



**Business Requirements
for
Alignment of
characteristics of a
Customer at an
Accounting Point**

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A. About this document

This document is a Business Requirements Specification (BRS) for Alignment of characteristics of a Customer at an Accounting Point process 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 process for alignment of characteristics of a Customer at an Accounting Point is based on a “supplier centric model”, i.e. where the Energy Supplier is the Content Responsible Party for the Customer information for the regulated roles. The Customer in this process is limited to the Party Connected to Grid, whose characteristics need to be aligned between the Energy Supplier, the Grid Company and other Entitled Parties. The BRS shows three basic processes; A process where an Entitled Party, such as a Grid Company, requests characteristics of a Customer from the Party Administrator, a process where the Party Administrator notifies the Entitled Parties with changes to the characteristics of a Customer at an Accounting Point, and a process where an Entitled Party, such as a Grid Company requests for an update in the characteristics of a Customer at an Accounting point. This BRS will not include transfer of Customer data directly between Energy Suppliers. A main reason for alignment of Customer characteristic is for billing purposes.

There is a need for additional common Customer information. For Customer identification, a unique ID is needed, preferably from an official administration. A Customer is linked to the Accounting Point, using the ID from the common Customer administration.

We assume that sometime in the future there will be a “Party administration”, independent of the Metering Point administration, maintained by a Party Administrator.

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. References

A.1.1. 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.1.2. 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)

A.2. Main changes since last version

Old	New	Clarification	Date
Version 2.0			
v1r0C	v2r0A	Recast of BRS	20200525
Version 2.1			
2.0A	2.1A	Addition of Check consent process.	20201019
2.1A	2.1B	<ul style="list-style-type: none"> Hiding attributes from the root class in Appendix A, to make the class diagrams more readable. Addition of clarifying text in chapter A. 	20230815
2.1B	2.1C	<ul style="list-style-type: none"> Since ebIX® is closing down from the end of 2023, the link to the ebIX® secretary has been removed. 	20231212

1 Business Domain View: Alignment of characteristics of a Customer at an Accounting Point

1.1 Business Domain View: Align characteristics of a Customer at an Accounting Point (Business Process UseCase)

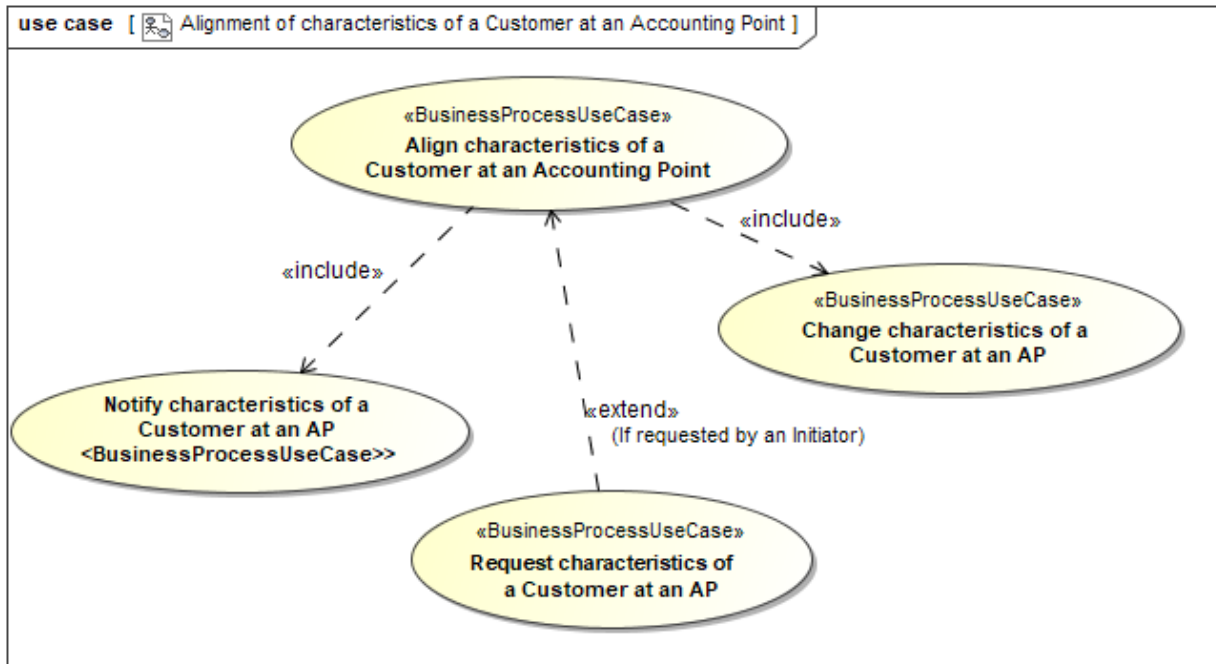


Figure 1 Business Process UseCase: Align characteristics of a Customer at an Accounting Point

1.1.1 Description

UseCase description: Align characteristics of a Customer at an Accounting Point	
definition	<p>This is the process where a Party Administrator can notify characteristics of a Customer at an Accounting Point to parties (roles) entitled to receive the characteristics. As an extension, an Entitled Party can request characteristics, or request an update in the characteristics, of a Customer at an Accounting Point.</p> <p>The characteristics of a Customer at an Accounting Point are always related to an Accounting Point.</p> <p>The Request characteristics of a Customer at an Accounting Point process will return the characteristics the requesting party needs to fulfil its obligations in the energy market.</p> <p>The Request for an update of characteristics of a Customer at an Accounting Point is sent from an Entitled Party to the Content Responsible Party (i.e.</p>

	<p>Energy Supplier), who requests a change of the characteristics of a Customer at an Accounting Point to the Party Administrator.</p>
beginsWhen	<p>When the Party Administrator needs to inform the Entitled Parties of changes to the characteristics of a Customer at an Accounting Point, or an Entitled Party has requested such information, or an Entitled Party has requested an update in the characteristics of a Customer at an Accounting Point.</p>
preCondition	<p>The Party Administrator needs to inform the Entitled Parties about changes to characteristics of a Customer at an Accounting Point.</p> <p>If characteristics of a Customer at an Accounting Point are requested by an Entitled Party or the Entitled Party request an update of the characteristics, the requestor must be authorised to receive and/or update the characteristics at the Accounting Point, i.e. that the requestor (such as a Metered Data Responsible or a Grid Company) has a formal responsibility for, or is mandated by, the Customer.</p>
endsWhen	<p>When the Entitled Parties have received the characteristics of a Customer at an Accounting Point.</p>
postCondition	<p>The characteristics of a Customer at an Accounting Point are aligned between the Party Administrator and the Entitled Parties.</p>
exceptions	<p>Request for the characteristics of a Customer at an Accounting Point or request for an update of the characteristics of a Customer at an Accounting Point is rejected.</p>
actions	<p>Not relevant at this level.</p>

