses on Change of Supplier.

1.5. Actors, parties and roles

In the modelled processes (UseCases and Activity diagrams) specified in the next paragraphs, actors are either presented as <<BusinessPartner>> or as <<Harmonized Role>>.

A business partner type is an organization type, an organisational unit type or a person type that participates in a business process [2].

A harmonized role represents a specific responsibility in the European Energy Market related to the exchange of information [11].

In this document the following business partners (<<BusinessPartner>>) are taken from the business requirements:

- New Balance Supplier
- Old Balance Supplier
- New Balance Responsible Party
- Old Balance Responsible Party
- New Transport Capacity Responsible Party
- Old Transport Capacity Responsible Party
- Metering Point Administrator

In the model, the business partner is to be mapped to a <<Harmonized Role>> from the Role Model. In this document, the following harmonized roles are used:

- Balance Supplier
- Balance Responsible Party
- Transport Capacity Responsible Party
- Metering Point Administrator

1.6. Annexes for mapping to technology of choice

Information on available mapping to technology of choice can be found in the document Introduction to ebIX® Models (www.ebix.org) [8].

2. Business Choreography View: Change of Supplier

2.1. UseCase Change Supplier (Business Realization)

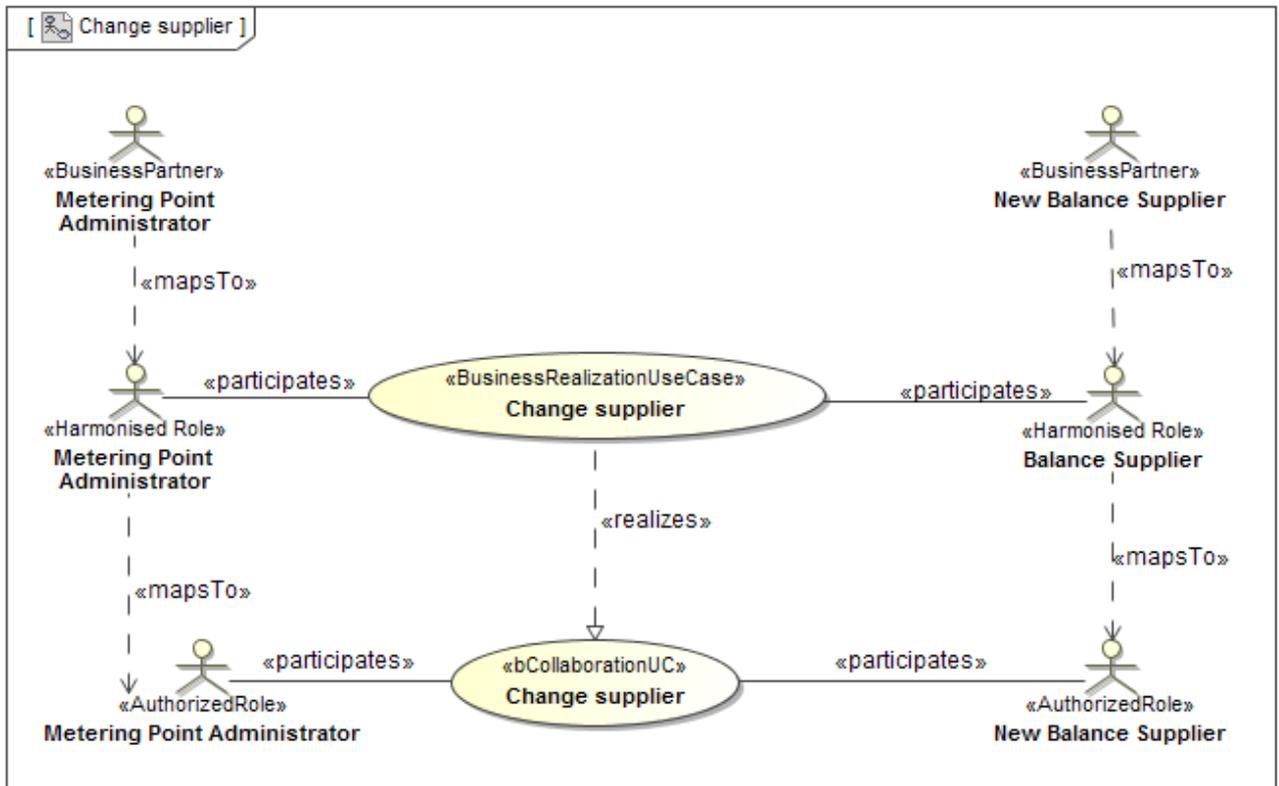


Figure 1 Realization: Change Supplier

2.1.1. UseCase Change Supplier (Business Collaboration)

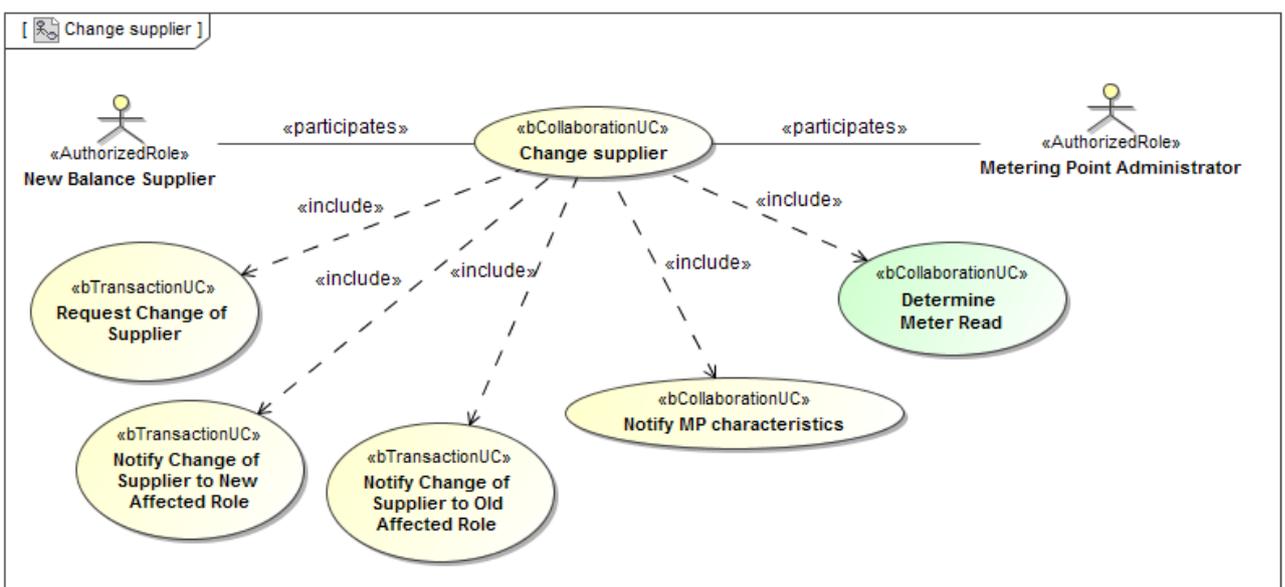


Figure 2 Collaboration UC: Change Supplier

Notes to the diagram:

- The Use Case Notify MP characteristics and Determine Meter Read can be found in separate Business information models, see ebIX® Business Information Models for other business areas (www.ebix.org), [10].

2.1.1.1. Description

UseCase description: Change Supplier	
definition	This is the process where a <i>New Balance Supplier</i> (together with the <i>Balance Responsible Party</i>) will be registered in the <i>Metering Point register</i> as the New Supplier for the <i>Metering Point</i> . The <i>Metering Point Administrator</i> makes all necessary updates for the Change of Supplier, including distribution of master data for alignment of the business partner databases.
beginsWhen	When a <i>Customer</i> asks for a contract with the <i>New Balance Supplier</i> and the Change of Supplier process is initiated
preCondition	The <i>New Balance Supplier</i> has all needed information to be able to request Change of Supplier
endsWhen	When the Request Change of Supplier is confirmed or rejected, and if confirmed then all relevant parties are informed about the Change of Supplier and master data of the <i>Metering Point</i> involved have been distributed to relevant parties.
postCondition	The <i>Customer</i> has changed <i>Balance Supplier</i> and all involved parties have exchanged and synchronised their master data, including determination and exchange of the meter read related to the Change of Supplier.
exceptions	The process <i>Identify and obtain critical Change of Supplier information</i> may be run if required by national rules.
actions	See 2.1.1.2

2.1.1.2. Change Supplier (Business Collaboration Protocol)

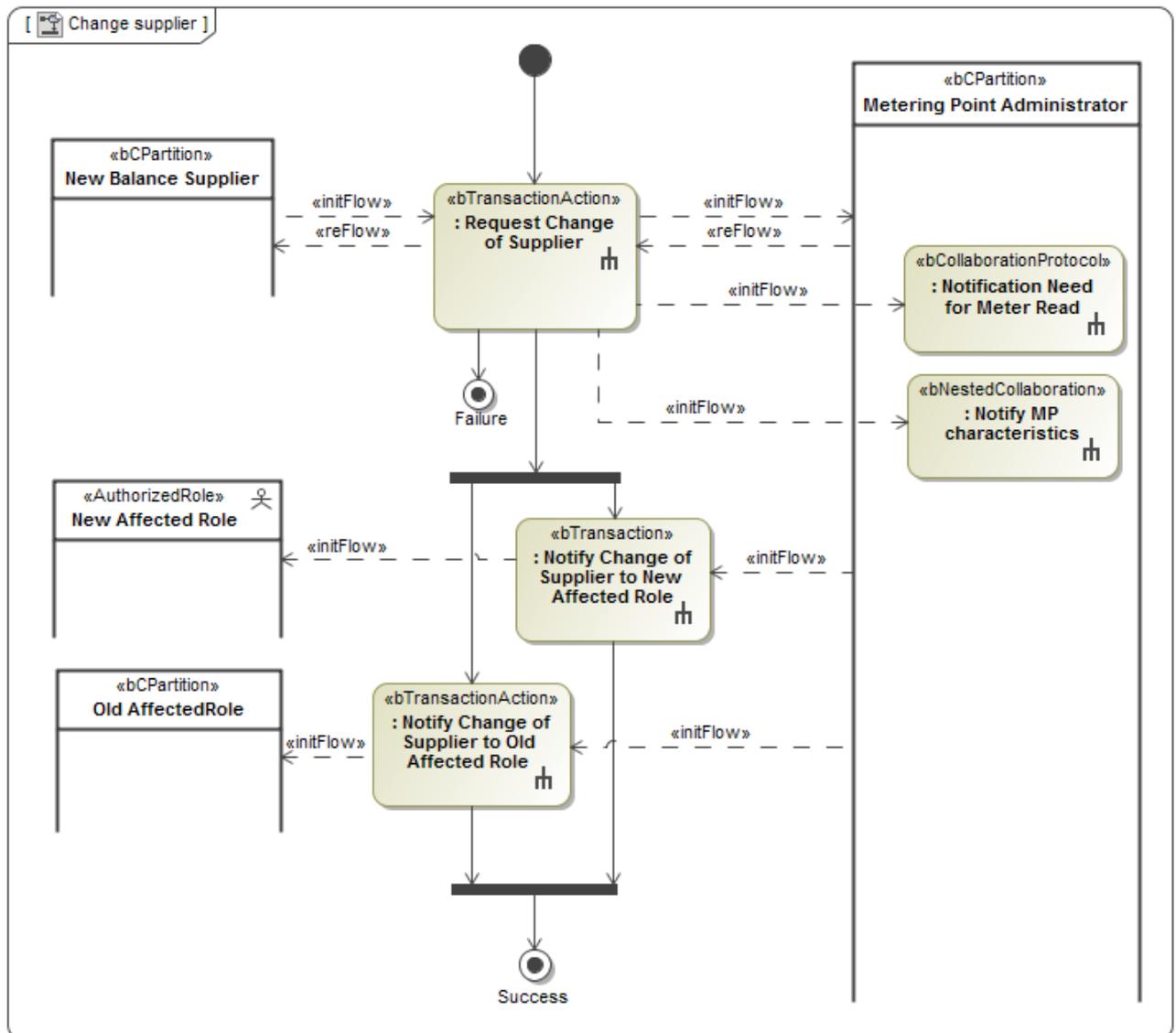


Figure 3 Collaboration: Change Supplier

2.1.2. UseCase Request Change of Supplier (Business Transaction)

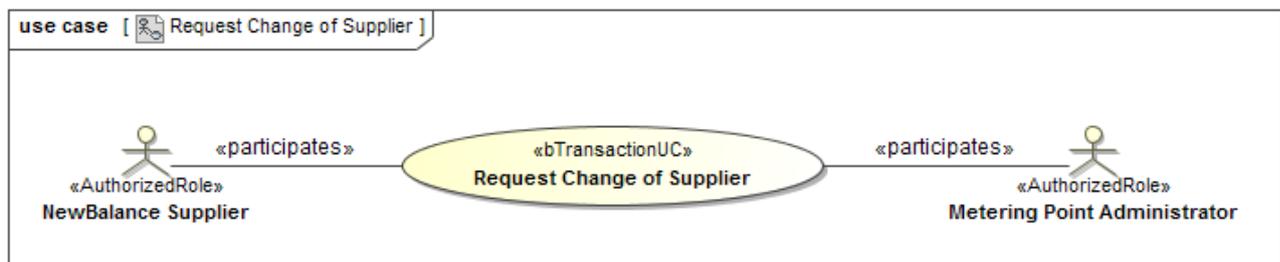


Figure 4 Transaction: Request Change of Supplier

2.1.2.1. Description

UseCase description: Request Change of Supplier	
definition	In this process, the <i>New Balance Supplier</i> will request Change of Supplier at a <i>Metering Point</i> and the <i>Metering Point Administrator</i> confirms or rejects it. During the business process, the change is confirmed and the Metering Point register will be updated, or the change is rejected.
beginsWhen	When the <i>New Balance Supplier</i> decides to send a request for Change of Supplier to the <i>Metering Point Administrator</i> , in order to achieve the intended start of supply date for the new supply contract.
preCondition	<ul style="list-style-type: none"> • A supply contract is in place • A start of supply date has been agreed with the <i>Customer</i>. • The requirements from Make supply contract and Identify and obtain critical Change of Supplier information have been fulfilled.
endsWhen	When the Request Change of Supplier is confirmed or rejected.
postCondition	The Change of Supplier process has been confirmed or rejected by the <i>Metering Point Administrator</i> to the <i>Balance Supplier</i> .
exceptions	Based on national rules; in case of missing upfront meter reading the Change of Supplier may be cancelled.
actions	See 2.1.2.2

2.1.2.2. Request Change of Supplier (Business Transaction)

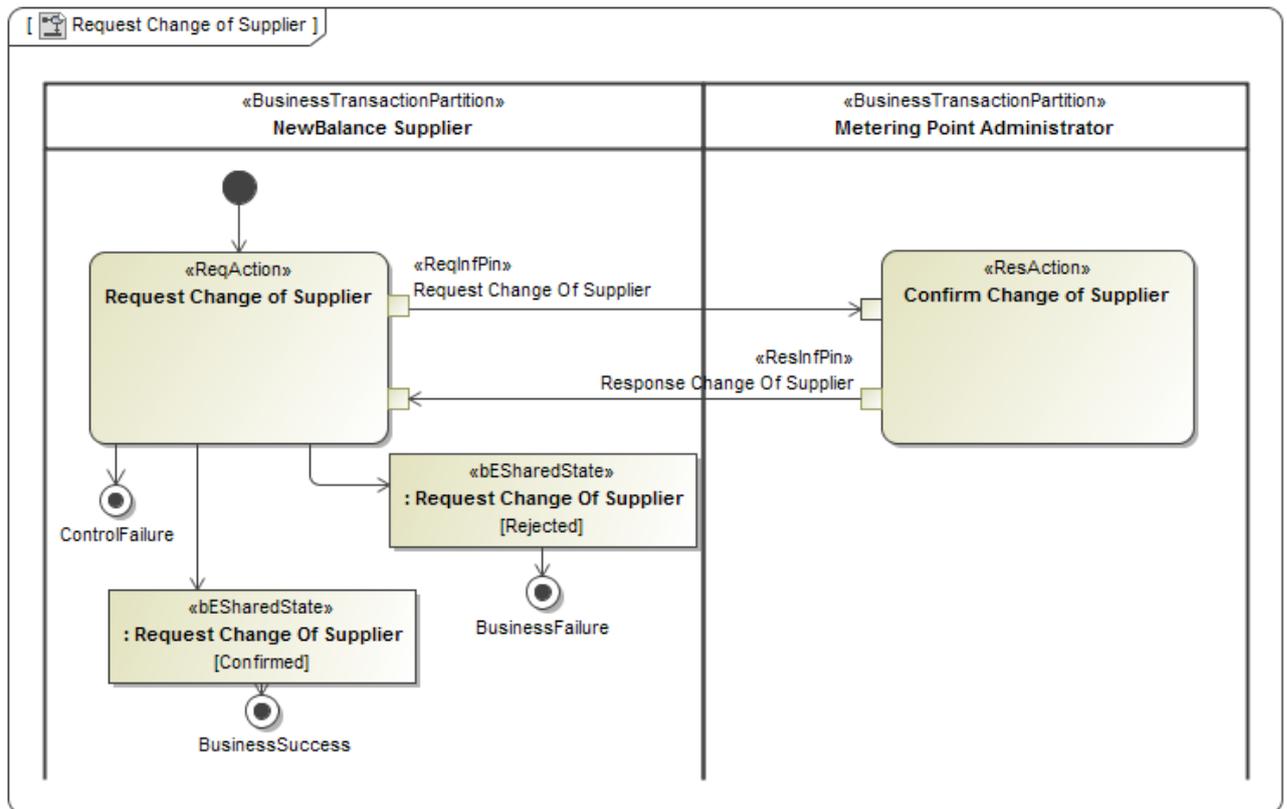


Figure 5 Business transaction: Request Change of Supplier

2.1.3. UseCase Notify Change of Supplier to Old Affected Role (Business Transaction)

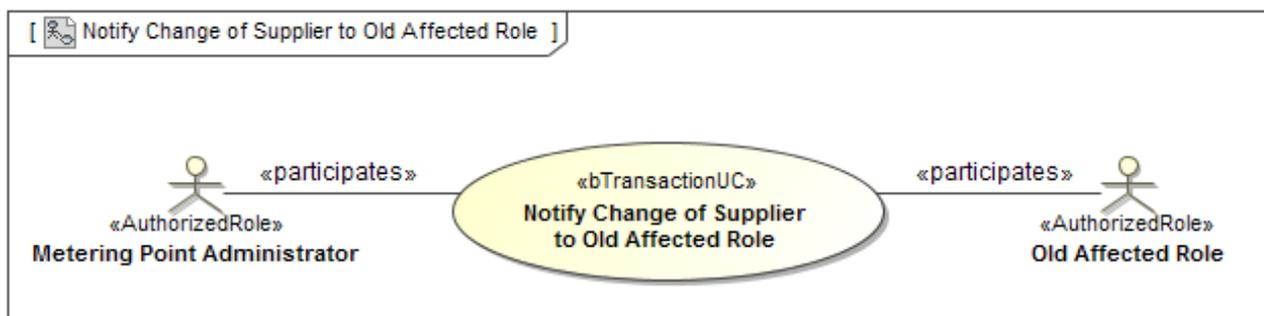


Figure 6 Business transaction UC: Notify change of Supplier to Old Affected Role

2.1.3.1. Description

UseCase description: Notify change of Supplier to Old Affected Role	
Definition	In this process, the <i>Metering Point Administrator</i> will notify <i>the Old Balance Supplier, and the Old and New Balance Responsible Party / Transport Capacity Responsible Party</i> of the Change of Supplier in the Metering Point and the related change date.
Begins when	When the Change of Supplier has been confirmed by the <i>Metering Point Administrator</i> - to be defined by national rules
Preconditions	<ul style="list-style-type: none"> The Request Change of Supplier process has been confirmed by the Metering Point Administrator The Metering Point register has been updated with the New Balance Supplier
Ends when	When the <i>Old Balance Supplier, and the Old and New Balance Responsible Party / Transport Capacity Responsible Party</i> have received the notification
Post condition	The Change of Supplier is notified to <i>the Old Balance Supplier, and the Old Balance Responsible Party / Transport Capacity Responsible Party</i>
Exceptions	If required by national rules the <i>Old Balance Responsible Party</i> or the <i>Transport Capacity Responsible Party</i> may not be notified
Actions	See 0