1.1.2 Notify characteristics of a Customer at an AP (Business Process UseCase)

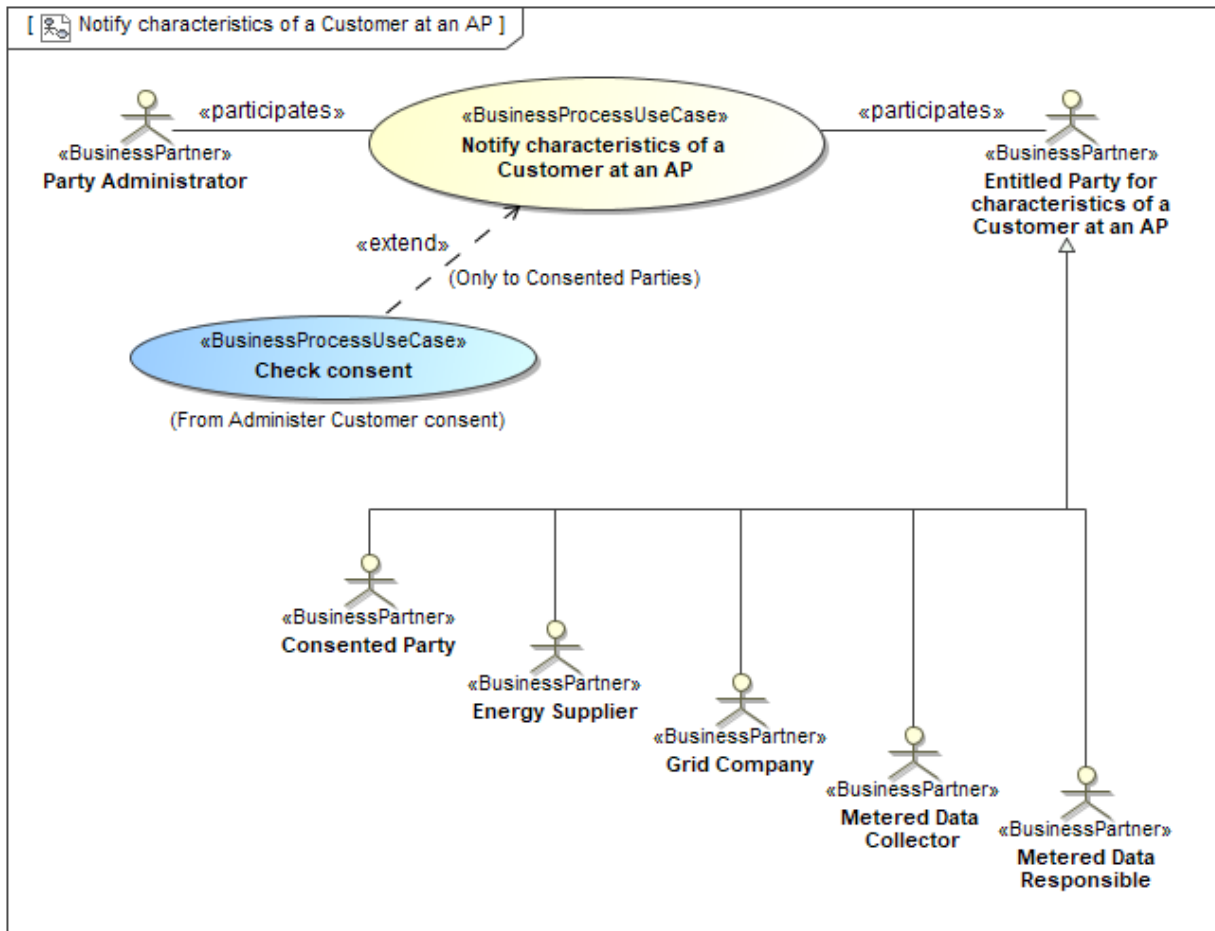


Figure 2 Business Process UseCase: Notify characteristics of a Customer at an Accounting Point

1.1.2.1 Description

UseCase description: Notify characteristics of a Customer at an Accounting Point	
definition	In this process, the Party Administrator distributes characteristics of a Customer linked to an Accounting Point to the Entitled Parties ¹ after update of one or more of the characteristics of a Customer at an Accounting Point. For Consented Parties, the validity of the consent is checked before the notification is sent.
beginsWhen	When there have been changes to the characteristics of the Customer at the Accounting Point.

¹ In a supplier-centric model, the Entitled Party is the Grid Company. Based on national rules, this may be extended to other parties, such as the Metered Data Collector or the Metered Data Responsible. In addition, other parties can be consented by the Customer.

preCondition	<p>One or more characteristics of the Customer at this Accounting Point have been changed.</p> <p>There are one or more Entitled Parties that are authorised for the characteristics of a Customer at an Accounting Point.</p>
endsWhen	When the Entitled Parties have received the notification.
postCondition	The Entitled Parties have aligned the characteristics of a Customer at an Accounting Point.
exceptions	<p>Time constraints are based on national rules.</p> <p>In the ebIX® model there is no information exchange between a new and an old Energy Supplier, i.e. the Party Administrator is only linked to the Customer as long as the Energy Supplier has a valid supply contract with the Customer.</p>
actions	See 1.1.2.2.

1.1.2.2 Business Process

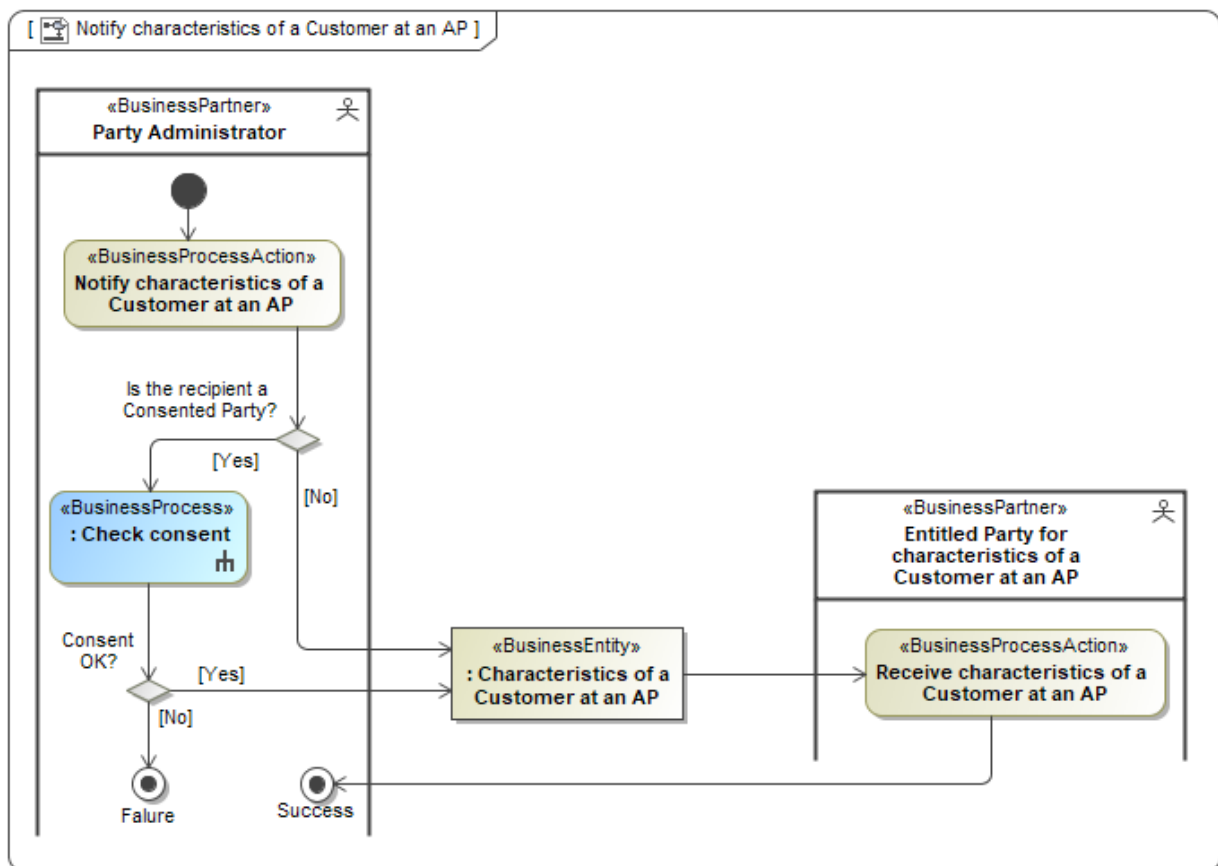


Figure 3 Business Process: Notify characteristics of a Customer at an Accounting Point