2.1.3.2. Notify Change of Supplier to Old Affected Role (Business Transaction)

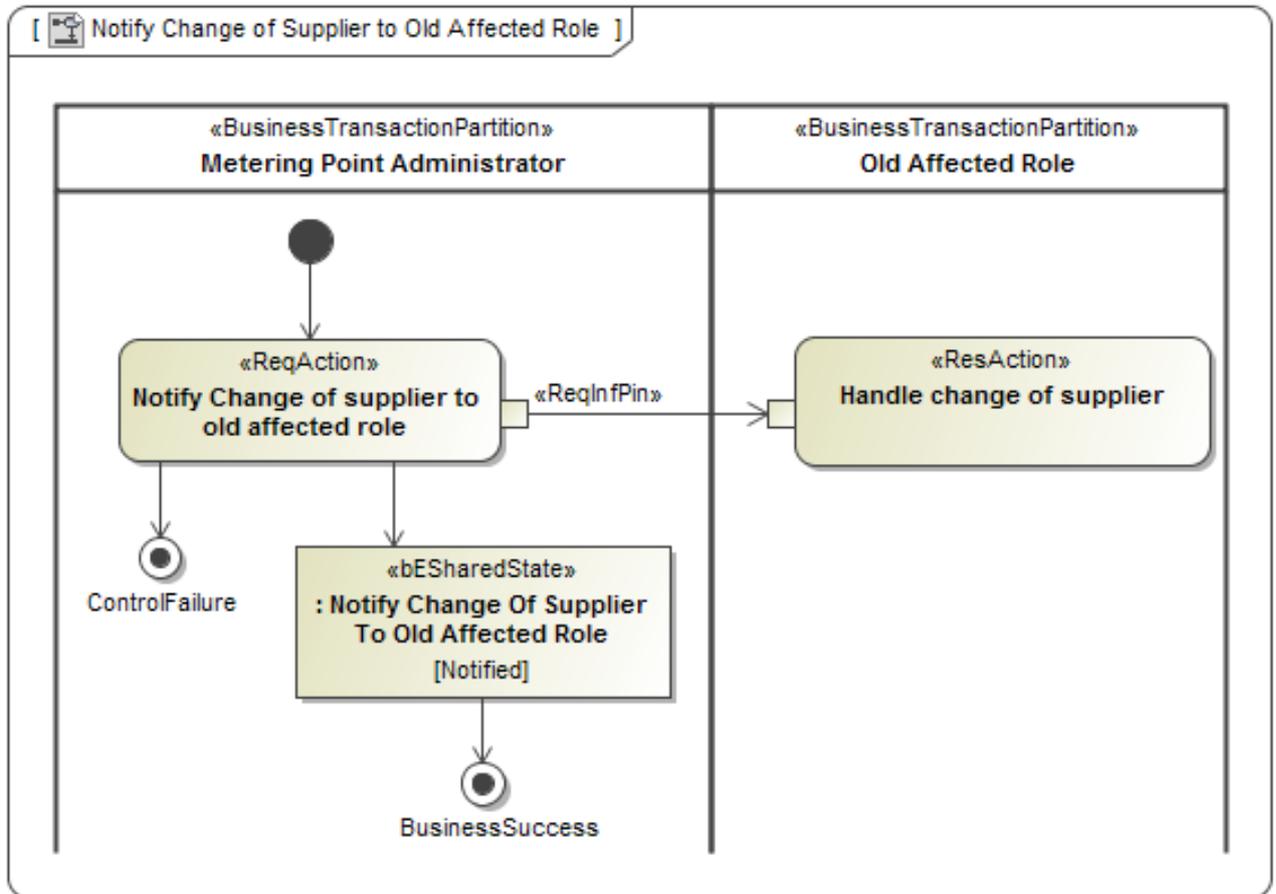


Figure 7 Transaction: Notify Change of Supplier to Old Affected Role

2.1.4. UseCase Notify Change of Supplier to New Affected Role (Business Transaction)

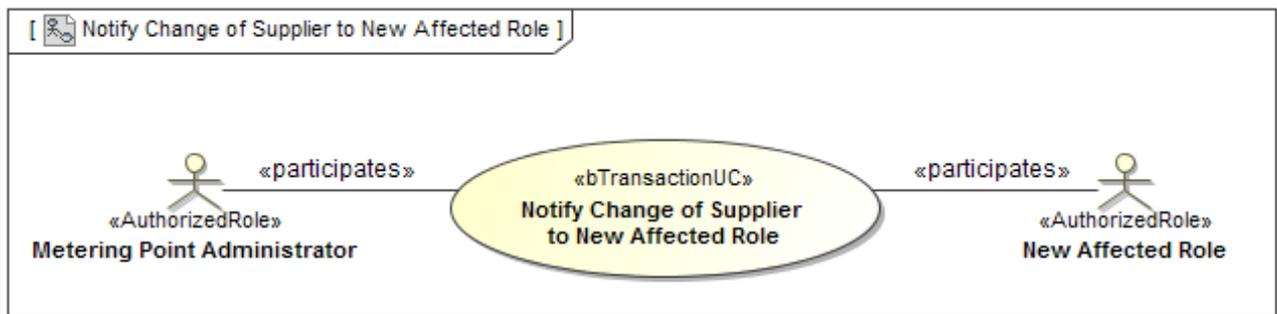


Figure 8 Business transaction UC: Notify change of Supplier to New Affected Role

2.1.4.1. Description

UseCase description: Notify change of Supplier to New Affected Role	
Definition	In this process, the <i>Metering Point Administrator</i> will notify the <i>New Balance Responsible Party</i> and the <i>New Transport Capacity Responsible Party</i> of the Change of Supplier in the Metering Point and the related change date.
Begins when	When the Change of Supplier has been confirmed by the <i>Metering Point Administrator</i> - to be defined by national rules
Preconditions	<ul style="list-style-type: none"> The Request Change of Supplier process has been confirmed by the Metering Point Administrator The Metering Point register has been updated with the New Balance Supplier
Ends when	When the <i>New Balance Responsible Party</i> and the <i>New Transport Capacity Responsible Party</i> have received the notification
Post condition	The Change of Supplier is notified to the <i>New Balance Responsible Party</i> and the <i>Transport Capacity Responsible Party</i>
Exceptions	If required by national rules the <i>New Balance Responsible Party</i> or the <i>Transport Capacity Responsible Party</i> may not be notified
Actions	See 0

2.1.4.2. Notify Change of Supplier to New Affected Role (Business Transaction)

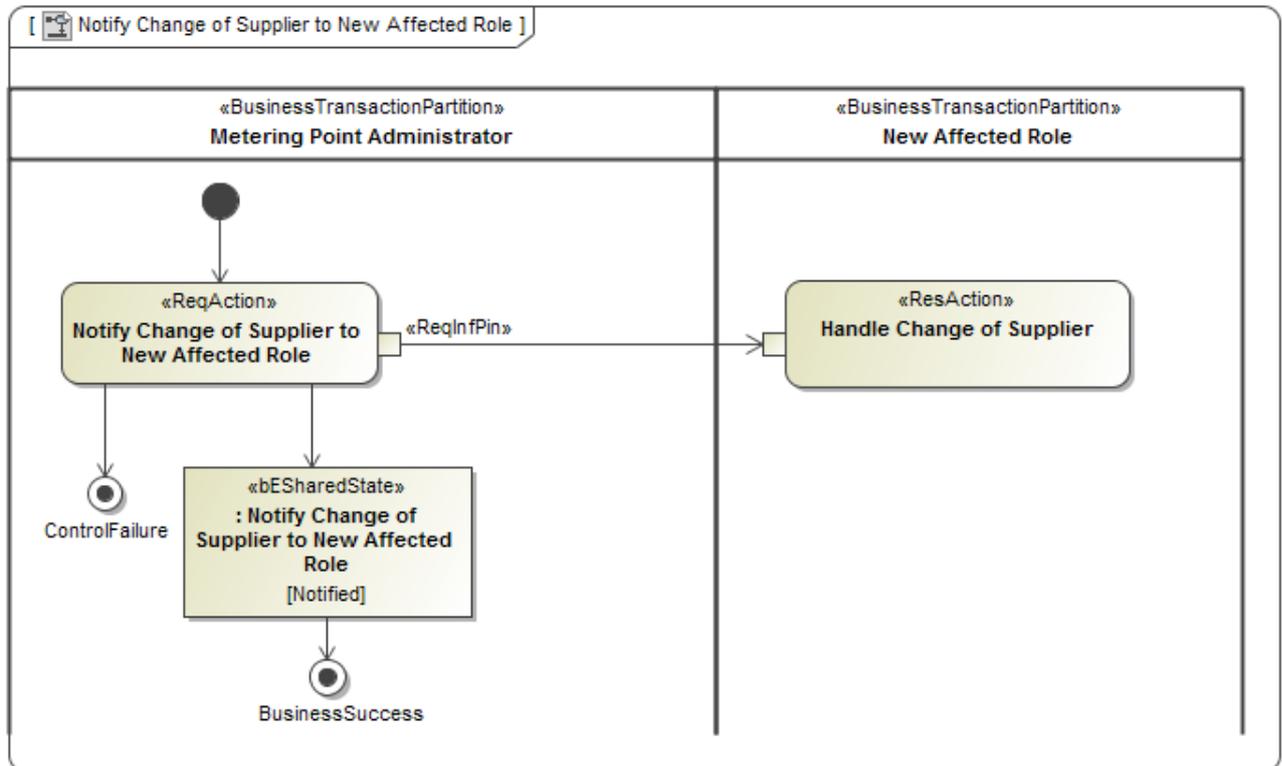


Figure 9 Transaction: Notify Change of Supplier to New Affected Role

3. Business Information View: Change of Supplier

3.1. Request Change of Supplier (Business Information)

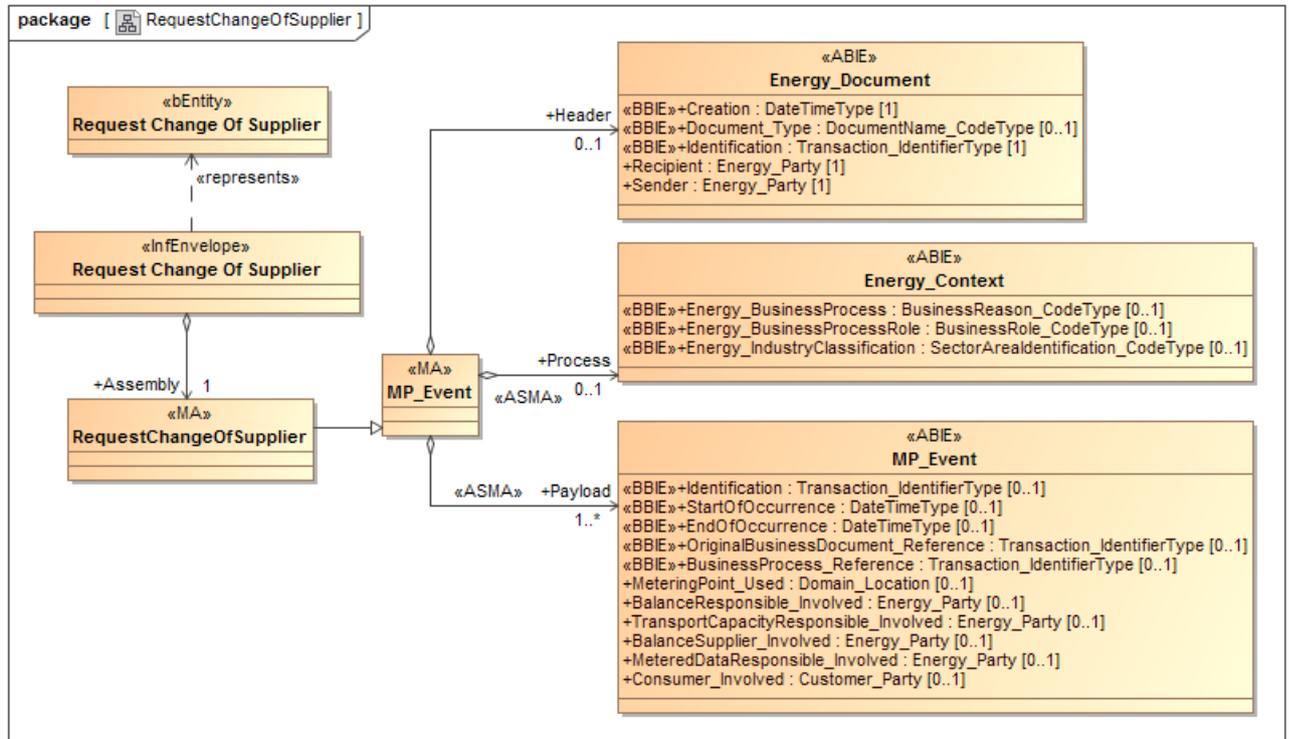


Figure 10 Class diagram: Request change of Supplier

3.1.1. OCL constraints for Request Change of Supplier <<MA>>

#	Specification	Constrained Element	Applied Stereotype
1	<pre>-- Structure Document -- Request change of supplier self.Header->size()=1 inv: self.Process->size()=1</pre>	 RequestChangeOfSupplier	<pre>«>> abie [Constraint] «>> document [Constraint] «>> invariant [Constraint]</pre>
2	<pre>-- Structure Energy_Document -- Request change of supplier self.Header.Identification->size()=1 inv: self.Header.Creation->size()=1 inv: self.Header.Document_Type->size()=1 inv: self.Header.Sender.Identification->size()=1 inv: self.Header.Sender.Role->size()=0 inv: self.Header.Sender.Name->size()=0 inv: self.Header.Recipient.Identification->size()=1 inv: self.Header.Recipient.Role->size()=0 inv: self.Header.Recipient.Name->size()=0</pre>	 RequestChangeOfSupplier	<pre>«>> abie [Constraint] «>> document [Constraint] «>> invariant [Constraint]</pre>
3	<pre>-- BDT Energy_Document -- Request change of supplier self.Header.Document_Type.content=DocumentNameCode::392 inv: self.Header.Document_Type.listIdentifier->size()=0 inv: self.Header.Document_Type.listAgencyIdentifier->size()=0 inv: self.Header.Creation.timeZoneCode->size()=0 inv: self.Header.Sender.Identification.schemeIdentifier->size()=0</pre>	 RequestChangeOfSupplier	<pre>«>> bdt [Constraint] «>> document [Constraint] «>> invariant [Constraint]</pre>