1.1.3 Request characteristics of a Customer at an AP (Business Process UseCase)

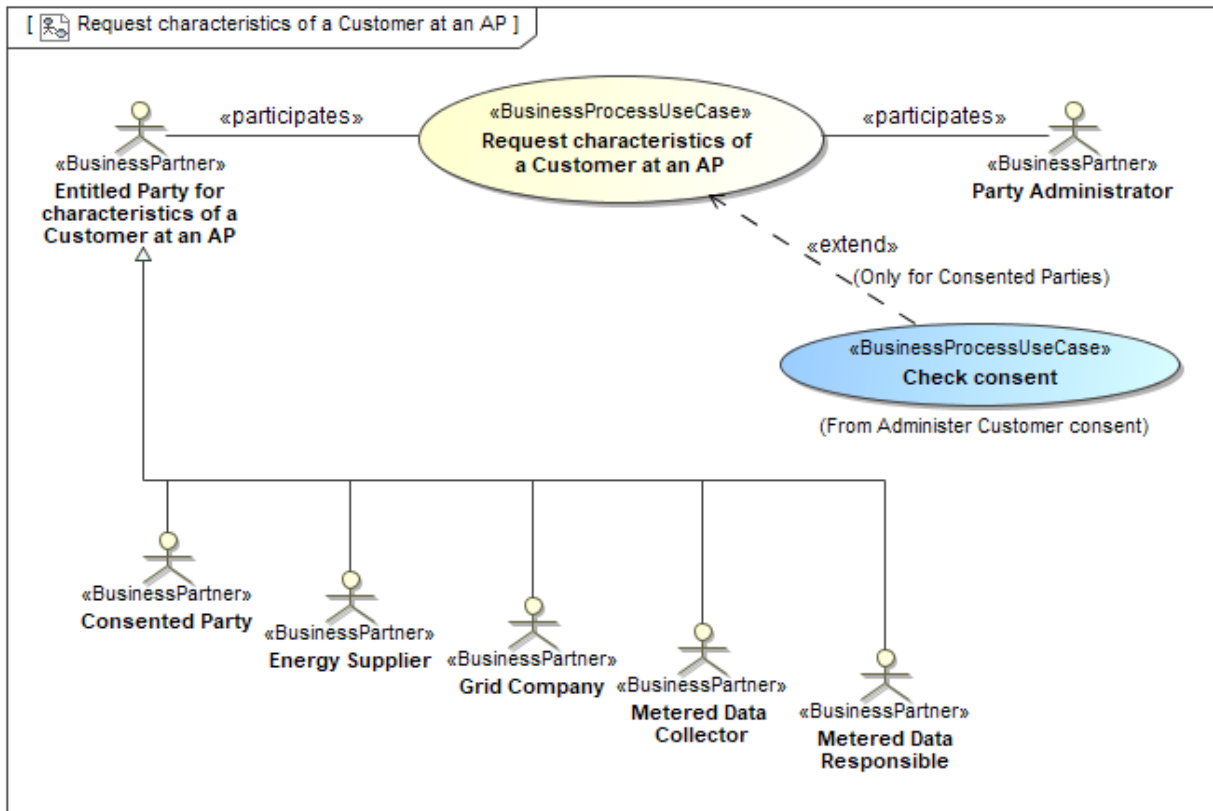


Figure 4 Business Process UseCase: Request characteristics of a Customer at an Accounting Point

1.1.3.1 Description

UseCase description: Request characteristics of a Customer at an Accounting Point	
definition	This is the process where an Entitled Party can align its characteristics of a Customer at an Accounting Point with the Party Administration. For Consented Parties, the validity of the consent is checked before the notification is sent.
beginsWhen	When the Entitled Party needs to align the characteristics of a Customer at an Accounting Point
preCondition	The Entitled Party is authorised to receive the characteristics of a Customer at this Accounting Point.
endsWhen	When the Entitled Party has received the characteristics of the Customer at this Accounting Point from the Party Administrator.
postCondition	The Entitled Party has aligned the characteristics of this Customer at the Accounting Point.

exceptions	The request from the Entitled Party for the characteristics of a Customer at an Accounting Point is rejected.
actions	See 1.1.3.2.

1.1.3.2 Business Process

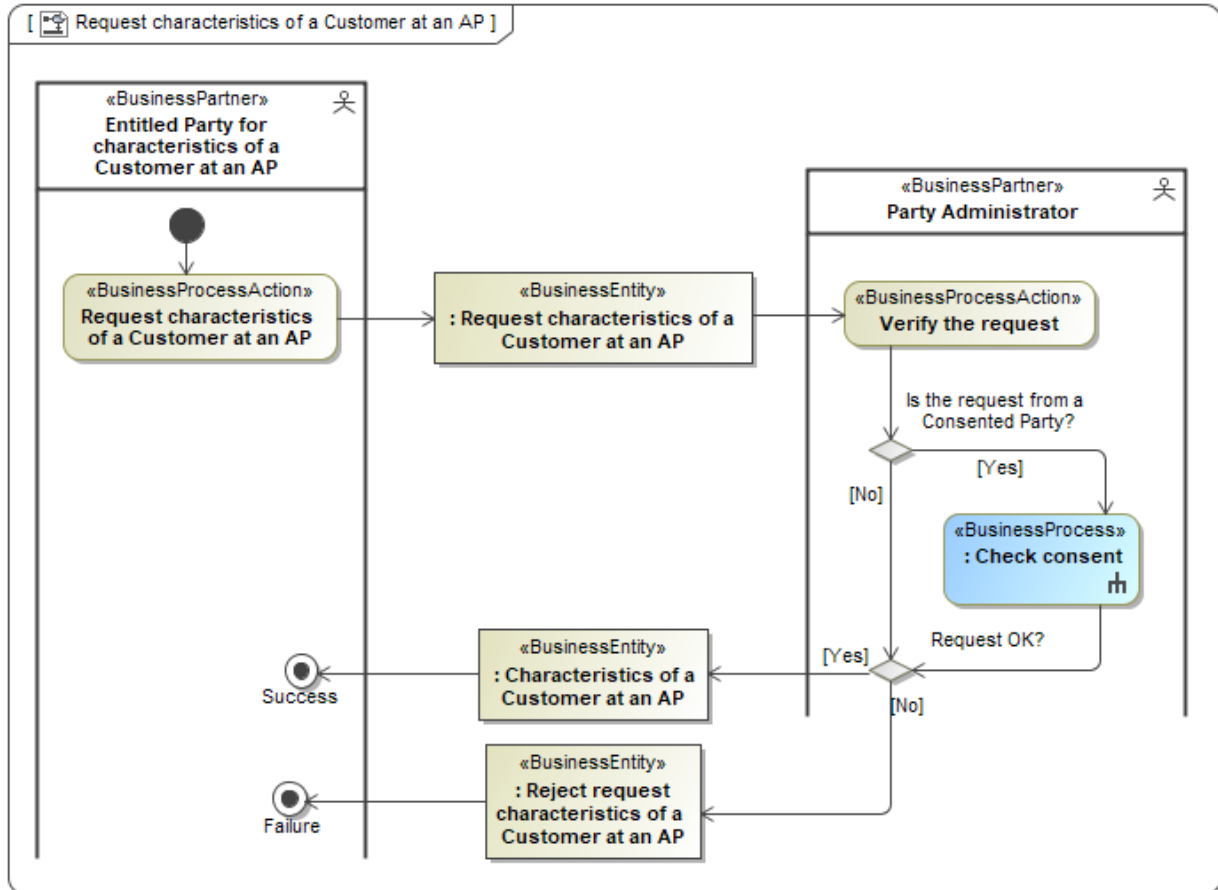


Figure 5 Business Process: Request characteristics of a Customer at an Accounting Point