#	Specification	Constrained Element	Applied Stereotype
	<p>inv: self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</p> <p>inv: self.Header.Sender.Role.content=BusinessRoleCode::DDQ inv: self.Header.Sender.Role.listIdentifier->size()=0 inv: self.Header.Sender.Role.listAgencyIdentifier->size()=0</p> <p>inv: self.Header.Sender.Name.languageCode->size()=0</p> <p>inv: self.Header.Recipient.Identification.schemeIdentifier->size()=0 inv: self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</p> <p>inv: self.Header.Recipient.Role.content=BusinessRoleCode::MDR inv: self.Header.Recipient.Role.listIdentifier->size()=0 inv: self.Header.Recipient.Role.listAgencyIdentifier->size()=0</p> <p>inv: self.Header.Recipient.Name.languageCode->size()=0</p>		
4	<p>-- Structure Energy_Context -- Request change of supplier</p> <p>self.Process.Energy_BusinessProcess->size()=1 inv: self.Process.Energy_BusinessProcessRole->size()=1 inv: self.Process.Energy_IndustryClassification->size()=1</p>	 RequestChangeOfSupplier	<p>«>> abie [Constraint] «>> invariant [Constraint] «>> document [Constraint]</p>
5	<p>-- BDT Energy_Context -- Request change of supplier</p> <p>self.Process.Energy_BusinessProcess.content=BusinessReasonCode::E03 inv: self.Process.Energy_BusinessProcess.listIdentifier->size()=0 inv: self.Process.Energy_BusinessProcess.listAgencyIdentifier=CodeListResponsibleAgencyCode::260</p> <p>inv: self.Process.Energy_BusinessProcessRole.content=BusinessRoleCode::DDQ inv: self.Process.Energy_BusinessProcessRole.listIdentifier->size()=0 inv: self.Process.Energy_BusinessProcessRole.listAgencyIdentifier->size()=0</p> <p>inv: self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::23 or</p>	 RequestChangeOfSupplier	<p>«>> bdt [Constraint] «>> invariant [Constraint] «>> document [Constraint]</p>

#	Specification	Constrained Element	Applied Stereotype
	<pre>self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::27 inv: self.Process.Energy_IndustryClassification.listAgencyIdentifier->size()=0</pre>		
6	<pre>-- Structure Payload -- Request change of supplier self.Header->size()=0 inv: self.Process->size()=0</pre>	 RequestChangeOfSupplier	<pre><<> invariant [Constraint] <<> payload [Constraint] <<> abie [Constraint]</pre>
7	<pre>--Structure MP_Event --Request Change-of-Supplier self.Payload.StartOfOccurrence->size()=1 inv: self.Payload.EndOfOccurrence->size()=0 inv: self.Payload.MeteringPoint_Used->size()=1 inv: self.Payload.BalanceSupplier_Involved->size()=1 inv: self.Payload.BalanceSupplier_Involved.Role->size()=0 inv: self.Payload.BalanceSupplier_Involved.Name->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved.Role->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved.Name->size()=0 inv: self.Payload.BalanceResponsible_Involved.Name->size()=0 inv: self.Payload.BalanceResponsible_Involved.Role->size()=0 inv: self.Payload.MeteredDataResponsible_Involved->size()=0 inv: self.Payload.BusinessProcess_Reference->size()=0 inv: self.Payload.OriginalBusinessDocument_Reference->size()=0 inv: self.Payload.Consumer_Involved->size()=0</pre>	 RequestChangeOfSupplier	<pre><<> invariant [Constraint] <<> abie [Constraint] <<> document [Constraint] <<> payload [Constraint]</pre>
8	<pre>-- BDT MP_Event -- Request Change-of-Supplier self.Payload.StartOfOccurrence.timeZoneCode->size()=0 inv: self.Payload.EndOfOccurrence.timeZoneCode->size()=0</pre>	 RequestChangeOfSupplier	<pre><<> invariant [Constraint] <<> bdt [Constraint] <<> document [Constraint] <<> payload [Constraint]</pre>

#	Specification	Constrained Element	Applied Stereotype
	inv: self.Payload.OriginalBusinessDocument_Reference->size()=0		
	inv: self.Payload.MeteringPoint_Used.Identification.schemeIdentifier->size()=0 inv: self.Payload.MeteringPoint_Used.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9		
	inv: self.Payload.BalanceResponsible_Involved.Identification->size()=1 inv: self.Payload.BalanceResponsible_Involved.Identification.schemeIdentifier->size()=0 inv: self.Payload.BalanceResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or Payload.BalanceResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305		
	inv: self.Payload.BalanceSupplier_Involved.Identification->size()=1 inv: self.Payload.BalanceSupplier_Involved.Identification.schemeIdentifier->size()=0 inv: self.Payload.BalanceSupplier_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or Payload.BalanceSupplier_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305		
	inv: self.Payload.TransportCapacityResponsible_Involved.Identification->size()=1 inv: self.Payload.TransportCapacityResponsible_Involved.Identification.schemeIdentifier->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode: :9 or Payload.TransportCapacityResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305		

3.1.2. Mapping BRS-BIM for Request Change of Supplier

	+Identification : ebix:org::BDT::Do...	+Energy_BusinessProcess : ebix:or...	+Energy_BusinessProcessRole : ebi...	+Document_Type : ebix:org::BDT::...	+Identification : ebix:org::BDT::Pa...	+BalanceResponsible_Involved : e...	+BalanceSupplier_Involved : ebix:o...	+Identification : ebix:org::BDT::Tr...	+MeteringPoint_Used : ebix:org::A...	+StartOfOccurrence : ebix:org::BD...	+TransportCapacityResponsible_In...
Metering Point	1							1			
Metering Point	1							1			
+Identification [1]	↗							↗			
Request Change of Supplier		1	1	1	4	1	1	1		1	1
Header and Context Information		1	1	1	1						
+Ancillary Business Process Role [1]			↗		↗						
+Business Reason : ebix:org::BDT::BusinessReason_CodeType [1]		↗									
+Document Type : ebix:org::BDT::DocumentName_CodeType [1]				↗							
Request Change Of Supplier					3	1	1			1	1
+New Balance Responsible Party ID [0..1]					↗	↗					
+New Balance Supplier ID [1]					↗		↗				
+New Transport Capacity Responsible Party ID [0..1]					↗						↗
+Start date [1]										↗	
RequestChangeOfSupplier Additions								1			
+Transaction ID [0..1]								↗			

Figure 11 Mapping: BRS-BIM for Request Change of Supplier

3.2. Response Change of Supplier (Business Information)

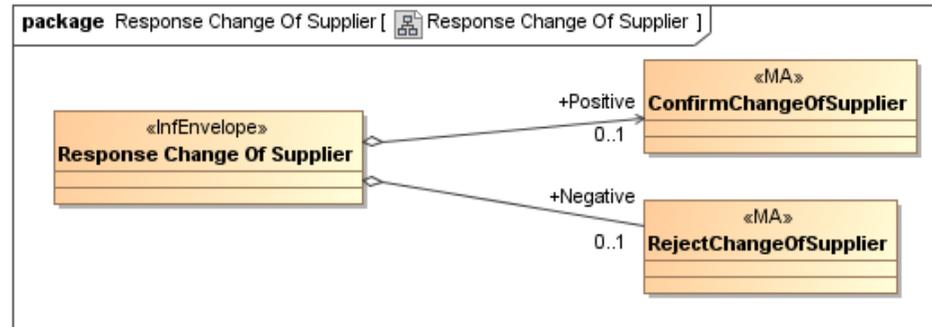


Figure 12 Class diagram: Response change of Supplier

3.2.1. OCL constraints for Response Change of Supplier <<InfEnvelope>>

#	Specification	Constrained Element	Applied Stereotype
1	-- Dependency Response change of supplier self.Positive->size()=1 implies self.Negative->size()=0 inv: self.Negative->size()=1 implies self.Positive->size()=0	Response Change Of Supplier	«» invariant [Constraint] «» dependency [Constraint]

3.2.2. Mapping BRS-BIM for Response Change of Supplier

Since the class stereotyped «InfEnvelope» does not represent business requirements, no mapping to «ABIE» is needed. The mapping is done for the «MA» options that this class includes.