1.1.4 Change of characteristics of a Customer at an AP (Business Process UseCase)

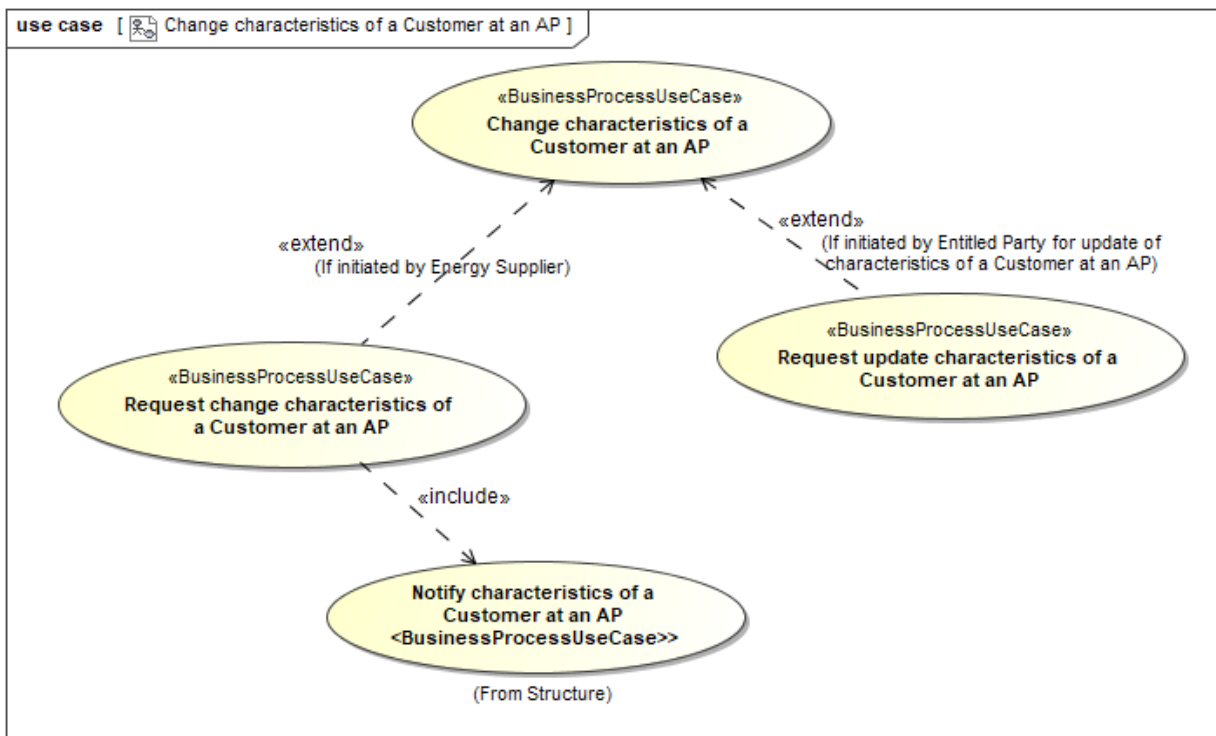


Figure 6 Business Process UseCase: Change characteristics of a Customer at an Accounting Point

1.1.4.1 Description

UseCase description: Change characteristics of a Customer at an Accounting Point	
definition	<p>This is the process where the Energy Supplier makes changes to relevant characteristics of a Customer at a specified Accounting Point.</p> <p>Further, the request for change of characteristics of the Customer at the Accounting Point from the Energy Supplier can be initiated by a request for update from an Entitled Party for update of characteristics of the Customer at the Accounting Point.</p>
beginsWhen	When there is a need to change or update characteristics of a Customer linked to an Accounting Point.
preCondition	The Energy Supplier and the Entitled Party for update of characteristics of a Customer at the Accounting Point are linked to the Accounting Point.
endsWhen	<p>When the following are fulfilled:</p> <ul style="list-style-type: none"> Characteristics of a Customer at an Accounting Point have been changed in the party administration;

	<ul style="list-style-type: none"> All Entitled Parties for update of characteristics of the Customer at the Accounting Point have received updated characteristics of the Customer at the Accounting Point from the Party Administrator.
postCondition	All Entitled Parties for characteristics of a Customer at an Accounting Point have aligned the changed characteristics of the Customer at the Accounting Point.
exceptions	The request to update or change characteristics of a Customer at an Accounting Point is rejected.
actions	See 1.1.4.2.

1.1.4.2 Business process

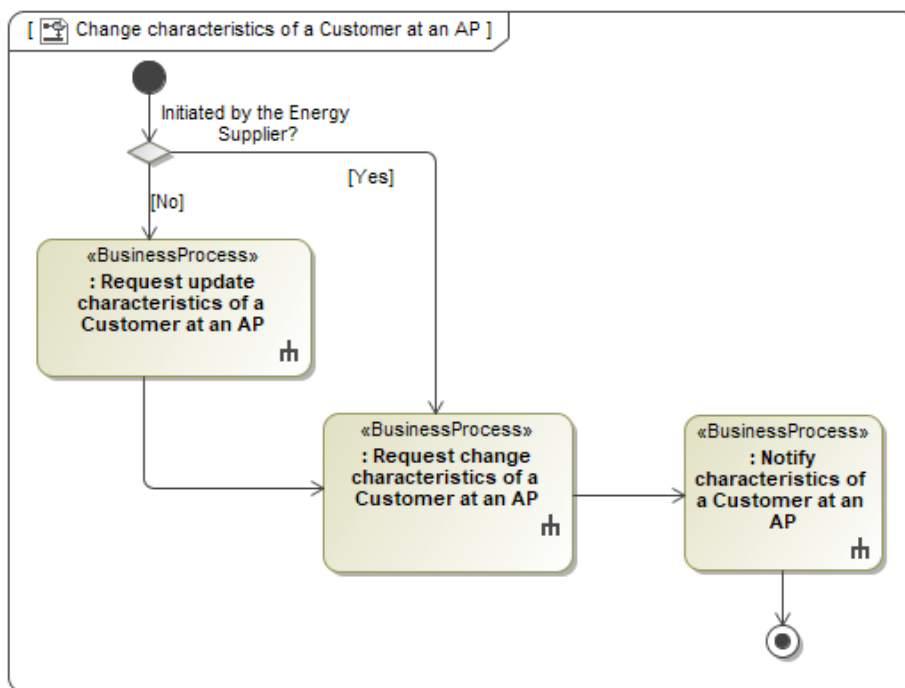


Figure 7 Business Process: Change characteristics of a Customer at an Accounting Point

1.1.4.3 Request change characteristics of a Customer at an AP (Business Process UseCase)

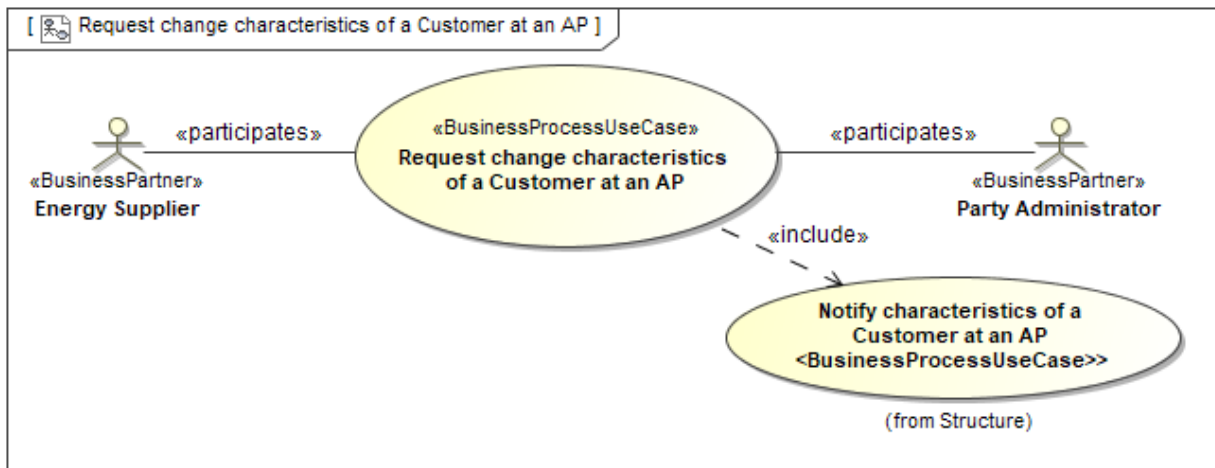


Figure 8 Business Process UseCase: Request change characteristics of a Customer at an Accounting Point