3.2.3. Confirm Change of Supplier (Business Information)

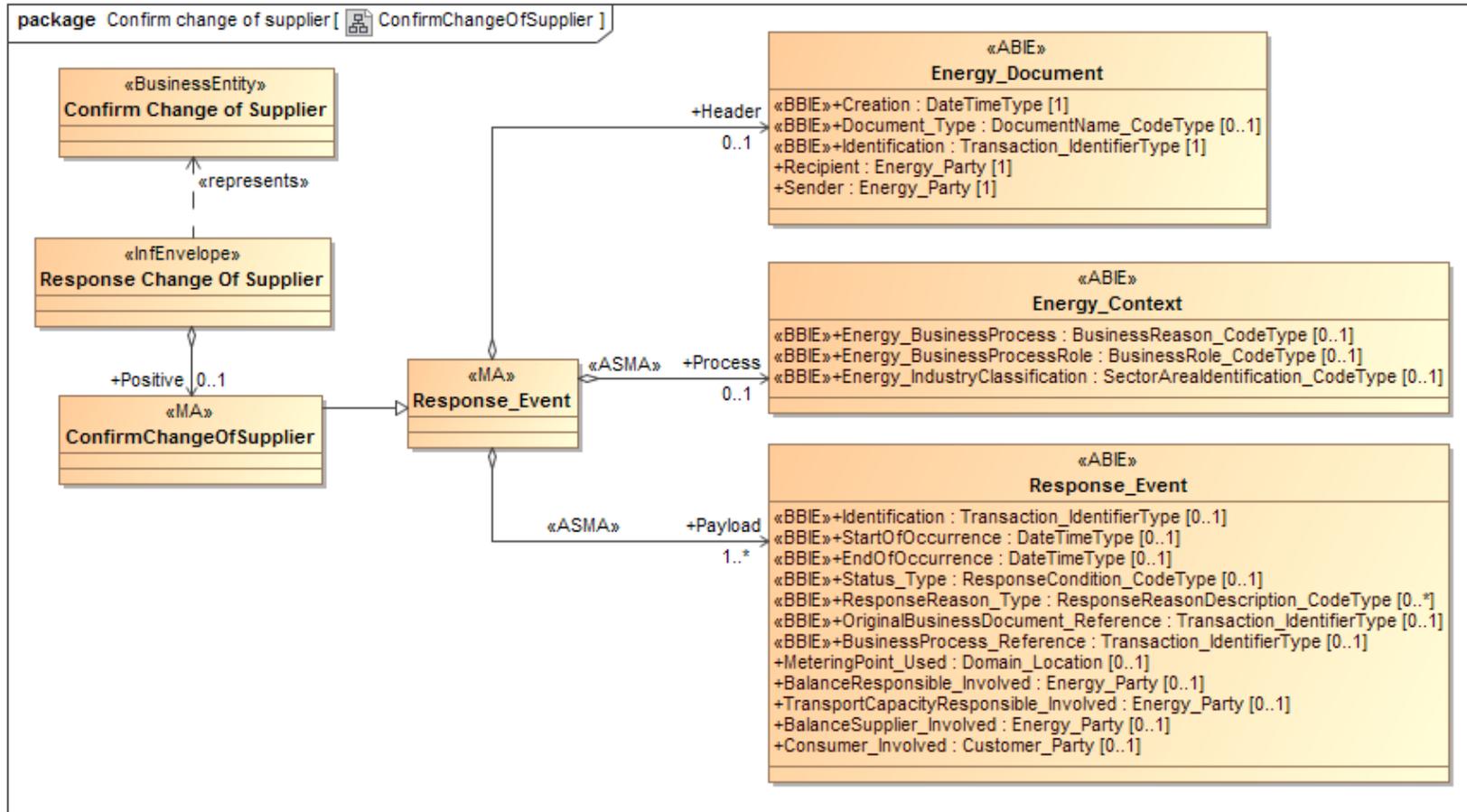


Figure 13 Class diagram: Confirm change of Supplier

3.2.4. OCL constraints for Confirm Change of Supplier <<MA>>

#	Specification	Constrained Element	Applied Stereotype
1	<pre>-- Structure Document -- Confirm change of supplier self.Header->size()=1 inv: self.Process->size()=1</pre>	 ConfirmChangeOfSupplier	<pre><<> abie [Constraint] <<> document [Constraint] <<> invariant [Constraint]</pre>
2	<pre>-- Structure Energy_Document -- Confirm change of supplier self.Header.Identification->size()=1 inv: self.Header.Creation->size()=1 inv: self.Header.Document_Type->size()=1 inv: self.Header.Sender.Identification->size()=1 inv: self.Header.Sender.Role->size()=0 inv: self.Header.Sender.Name->size()=0 inv: self.Header.Recipient.Identification->size()=1 inv: self.Header.Recipient.Role->size()=0 inv: self.Header.Recipient.Name->size()=0</pre>	 ConfirmChangeOfSupplier	<pre><<> abie [Constraint] <<> document [Constraint] <<> invariant [Constraint]</pre>
3	<pre>-- BDT Energy_Document -- Confirm change of supplier self.Header.Document_Type.content=DocumentNameCode::414 inv: self.Header.Document_Type.listIdentifier->size()=0 inv: self.Header.Document_Type.listAgencyIdentifier->size()=0 inv: self.Header.Creation.timeZoneCode->size()=0 inv: self.Header.Sender.Identification.schemeIdentifier->size()=0 inv: self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305 inv: self.Header.Sender.Role.content=BusinessRoleCode::MDR inv: self.Header.Sender.Role.listIdentifier->size()=0</pre>	 ConfirmChangeOfSupplier	<pre><<> bdt [Constraint] <<> document [Constraint] <<> invariant [Constraint]</pre>

#	Specification	Constrained Element	Applied Stereotype
	<p>inv: self.Header.Sender.Role.listAgencyIdentifier->size()=0</p> <p>inv: self.Header.Sender.Name.languageCode->size()=0</p> <p>inv: self.Header.Recipient.Identification.schemeIdentifier->size()=0</p> <p>inv: self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</p> <p>inv: self.Header.Recipient.Role.content=BusinessRoleCode::DDQ</p> <p>inv: self.Header.Recipient.Role.listIdentifier->size()=0</p> <p>inv: self.Header.Recipient.Role.listAgencyIdentifier->size()=0</p> <p>inv: self.Header.Recipient.Name.languageCode->size()=0</p>		
4	<p>-- Structure Energy_Context</p> <p>-- Confirm change of supplier</p> <p>self.Process.Energy_BusinessProcess->size()=1</p> <p>inv: self.Process.Energy_BusinessProcessRole->size()=1</p> <p>inv: self.Process.Energy_IndustryClassification->size()=1</p>	 ConfirmChangeOfSupplier	<p>«» abie [Constraint]</p> <p>«» invariant [Constraint]</p> <p>«» document [Constraint]</p>
5	<p>-- BDT Energy_Context</p> <p>-- Confirm change of supplier</p> <p>self.Process.Energy_BusinessProcess.content=BusinessReasonCode::E03</p> <p>inv: self.Process.Energy_BusinessProcess.listIdentifier->size()=0</p> <p>inv: self.Process.Energy_BusinessProcess.listAgencyIdentifier=CodeListResponsibleAgencyCode::260</p> <p>inv: self.Process.Energy_BusinessProcessRole.content=BusinessRoleCode::DDQ</p> <p>inv: self.Process.Energy_BusinessProcessRole.listIdentifier->size()=0</p> <p>inv: self.Process.Energy_BusinessProcessRole.listAgencyIdentifier->size()=0</p> <p>inv: self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::23 or self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::27</p> <p>inv: self.Process.Energy_IndustryClassification.listAgencyIdentifier->size()=0</p>	 ConfirmChangeOfSupplier	<p>«» bdt [Constraint]</p> <p>«» invariant [Constraint]</p> <p>«» document [Constraint]</p>

#	Specification	Constrained Element	Applied Stereotype
6	-- Structure Payload -- Confirm change of supplier self.Header->size()=0 inv: self.Process->size()=0	 ConfirmChangeOfSupplier	«>> invariant [Constraint] «>> payload [Constraint] «>> abie [Constraint]
7	--Structure Response_Event --Confirm change of supplier self.Payload.StartOfOccurrence->size()=1 inv: self.Payload.EndOfOccurrence->size()=0 inv: self.Payload.ResponseReason_Type->size()=0 inv: self.Payload.Status_Type->size()=0 inv: self.Payload.MeteringPoint_Used->size()=1 inv: self.Payload.BalanceSupplier_Involved->size()=1 inv: self.Payload.BalanceSupplier_Involved.Role->size()=0 inv: self.Payload.BalanceSupplier_Involved.Name->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved.Role->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved.Name->size()=0 inv: self.Payload.BalanceResponsible_Involved.Name->size()=0 inv: self.Payload.BalanceResponsible_Involved.Role->size()=0 inv: self.Payload.Consumer_Involved->size()=0	 ConfirmChangeOfSupplier	«>> invariant [Constraint] «>> abie [Constraint] «>> document [Constraint] «>> payload [Constraint]
8	-- BDT Response_Event -- Confirm change of supplier self.Payload.MeteringPoint_Used.Identification.schemeIdentifier->size()=0 inv: self.Payload.MeteringPoint_Used.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode ::9	 ConfirmChangeOfSupplier	«>> invariant [Constraint] «>> bdt [Constraint] «>> document [Constraint] «>> payload [Constraint]

3.2.5. Mapping BRS-BIM for Confirm Change of Supplier

	+Identification : ebix:org::BD...	+Energy_BusinessProcess : e...	+Energy_IndustryClassificatio...	+Document_Type : ebix:org::...	+Identification : ebix:org::BD...	+BalanceResponsible_Involve...	+BalanceSupplier_Involved : ...	+BusinessProcess_Reference ...	+Identification : ebix:org::BD...	+MeteringPoint_Used : ebix:org::...	+OriginalBusinessDocument_...	+StartOfOccurrence : ebix:org::...	+TransportCapacityResponsi...
Confirm Change of Supplier	1	1	1		3	1	1	1	1		1	1	1
Confirm Change of Supplier Async additions					3	1	1					1	1
+New Balance Responsible Party ID [0..1]					↗	↗							
+New Balance Supplier ID [1]					↗		↗						
+New Transport Capacity Responsible Party ID [0..1]					↗								↗
+Start date [1]												↗	
Header and Context Information	1	1	1										
+Ancillary Business Process Role [1]		↗											
+Business Reason : ebix:org::BDT::BusinessReason_CodeType [1]	↗												
+Document Type : ebix:org::BDT::DocumentName_CodeType [1]			↗										
Confirm Change of Supplier Additions								1	1		1		
+Business process ID [0..1]								↗					
+Reference to requesting Transaction ID [0..1]											↗		
+Transaction ID [0..1]									↗				
Metering Point	1									1			
Metering Point	1									1			
+Identification [1]	↗								↗				

Figure 14 Mapping: BRS-BIM for Confirm Change of Supplier

3.2.6. Reject Change of Supplier (Business Information)

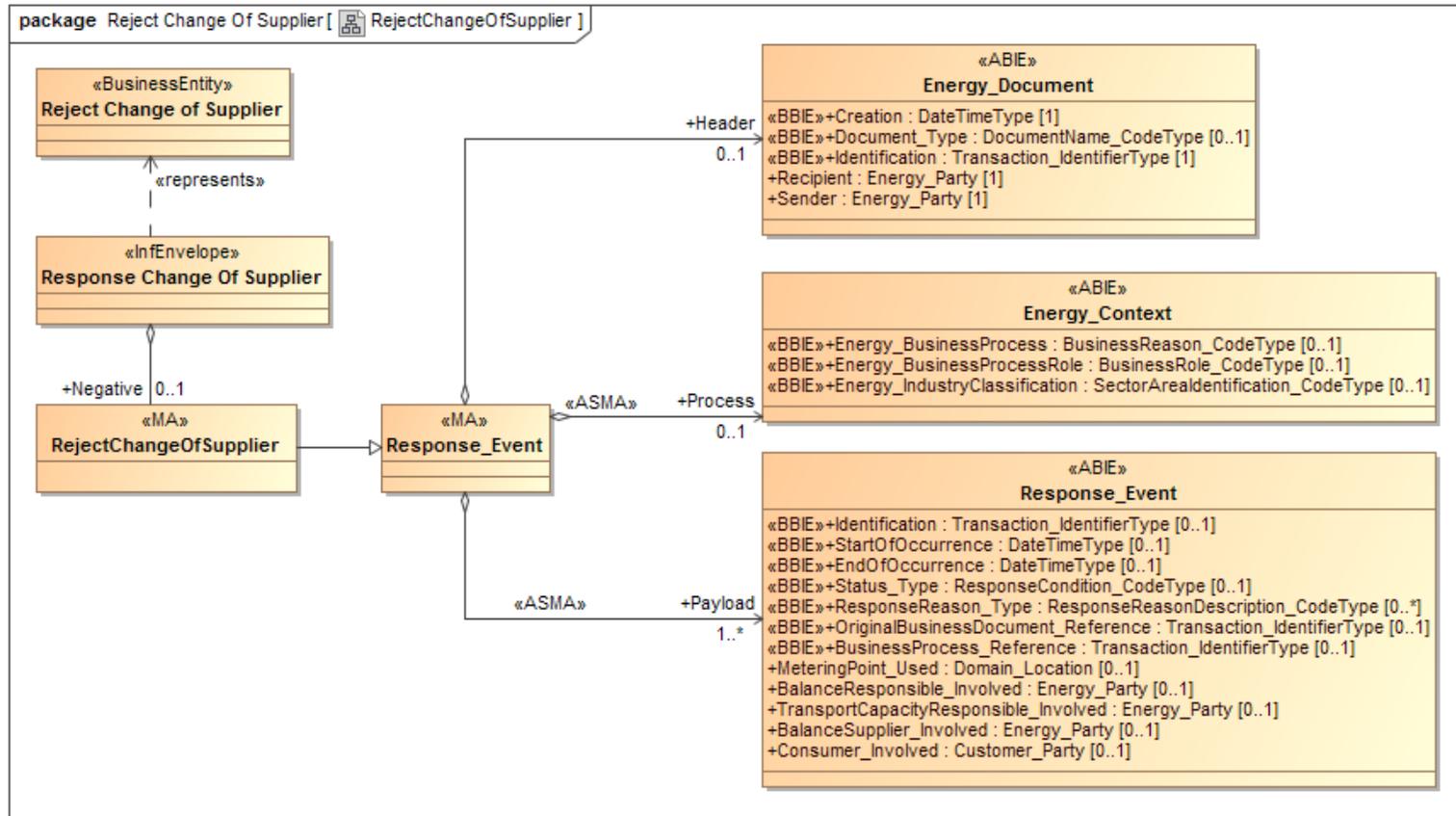


Figure 15 Class diagram: Reject change of Supplier

3.2.7. OCL constraints for Reject Change of Supplier <<MA>>

#	Specification	Constrained Element	Applied Stereotype
1	<p>-- Structure Document -- Reject change of supplier</p> <p>self.Header->size()=1 inv: self.Process->size()=1</p>	 RejectChangeOfSupplier	<p>«>> abie [Constraint] «>> document [Constraint] «>> invariant [Constraint]</p>
2	<p>-- Structure Energy_Document -- Reject change of supplier</p> <p>self.Header.Identification->size()=1 inv: self.Header.Creation->size()=1 inv: self.Header.Document_Type->size()=1 inv: self.Header.Sender.Identification->size()=1 inv: self.Header.Sender.Role->size()=0 inv: self.Header.Sender.Name->size()=0 inv: self.Header.Recipient.Identification->size()=1 inv: self.Header.Recipient.Role->size()=0 inv: self.Header.Recipient.Name->size()=0</p>	 RejectChangeOfSupplier	<p>«>> abie [Constraint] «>> document [Constraint] «>> invariant [Constraint]</p>
3	<p>-- BDT Energy_Document -- Reject change of supplier</p> <p>self.Header.Document_Type.content=DocumentNameCode::432 inv: self.Header.Document_Type.listIdentifier->size()=0 inv: self.Header.Document_Type.listAgencyIdentifier->size()=0</p> <p>inv: self.Header.Creation.timeZoneCode->size()=0</p> <p>inv: self.Header.Sender.Identification.schemeIdentifier->size()=0 inv: self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</p> <p>inv: self.Header.Sender.Role.content=BusinessRoleCode::MDR inv: self.Header.Sender.Role.listIdentifier->size()=0 inv: self.Header.Sender.Role.listAgencyIdentifier->size()=0</p>	 RejectChangeOfSupplier	<p>«>> bdt [Constraint] «>> document [Constraint] «>> invariant [Constraint]</p>

#	Specification	Constrained Element	Applied Stereotype
	<p>inv: self.Header.Sender.Name.languageCode->size()=0</p> <p>inv: self.Header.Recipient.Identification.schemeIdentifier->size()=0 inv: self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</p> <p>inv: self.Header.Recipient.Role.content=BusinessRoleCode::DDQ inv: self.Header.Recipient.Role.listIdentifier->size()=0 inv: self.Header.Recipient.Role.listAgencyIdentifier->size()=0</p> <p>inv: self.Header.Recipient.Name.languageCode->size()=0</p>		
4	<p>-- Structure Energy_Context -- Reject change of supplier</p> <p>self.Process.Energy_BusinessProcess->size()=1 inv: self.Process.Energy_BusinessProcessRole->size()=1 inv: self.Process.Energy_IndustryClassification->size()=1</p>	 RejectChangeOfSupplier	<p>«>> abie [Constraint] «>> invariant [Constraint] «>> document [Constraint]</p>
5	<p>-- BDT Energy_Context -- Reject change of supplier</p> <p>self.Process.Energy_BusinessProcess.content=BusinessReasonCode::E03 inv: self.Process.Energy_BusinessProcess.listIdentifier->size()=0 inv: self.Process.Energy_BusinessProcess.listAgencyIdentifier=CodeListResponsibleAgencyCode::260</p> <p>inv: self.Process.Energy_BusinessProcessRole.content=BusinessRoleCode::DDQ inv: self.Process.Energy_BusinessProcessRole.listIdentifier->size()=0 inv: self.Process.Energy_BusinessProcessRole.listAgencyIdentifier->size()=0</p> <p>inv: self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::23 or self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::27 inv: self.Process.Energy_IndustryClassification.listAgencyIdentifier->size()=0</p>	 RejectChangeOfSupplier	<p>«>> bdt [Constraint] «>> invariant [Constraint] «>> document [Constraint]</p>
6	<p>-- Structure Payload -- Reject change of supplier</p> <p>self.Header->size()=0 inv: self.Process->size()=0</p>	 RejectChangeOfSupplier	<p>«>> invariant [Constraint] «>> payload [Constraint] «>> abie [Constraint]</p>

#	Specification	Constrained Element	Applied Stereotype
7	<p>--Structure Response_Event --Reject change of Supplier</p> <p>self.Payload.StartOfOccurrence->size()=1 inv: self.Payload.EndOfOccurrence->size()=0 inv: self.Payload.MeteringPoint_Used->size()=0 inv: self.Payload.Status_Type->size()=0</p> <p>inv: self.Payload.ResponseReason_Type->notEmpty() inv: self.Payload.BusinessProcess_Reference->size()=0 inv: self.Payload.BalanceResponsible_Involved->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved->size()=0 inv: self.Payload.BalanceSupplier_Involved->size()=0 inv: self.Payload.Consumer_Involved->size()=0</p>	 RejectChangeOfSupplier	<p>«>> invariant [Constraint] «>> abie [Constraint] «>> document [Constraint] «>> payload [Constraint]</p>
8	<p>-- BDT Response_Event -- Reject change of Supplier</p> <p>self.Payload.ResponseReason_Type.content=ResponseReasonDescriptionCode::E10 or Payload.ResponseReason_Type.content=ResponseReasonDescriptionCode::E16 or Payload.ResponseReason_Type.content=ResponseReasonDescriptionCode::E17 or Payload.ResponseReason_Type.content=ResponseReasonDescriptionCode::E18 or Payload.ResponseReason_Type.content=ResponseReasonDescriptionCode::E22 or Payload.ResponseReason_Type.content=ResponseReasonDescriptionCode::E37 or Payload.ResponseReason_Type.content=ResponseReasonDescriptionCode::E54 or Payload.ResponseReason_Type.content=ResponseReasonDescriptionCode::E59 inv: self.Payload.ResponseReason_Type.listIdentifier->size()=0 inv: self.Payload.ResponseReason_Type.listAgencyIdentifier=CodeListResponsibleAgencyCode::260</p> <p>inv: self.Payload.MeteringPoint_Used.Identification.schemeIdentifier->size()=0 inv: self.Payload.MeteringPoint_Used.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode: :9</p>	 RejectChangeOfSupplier	<p>«>> invariant [Constraint] «>> bdt [Constraint] «>> document [Constraint] «>> payload [Constraint]</p>

3.2.8. Mapping BRS-BIM for Reject Change of Supplier

	+Identification : ebix:org::BDT::...	+Energy_BusinessProcess : ebix:...	+Energy_BusinessProcessRole : ...	+Document_Type : ebix:org::BD...	+Identification : ebix:org::BDT::...	+Identification : ebix:org::BDT::...	+MeteringPoint_Used : ebix:org::...	+OriginalBusinessDocument_Ref...	+ResponseReason_Type : ebix:o...	+StartOfOccurrence : ebix:org::...
Folder: Metering Point	1						1			
Folder: Metering Point	1						1			
+Identification [1]	↗						↗			
Folder: Reject Change of Supplier		1	1	1	1	1		1	1	1
Folder: Reject Change of Supplier Additions						1		1		
+Reference to requesting Transaction ID [0..1]								↗		
+Transaction ID [0..1]						↗				
Folder: Reject Change of Supplier									1	
+Reason [1..*]									↗	
Folder: Header and Context Information		1	1	1	1					
+Ancillary Business Process Role [1]			↗		↗					
+Business Reason : ebix:org::BDT::BusinessReason_CodeType [1]	↗									
+Document Type : ebix:org::BDT::DocumentName_CodeType [1]				↗						
Folder: Reject Change of Supplier Async additions										1
+Start date [1]										↗