1.1.4.3.1 Description

UseCase description: Request change characteristics of a Customer at an Accounting Point	
definition	In this process the Energy Supplier requests the Party Administrator to change one or more of the characteristics of the Customer at an Accounting Point. After change, the Party Administrator will notify the Entitled Parties of the characteristics of the Customer at the Accounting Point.
beginsWhen	When the Energy Supplier has the need to change characteristics of a Customer at an Accounting Point and decides to send a request for change of one or more characteristics of the Customer at the Accounting Point to the Party Administrator.
preCondition	The Energy Supplier must be linked to the Accounting Point.
endsWhen	When the request for change of characteristics of a Customer at the Accounting Point is confirmed by the Party Administrator and Entitled Parties are notified of the changed characteristics of the Customer at the Accounting Point.
postCondition	The characteristics of the Customer at the Accounting Point have been changed in the Party administration and Entitled Parties have aligned the changed characteristics of the Customer at the Accounting Point.
exceptions	The request for change of characteristics of a Customer at an Accounting Point is rejected.
actions	See 1.1.4.3.2

1.1.4.3.2 Business process

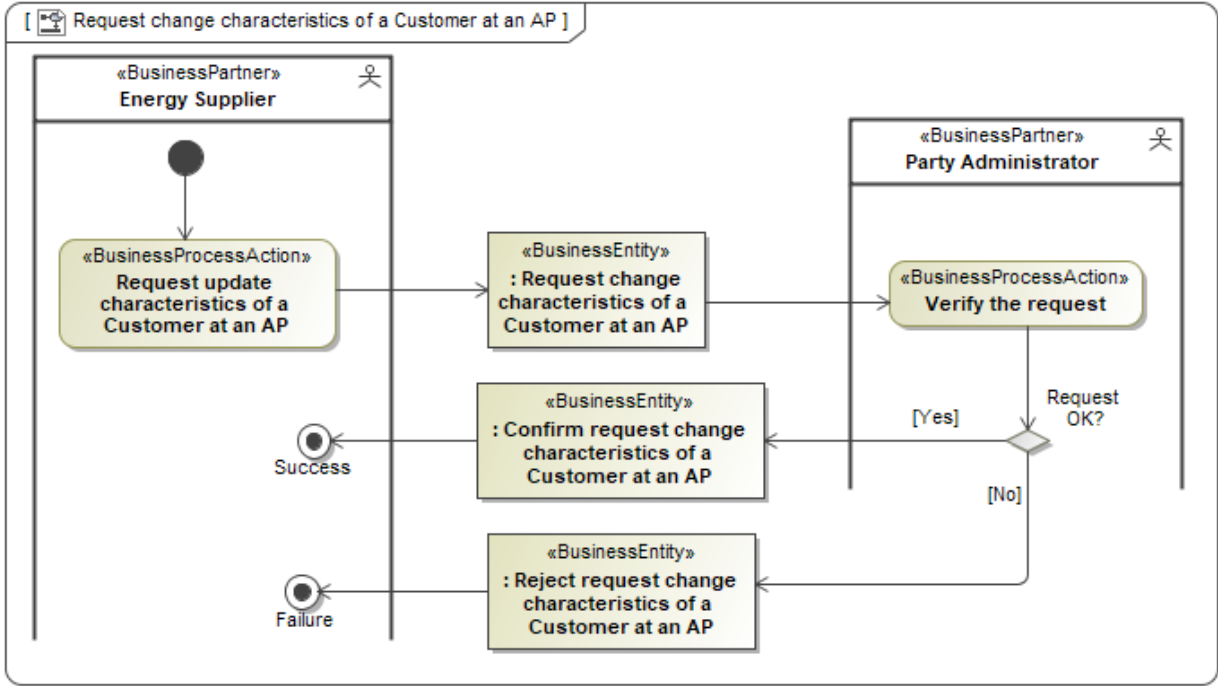


Figure 9 Business Process: Request change characteristics of a Customer at an Accounting Point

1.1.4.3.3 Notify characteristics of a Customer at an Accounting Point

The Process Area *Notify characteristics of a Customer at an Accounting Point* is documented in chapter 1.1.2.

1.1.4.4 Request update characteristics of a Customer at an Accounting Point (Business Process UseCase)

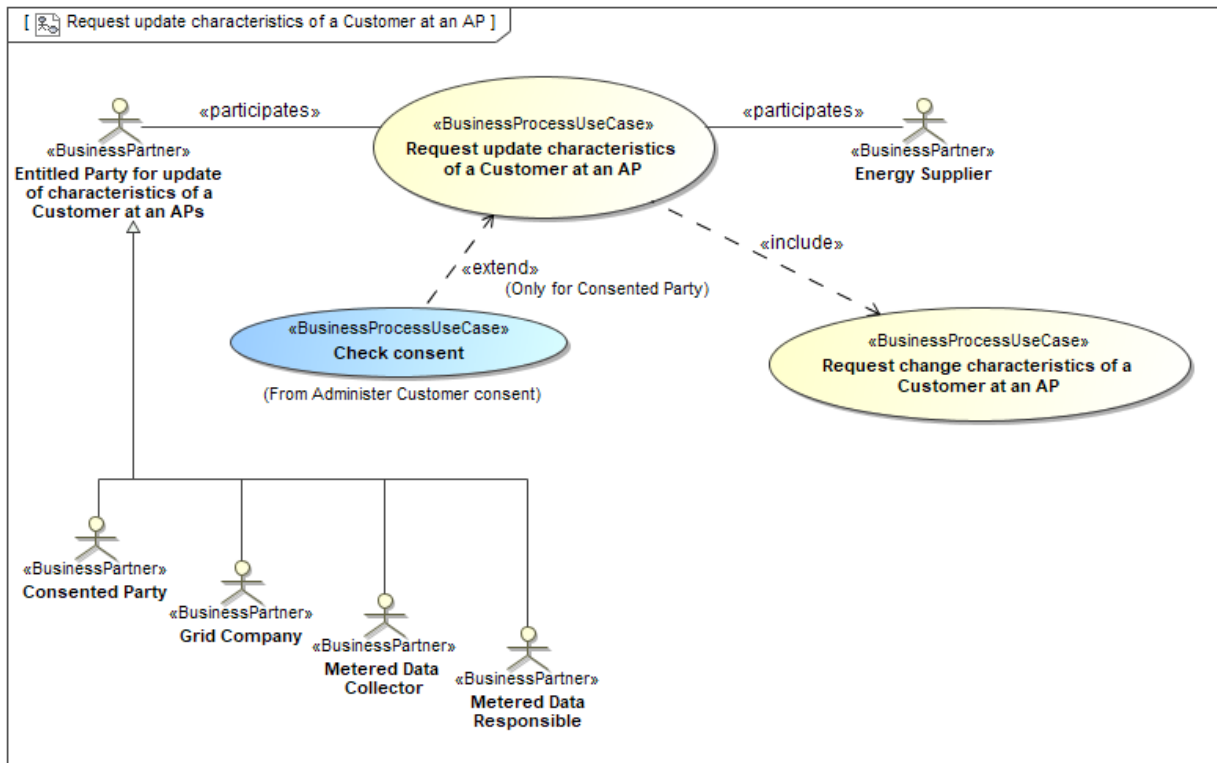


Figure 10 Business Process UseCase: Request update characteristics of a Customer at an Accounting Point

1.1.4.4.1 Description

UseCase description: Request update characteristics of a Customer at an Accounting Point	
definition	In this process an Entitled Party, i.e. Grid Company, Metered Data Collector, Metered Data Responsible or a Consented Party, requests the Energy Supplier to update one or more of the characteristics of a Customer at an Accounting Point it is entitled to update. For Consented Parties, the validity of the consent is checked before the response is sent.
beginsWhen	When the Entitled Party has the need to update characteristics of a Customer at an Accounting Point and decides to send a request for update of one or more characteristics to the Party Administrator.
preCondition	The Entitled Party must be linked to the Accounting Point. The Entitled Party must be known to the Energy Supplier.
endsWhen	When the request for update of characteristics of the Customer at the Accounting Point is confirmed.

postCondition	The characteristics of the Customer at the Accounting Point have been updated in the Party administration.
exceptions	The request for an update of characteristics of a Customer at an Accounting Point is rejected.
actions	See 1.1.4.4.2.