Figure 16 Mapping: BRS-BIM for Reject Change of Supplier

3.2.9. Notify Change of Supplier to new affected role (Business Information)

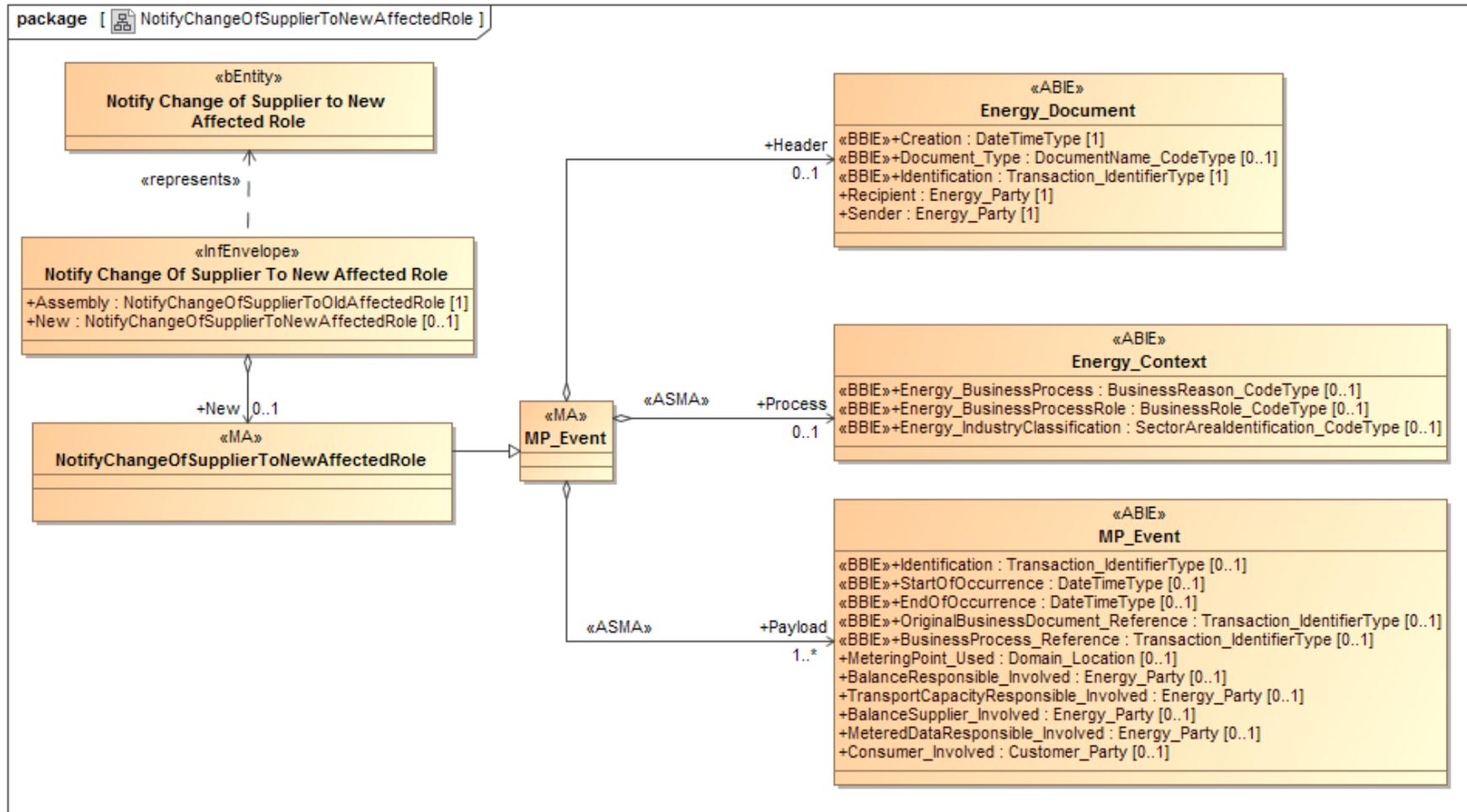


Figure 17 Class diagram: Notify Change of Supplier to new affected role

3.2.10. OCL constraints for Notify Change of Supplier to new affected role <<MA>>

#	Specification	Constrained Element	Applied Stereotype
1	<pre>-- Structure Document -- Notify change of supplier to new affected role self.Header->size()=1 inv: self.Process->size()=1</pre>	 NotifyChangeOfSupplierToNewAffectedRole	<pre><<>> abie [Constraint] <<>> document [Constraint] <<>> invariant [Constraint]</pre>
2	<pre>-- Structure Energy_Document -- Notify change of supplier to new affected role self.Header.Identification->size()=1 inv: self.Header.Creation->size()=1 inv: self.Header.Document_Type->size()=1 inv: self.Header.Sender.Identification->size()=1 inv: self.Header.Sender.Role->size()=0 inv: self.Header.Sender.Name->size()=0 inv: self.Header.Recipient.Identification->size()=1 inv: self.Header.Recipient.Role->size()=0 inv: self.Header.Recipient.Name->size()=0</pre>	 NotifyChangeOfSupplierToNewAffectedRole	<pre><<>> abie [Constraint] <<>> document [Constraint] <<>> invariant [Constraint]</pre>
3	<pre>-- BDT Energy_Document -- Notify change of supplier to new affected role self.Header.Document_Type.content=DocumentNameCode::E44 inv: self.Header.Document_Type.listIdentifier->size()=0 inv: self.Header.Document_Type.listAgencyIdentifier=CodeListResponsibleAgencyCode::260 inv: self.Header.Creation.timeZoneCode->size()=0 inv: self.Header.Sender.Identification.schemeIdentifier->size()=0 inv: self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</pre>	 NotifyChangeOfSupplierToNewAffectedRole	<pre><<>> bdt [Constraint] <<>> document [Constraint] <<>> invariant [Constraint]</pre>

#	Specification	Constrained Element	Applied Stereotype
	<p>inv: self.Header.Sender.Role.content=BusinessRoleCode::MDR inv: self.Header.Sender.Role.listIdentifier->size()=0 inv: self.Header.Sender.Role.listAgencyIdentifier->size()=0</p> <p>inv: self.Header.Sender.Name.languageCode->size()=0 inv: self.Header.Sender.Name.languageCode->size()=0</p> <p>inv: self.Header.Recipient.Identification.schemeIdentifier->size()=0 inv: self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</p> <p>inv: self.Header.Recipient.Role.content=BusinessRoleCode::DDQ or self.Header.Recipient.Role.content=BusinessRoleCode::TCR inv: self.Header.Recipient.Role.listIdentifier->size()=0 inv: self.Header.Recipient.Role.listAgencyIdentifier->size()=0</p> <p>inv: self.Header.Recipient.Name.languageCode->size()=0 inv: self.Header.Recipient.Name.languageCode->size()=0</p>		
4	<p>-- Structure Energy_Context -- Notify change of supplier to new affected role</p> <p>self.Process.Energy_BusinessProcess->size()=1 inv: self.Process.Energy_BusinessProcessRole->size()=1 inv: self.Process.Energy_IndustryClassification->size()=1</p>	 NotifyChangeOfSupplierToNewAffectedRole	<p>«» abie [Constraint] «» invariant [Constraint] «» document [Constraint]</p>
5	<p>-- BDT Energy_Context -- Notify change of supplier to new affected role</p> <p>self.Process.Energy_BusinessProcess.content=BusinessReasonCode::E03 inv: self.Process.Energy_BusinessProcess.listIdentifier->size()=0 inv: self.Process.Energy_BusinessProcess.listAgencyIdentifier=CodeListResponsibleAgencyCode::260</p> <p>inv: self.Process.Energy_BusinessProcessRole.content=BusinessRoleCode::DDK or self.Process.Energy_BusinessProcessRole.content=BusinessRoleCode::TCR inv: self.Process.Energy_BusinessProcessRole.listIdentifier->size()=0 inv: self.Process.Energy_BusinessProcessRole.listAgencyIdentifier->size()=0</p>	 NotifyChangeOfSupplierToNewAffectedRole	<p>«» bdt [Constraint] «» invariant [Constraint] «» document [Constraint]</p>

#	Specification	Constrained Element	Applied Stereotype
	<pre> inv: self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::23 or self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::27 inv: self.Process.Energy_IndustryClassification.listAgencyIdentifier->size()=0 </pre>		
6	<pre> -- Structure Payload --Notify change of supplier to new affected role self.Header->size()=0 inv: self.Process->size()=0 </pre>	 NotifyChangeOfSupplierToNewAffectedRole	<pre> «» invariant [Constraint] «» payload [Constraint] «» abie [Constraint] </pre>
7	<pre> --Structure MP_Event -- Notify change of supplier to new affected role self.Payload.StartOfOccurrence->size()=1 inv: self.Payload.EndOfOccurrence->size()=0 inv: self.Payload.MeteringPoint_Used->size()=1 inv: self.Payload.BalanceSupplier_Involved->size()=1 inv: self.Payload.BalanceSupplier_Involved.Role->size()=0 inv: self.Payload.BalanceSupplier_Involved.Name->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved->size()=1 xor self.Payload.BalanceResponsible_Involved->size()=1 inv: self.Payload.TransportCapacityResponsible_Involved.Role->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved.Name->size()=0 inv: self.Payload.BalanceResponsible_Involved.Name->size()=0 inv: self.Payload.BalanceResponsible_Involved.Role->size()=0 inv: self.Payload.MeteredDataResponsible_Involved->size()=0 inv: self.Payload.OriginalBusinessDocument_Reference->size()=0 inv: self.Payload.Consumer_Involved->size()=0 </pre>	 NotifyChangeOfSupplierToNewAffectedRole	<pre> «» invariant [Constraint] «» abie [Constraint] «» document [Constraint] «» payload [Constraint] </pre>
8	<pre> -- BDT MP_Event -- -- Notify change of supplier to new affected role self.Payload.StartOfOccurrence.timeZoneCode->size()=0 </pre>	 NotifyChangeOfSupplierToNewAffectedRole	<pre> «» invariant [Constraint] «» bdt [Constraint] </pre>

#	Specification	Constrained Element	Applied Stereotype
	<p>inv: self.Payload.EndOfOccurrence.timeZoneCode->size()=0</p> <p>inv: self.Payload.OriginalBusinessDocument_Reference->size()=0</p> <p>inv: self.Payload.MeteringPoint_Used.Identification.schemeIdentifier->size()=0</p> <p>inv: self.Payload.MeteringPoint_Used.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9</p> <p>inv: self.Payload.BalanceResponsible_Involved.Identification->size()=1</p> <p>inv: self.Payload.BalanceResponsible_Involved.Identification.schemeIdentifier->size()=0</p> <p>inv: self.Payload.BalanceResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode: :9 or Payload.BalanceResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::30 5</p> <p>inv: self.Payload.BalanceSupplier_Involved.Identification->size()=1</p> <p>inv: self.Payload.BalanceSupplier_Involved.Identification.schemeIdentifier->size()=0</p> <p>inv: self.Payload.BalanceSupplier_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or Payload.BalanceSupplier_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</p> <p>inv: self.Payload.TransportCapacityResponsible_Involved.Identification->size()=1</p> <p>inv: self.Payload.TransportCapacityResponsible_Involved.Identification.schemeIdentifier->size()=0</p> <p>inv: self.Payload.TransportCapacityResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAg encyCode::9 or Payload.TransportCapacityResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgency Code::305</p>		<p>«» document [Constraint]</p> <p>«» payload [Constraint]</p>

3.2.11. Mapping BRS-BIM for Notify Change of Supplier to new affected role

	+Identification : ebix:org::BDT...	+Energy_BusinessProcess : eb...	+Energy_BusinessProcessRole...	+Identification : ebix:org::BDT...	+Identification : ebix:org::BDT...	+BalanceResponsible_Involve...	+BalanceSupplier_Involved : e...	+BusinessProcess_Reference ...	+Identification : ebix:org::BDT...	+MeteringPoint_Used : ebix:or...	+StartOfOccurrence : ebix:or...	+TransportCapacityResponsibl...
Metering Point	1									1		
Metering Point	1									1		
+Identification [1]	↗									↗		
Notify Change of Supplier to New Affected Role		1	1	1	4	1	1	1	1		1	1
Header and Context Information		1	1	1	1							
+Ancillary Business Process Role [1]			↗		↗							
+Business Reason : ebix:org::BDT::BusinessReason_CodeType [1]		↗										
+Document Type : ebix:org::BDT::DocumentName_CodeType [1]				↗								
Notify Change of Supplier to New Affected Role					3	1	1				1	1
+New Balance Responsible Party ID [0..1]					↗	↗						
+New Balance Supplier ID [1]					↗		↗					
+New Transport Capacity Responsible Party ID [0..1]					↗							↗
+Start date [1]											↗	
Notify Change of Supplier to New Affected Role Additions								1	1			
+Business process ID [0..1]								↗				
+Transaction ID [0..1]									↗			