1.1.4.4.2 Business process

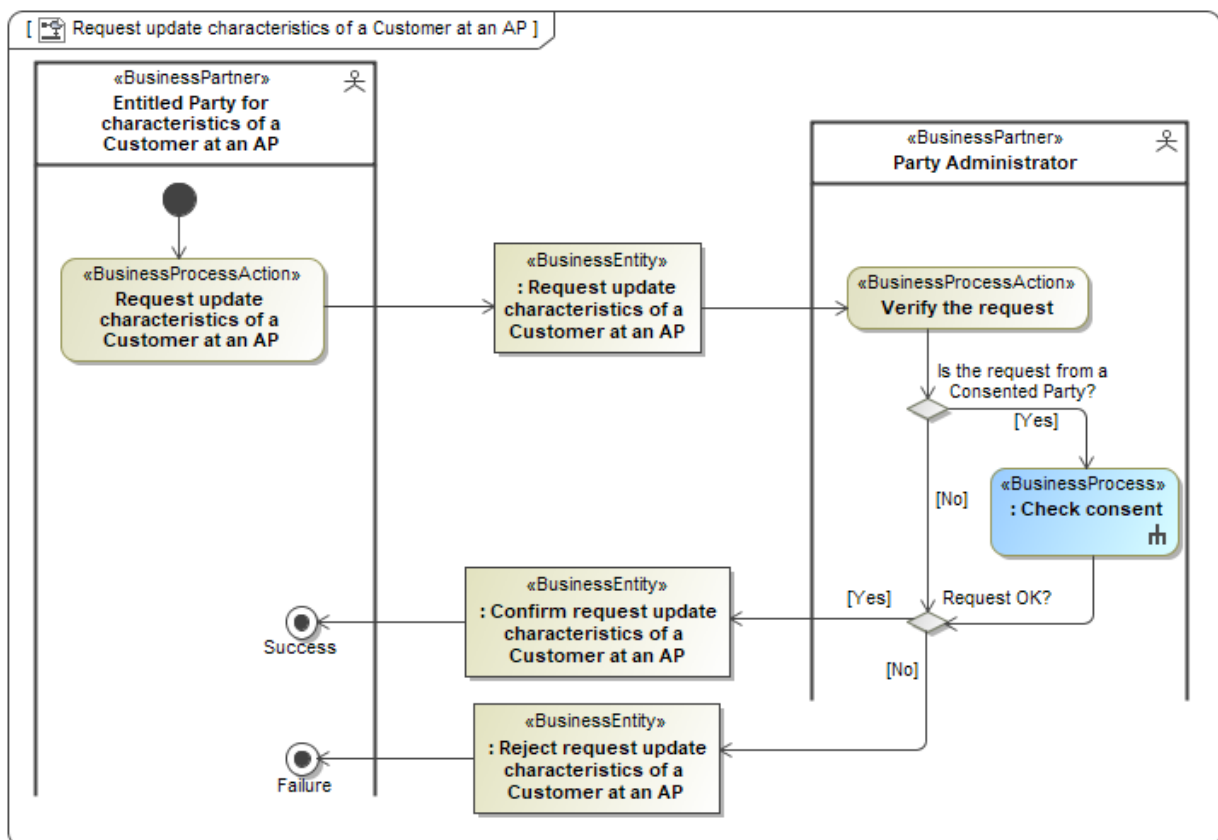


Figure 11 Business Process: Request update characteristics of a Customer at an Accounting Point

1.1.4.4.3 Sequence diagram: Request update and change characteristics of a Customer at an Accounting Point

The sequence diagram shown below is added for clarification:

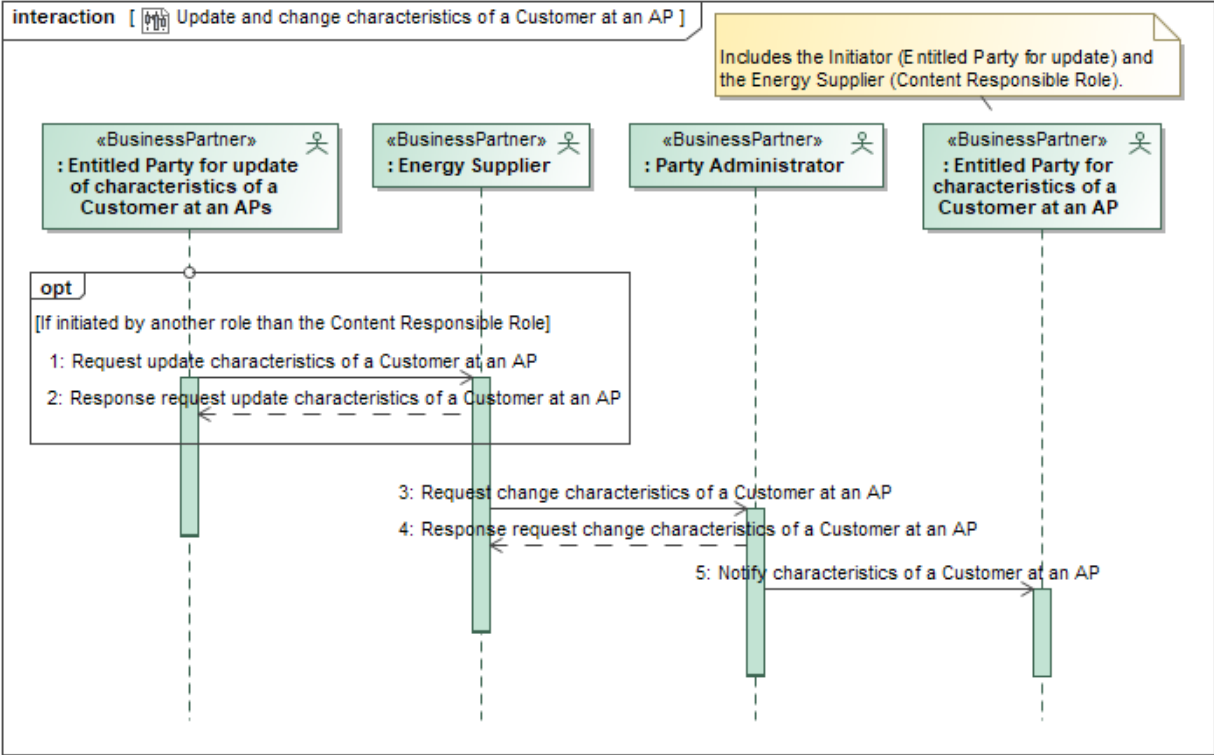


Figure 1 Sequence diagram: Request update and change characteristics of a Customer at an Accounting Point

2 Business Partner View

2.1 Business Partners for alignment of characteristics of a Customer at an AP

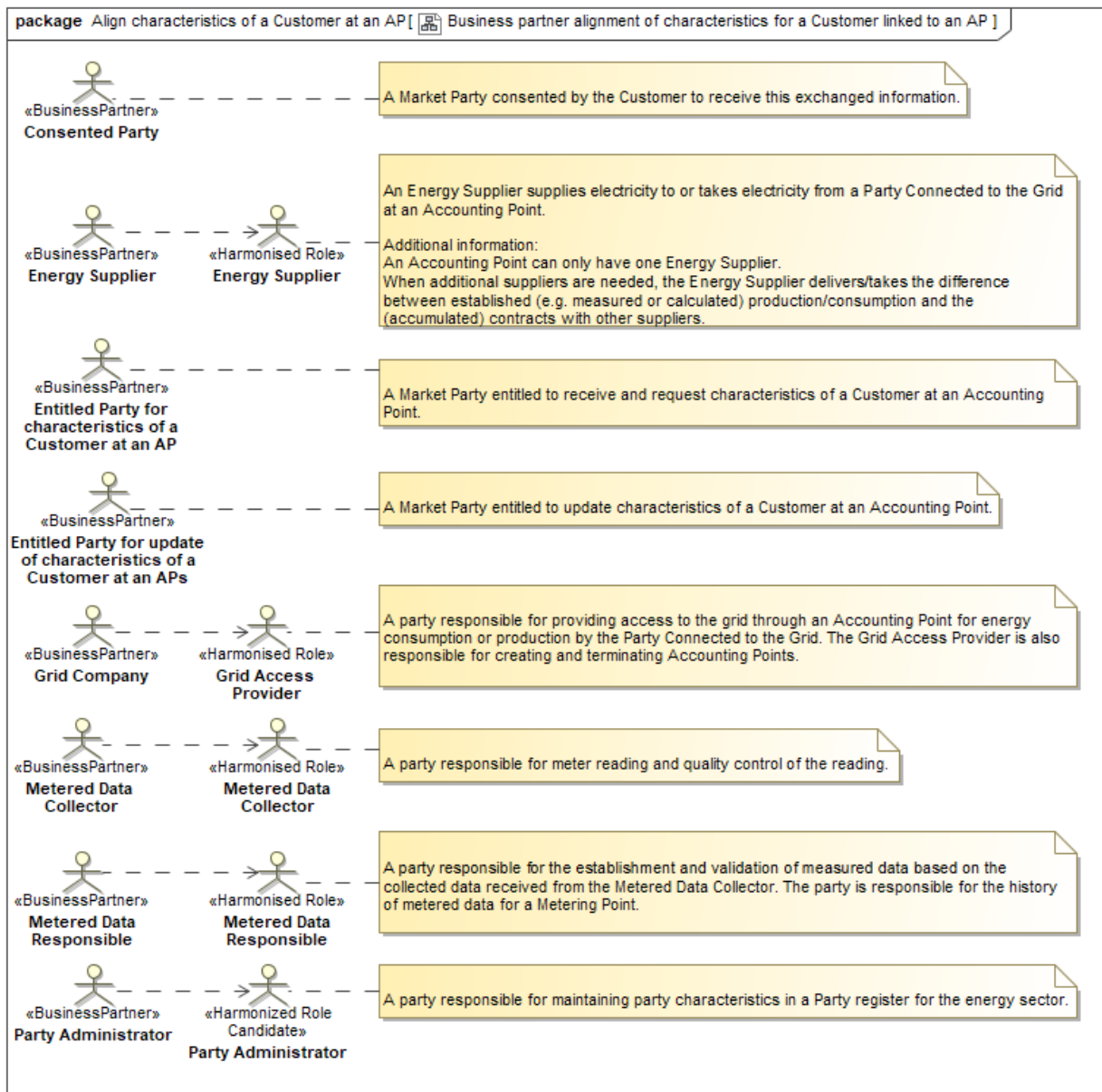


Figure 12 Business Partners related to alignment of characteristics of a Customer at an Accounting Point

Note: The roles a Consented Party can play must be defined nationally.

3 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), [4].

3.1 Characteristics of a Customer at an Accounting Point (Class Diagram)

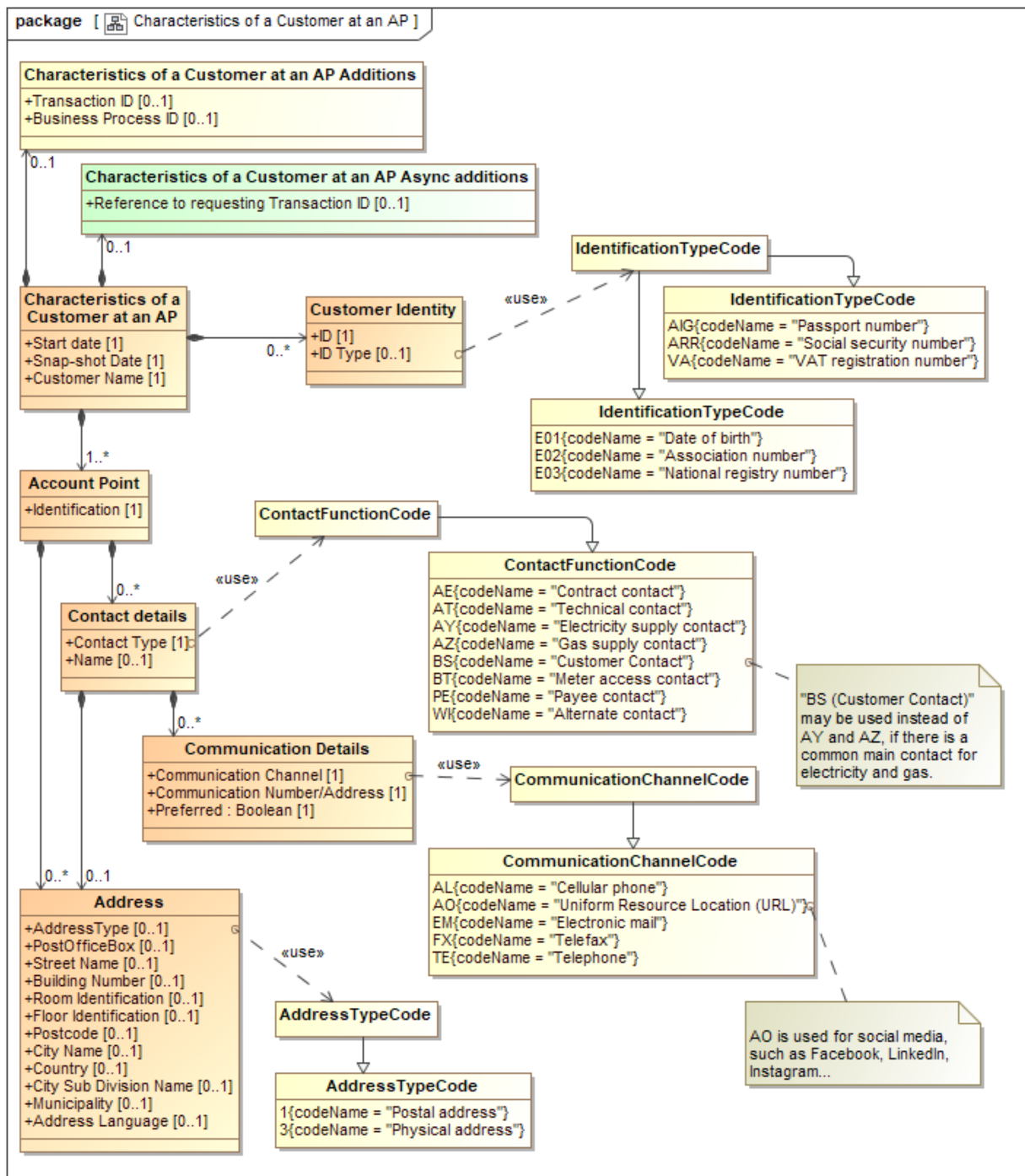


Figure 13 Class diagram: Characteristics of a Customer at an Accounting Point

Remark: The Accounting Point ID is added to be able to link the characteristics of a Customer at an Accounting Point to the energy market processes.

3.1.1 Element definitions: Characteristics of a Customer at an Accounting Point

Class/attribute	Sector ²	Description
«Business entity» Characteristics of a Customer at an Accounting Point		The information set related to the Customer in an Accounting Point sent by the Party Administrator to an Entitled Party in response to a request or when notifying characteristics of a Customer at an Accounting Point.
Start date		The date when the content of this business document becomes or became valid.
Snapshot date		The date or date/time when this set of characteristics of a Customer at an Accounting Point was derived from the Party Administration.
Customer name		The name of the Customer.
Customer Identity		The identification of a Customer
ID		The (unique) identification of this ID type of the Customer.
ID Type		The identification scheme used for this identification of the Customer in question.
«Business entity» Accounting Point		A domain under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined. Additional information: This is a type of Metering Point.
Identification		The unique identification of the Accounting Point where this Customer is linked to.
Contact Details		Details of a Contact for this Customer, which is connected to this Accounting Point.
Contact Type		The type of relation between this Contact and the Accounting Point, such as Invoice Contact, Neighbour or House Keeper.
Name		The name of this Contact.
Communication Details		Details of the possible communication with this Customer Contact.
Communication Channel		The code specifying the channel or way communication with this Customer or Contact, such as telephone or email or (postal) mail.