Figure 18 Class diagram: Notify Change of Supplier to old affected role

3.2.12. Notify Change of Supplier to old affected role (Business Information)

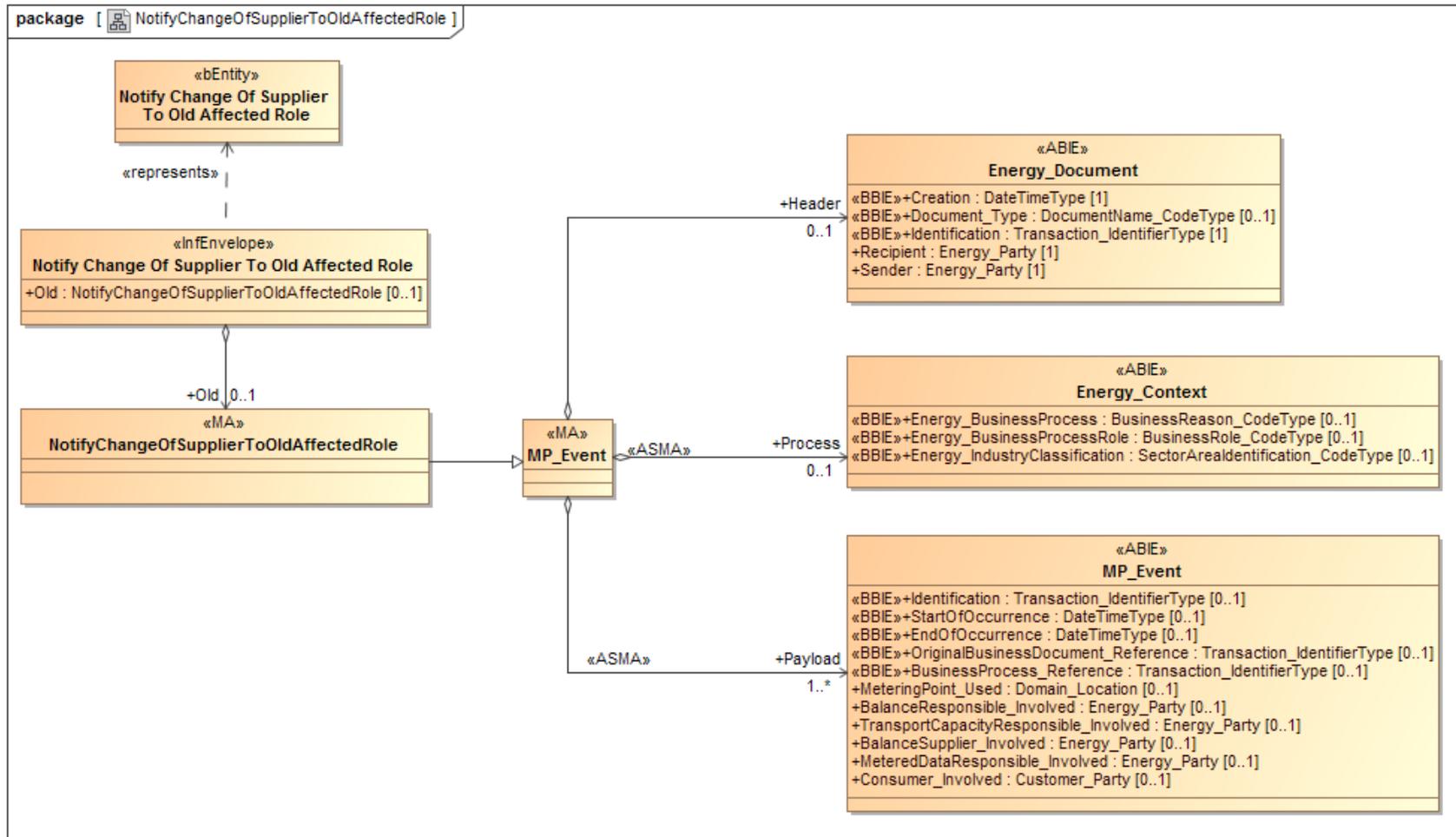


Figure 19 Class diagram: Notify Change of Supplier to old affected role

3.2.13. OCL constraints for Notify Change of Supplier to old affected role <<MA>>

#	Specification	Constrained Element	Applied Stereotype
1	<pre>-- Structure Document -- Notify change of supplier to old affected role self.Header->size()=1 inv: self.Process->size()=1</pre>	 NotifyChangeOfSupplierToOldAffectedRole	<pre><<>> abie [Constraint] <<>> document [Constraint] <<>> invariant [Constraint]</pre>
2	<pre>-- Structure Energy_Document -- Notify change of supplier to old affected role self.Header.Identification->size()=1 inv: self.Header.Creation->size()=1 inv: self.Header.Document_Type->size()=1 inv: self.Header.Sender.Identification->size()=1 inv: self.Header.Sender.Role->size()=0 inv: self.Header.Sender.Name->size()=0 inv: self.Header.Recipient.Identification->size()=1 inv: self.Header.Recipient.Role->size()=0 inv: self.Header.Recipient.Name->size()=0</pre>	 NotifyChangeOfSupplierToOldAffectedRole	<pre><<>> abie [Constraint] <<>> document [Constraint] <<>> invariant [Constraint]</pre>
3	<pre>-- BDT Energy_Document -- Notify change of supplier to old affected role self.Header.Document_Type.content=DocumentNameCode::E44 inv: self.Header.Document_Type.listIdentifier->size()=0 inv: self.Header.Document_Type.listAgencyIdentifier=CodeListResponsibleAgencyCode::260 inv: self.Header.Creation.timeZoneCode->size()=0 inv: self.Header.Sender.Identification.schemeIdentifier->size()=0 inv: self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Sender.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305 inv: self.Header.Sender.Role.content=BusinessRoleCode::MDR inv: self.Header.Sender.Role.listIdentifier->size()=0</pre>	 NotifyChangeOfSupplierToOldAffectedRole	<pre><<>> bdt [Constraint] <<>> document [Constraint] <<>> invariant [Constraint]</pre>

#	Specification	Constrained Element	Applied Stereotype
	<pre> inv: self.Header.Sender.Role.listAgencyIdentifier->size()=0 inv: self.Header.Sender.Name.languageCode->size()=0 inv: self.Header.Sender.Name.languageCode->size()=0 inv: self.Header.Recipient.Identification.schemeIdentifier->size()=0 inv: self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or self.Header.Recipient.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305 inv: self.Header.Recipient.Role.content=BusinessRoleCode::DDQ or self.Header.Recipient.Role.content=BusinessRoleCode::DDK or self.Header.Recipient.Role.content=BusinessRoleCode::TCR inv: self.Header.Recipient.Role.listIdentifier->size()=0 inv: self.Header.Recipient.Role.listAgencyIdentifier->size()=0 inv: self.Header.Recipient.Name.languageCode->size()=0 inv: self.Header.Recipient.Name.languageCode->size()=0 </pre>		
4	<pre> -- Structure Energy_Context -- Notify change of supplier to old affected role self.Process.Energy_BusinessProcess->size()=1 inv: self.Process.Energy_BusinessProcessRole->size()=1 inv: self.Process.Energy_IndustryClassification->size()=1 </pre>	 NotifyChangeOfSupplierToOldAffectedRole	<pre> «» abie [Constraint] «» invariant [Constraint] «» document [Constraint] </pre>
5	<pre> -- BDT Energy_Context -- Notify change of supplier to old affected role self.Process.Energy_BusinessProcess.content=BusinessReasonCode::E03 inv: self.Process.Energy_BusinessProcess.listIdentifier->size()=0 inv: self.Process.Energy_BusinessProcess.listAgencyIdentifier=CodeListResponsibleAgencyCode::260 inv: self.Process.Energy_BusinessProcessRole.content=BusinessRoleCode::DDK or self.Process.Energy_BusinessProcessRole.content=BusinessRoleCode::DDQ or self.Process.Energy_BusinessProcessRole.content=BusinessRoleCode::TCR inv: self.Process.Energy_BusinessProcessRole.listIdentifier->size()=0 inv: self.Process.Energy_BusinessProcessRole.listAgencyIdentifier->size()=0 </pre>	 NotifyChangeOfSupplierToOldAffectedRole	<pre> «» bdt [Constraint] «» invariant [Constraint] «» document [Constraint] </pre>

#	Specification	Constrained Element	Applied Stereotype
	<pre> inv: self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::23 or self.Process.Energy_IndustryClassification.content=SectorAreaIdentificationCode::27 inv: self.Process.Energy_IndustryClassification.listAgencyIdentifier->size()=0 </pre>		
6	<pre> -- Structure Payload -- Notify change of supplier to old affected role self.Header->size()=0 inv: self.Process->size()=0 </pre>	 NotifyChangeOfSupplierToOldAffectedRole	<pre> «» invariant [Constraint] «» payload [Constraint] «» abie [Constraint] </pre>
7	<pre> --Structure MP_Event -- Notify change of supplier to old affected role self.Payload.StartOfOccurrence->size()=0 inv: self.Payload.EndOfOccurrence->size()=1 inv: self.Payload.MeteringPoint_Used->size()=1 inv: self.Payload.BalanceSupplier_Involved->size()=1 inv: self.Payload.BalanceSupplier_Involved.Role->size()=0 inv: self.Payload.BalanceSupplier_Involved.Name->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved->size()=1 xor self.Payload.BalanceResponsible_Involved->size()=1 inv: self.Payload.TransportCapacityResponsible_Involved.Role->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved.Name->size()=0 inv: self.Payload.BalanceResponsible_Involved.Name->size()=0 inv: self.Payload.BalanceResponsible_Involved.Role->size()=0 inv: self.Payload.MeteredDataResponsible_Involved->size()=0 inv: self.Payload.OriginalBusinessDocument_Reference->size()=0 inv: self.Payload.Consumer_Involved->size()=0 </pre>	 NotifyChangeOfSupplierToOldAffectedRole	<pre> «» invariant [Constraint] «» abie [Constraint] «» document [Constraint] «» payload [Constraint] </pre>
8	<pre> -- BDT MP_Event -- -- Notify change of supplier to old affected role self.Payload.StartOfOccurrence.timeZoneCode->size()=0 </pre>	 NotifyChangeOfSupplierToOldAffectedRole	<pre> «» invariant [Constraint] «» bdt [Constraint] </pre>

#	Specification	Constrained Element	Applied Stereotype
	<pre>inv: self.Payload.EndOfOccurrence.timeZoneCode->size()=0</pre>		<pre>«» document</pre>
	<pre>inv: self.Payload.OriginalBusinessDocument_Reference->size()=0</pre>		<pre>[Constraint]</pre>
	<pre>inv: self.Payload.MeteringPoint_Used.Identification.schemeIdentifier->size()=0 inv: self.Payload.MeteringPoint_Used.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9</pre>		<pre>«» payload [Constraint]</pre>
	<pre>inv: self.Payload.BalanceResponsible_Involved.Identification->size()=1 inv: self.Payload.BalanceResponsible_Involved.Identification.schemeIdentifier->size()=0 inv: self.Payload.BalanceResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or Payload.BalanceResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305 inv: self.Payload.BalanceSupplier_Involved.Identification->size()=1 inv: self.Payload.BalanceSupplier_Involved.Identification.schemeIdentifier->size()=0 inv: self.Payload.BalanceSupplier_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or Payload.BalanceSupplier_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305 inv: self.Payload.TransportCapacityResponsible_Involved.Identification->size()=1 inv: self.Payload.TransportCapacityResponsible_Involved.Identification.schemeIdentifier->size()=0 inv: self.Payload.TransportCapacityResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::9 or Payload.TransportCapacityResponsible_Involved.Identification.schemeAgencyIdentifier=CodeListResponsibleAgencyCode::305</pre>		

3.2.14. Mapping BRS-BIM for Notify Change of Supplier to old affected role

	+Identification : ebix:org::BDT:...	+Energy_BusinessProcess : ebi...	+Energy_BusinessProcessRole : ...	+Document_Type : ebix:org::B...	+Identification : ebix:org::BDT:...	+BalanceResponsible_Involved ...	+BalanceSupplier_Involved : ebi...	+BusinessProcess_Reference : ...	+EndOfOccurrence : ebix:org::...	+Identification : ebix:org::BDT:...	+MeteringPoint_Used : ebix:org...	+TransportCapacityResponsible...
Metering Point	1										1	
Metering Point	1										1	
+Identification [1]	↗										↗	
Notify Change Of Supplier To Old Affected Role		1	1	1	4	1	1	1	1	1		1
Header and Context Information		1	1	1	1							
+Ancillary Business Process Role [1]			↗		↗							
+Business Reason : ebix:org::BDT::BusinessReason_CodeType [1]		↗										
+Document Type : ebix:org::BDT::DocumentName_CodeType [1]				↗								
Notify Change Of Supplier To Old Affected Role					3	1	1		1			1
+Balance responsible party ID [0..1]					↗	↗						
+Balance supplier ID [1]					↗		↗					
+End date [1]									↗			
+Transport capacity responsible party ID [0..1]					↗							↗
Notify Change Of Supplier To Old Affected Role Additions								1		1		
+Business process ID [0..1]								↗				
+Transaction ID [0..1]										↗		

Figure 20 Mapping: BRS-BIM for Notify Change of Supplier to old affected role