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

Class/attribute	Sector ²	Description
Communication Number/Address		A text string of characters that makes up the complete number or address for this communication.
Preferred		Indication (Boolean) whether this is the preferred communication channel for this Customer or Contact or not.
Address		The physical or postal address for a Customer or Contact.
Address type		The type of address, such as postal address or visiting address
Post Office Box		The unique identifier, expressed as text, of a container commonly referred to as a box, in a post office or other postal service location, assigned to a person or organization, where postal items may be kept for this address.
Street Name		The name, expressed as text, of this street or thoroughfare of this address.
Building Number		The number, expressed as text, of the building or house on this street at this address. ³
Room Identification		The identification, expressed as text, of the room, suite, office or apartment as part of this address.
Floor Identification		The identification by name or number, expressed as text, of the floor in the building as part of this address.
Postcode		The code specifying the postcode of this address.
City Name		The name, expressed as text, of the city, town or village of this address.
Country		The unique identifier of the country for this address (Reference ISO 3166 and UN/ECE Rec 3).
City Sub Division Name		A name, expressed as text, of a sub-division of a city for this address, for example a district or borough.
Municipality		A town or district that has local government.
Address Language		The language in which the address is specified.

³ The Building Number may include a “Building Number Extension”, such as one or more character making the address unique.

Class/attribute	Sector ²	Description
Characteristics of a Customer at an Accounting Point Additions		Additional information related to these characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Party Administrator.
Business process ID		The unique identification, given by the Party Administrator, of these characteristics of a Customer at an Accounting Point.
Characteristics of a Customer at an Accounting Point, Async Additions		Additional information related to these characteristics of a Customer at an Accounting Point, 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.

3.2 Request characteristics of a Customer at an Accounting Point (Class Diagram)

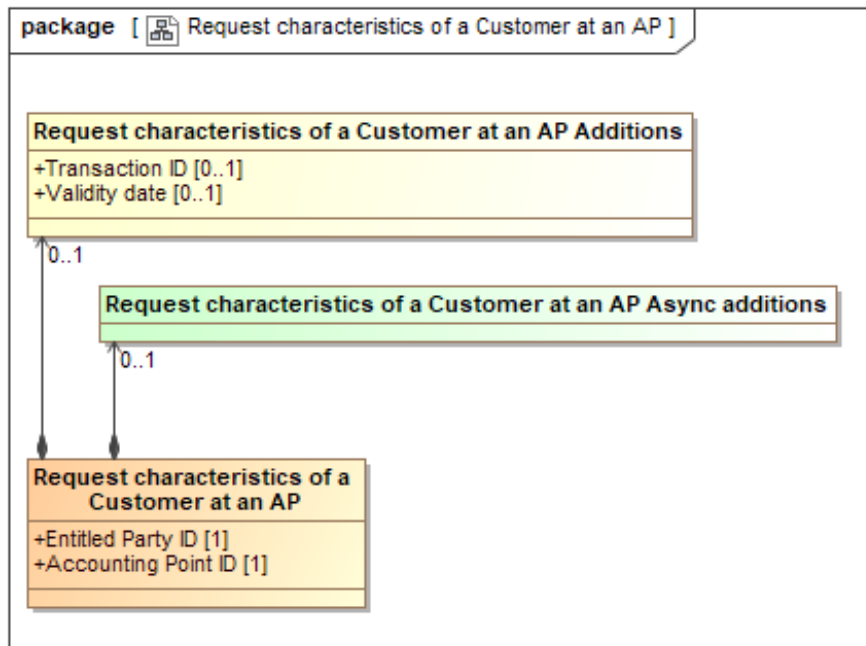


Figure 14 Class diagram: Request characteristics of a Customer at an Accounting Point

3.2.1 Element definitions: Request characteristics of a Customer at an AP

Class/attribute	Sector ⁴	Description
«Business entity» Request characteristics of a Customer at an Accounting Point		The information set to be sent by an Entitled Party to the Party Administrator when requesting characteristics of a Customer at an Accounting Point.
Entitled Party ID		The unique identification of the Entitled Party that requests characteristics of a Customer at an Accounting Point.
Accounting Point ID		The unique identification of the Accounting Point the characteristics of a Customer at an Accounting Point are requested for.
Request characteristics of a Customer at an Accounting Point Additions		Additional information, related to this Request characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Entitled Party.

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

Class/attribute	Sector ⁴	Description
Validity date		The date for when the requested characteristics of a Customer at an Accounting Point are valid.
Request characteristics of a Customer at an Accounting Point Async Additions		Additional information, related to Requested characteristics of a Customer at an Accounting Point, needed when using asynchronous communication (however not used in this request).

3.3 Reject Request characteristics of a Customer at an AP (Class Diagram)

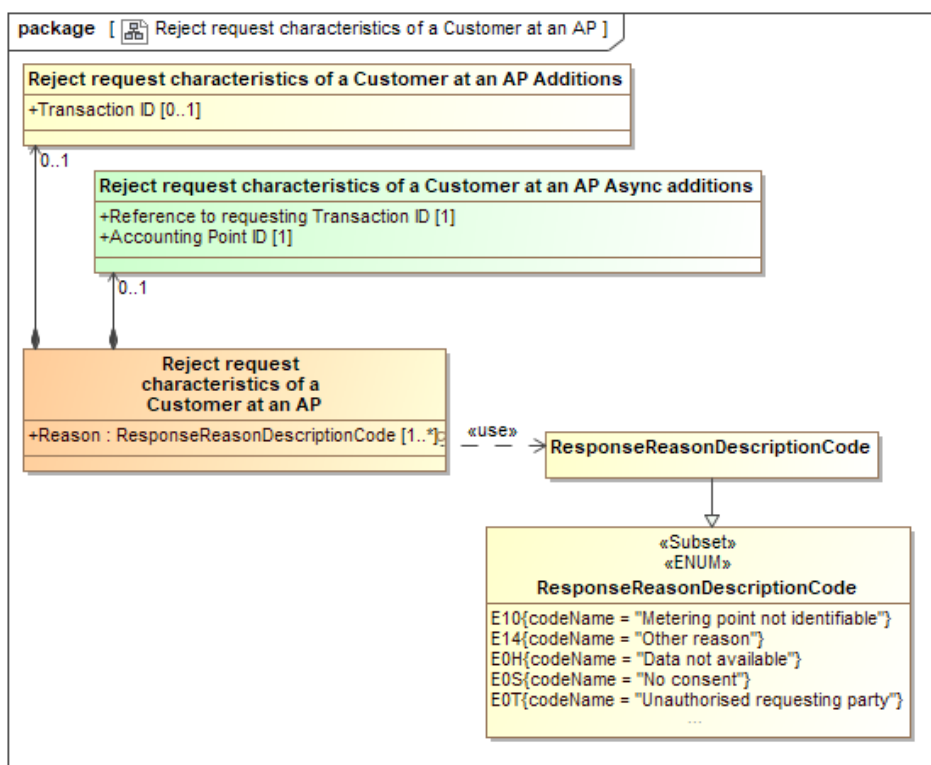


Figure 15 Reject Request characteristics of a Customer at an Accounting Point

3.3.1 Element definitions: Reject Request characteristics of a Customer at an AP

Class/attribute	Sector ⁵	Description
«Business entity» Reject Request characteristics of a Customer at an Accounting Point		The information set sent from the Party Administrator to the Entitled Party when rejecting a request for characteristics of a Customer at an Accounting Point.
Reason		A code specifying (one of) the reason(s) for the rejection of the Request characteristics of a Customer at an Accounting Point.
Reject Request characteristics of a Customer at an Accounting Point Additions		Additional information related to rejecting the Request characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Party Administrator.

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

Class/attribute	Sector ⁵	Description
Reject Request characteristics of a Customer at an Accounting Point Async Additions		Additional information, related to the rejection of the Request characteristics of a Customer at an Accounting Point, needed when using asynchronous communication.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the requesting Entitled Party.
Accounting Point ID		The unique identification of the Accounting Point for which the characteristics of a Customer at an Accounting Point were requested for.

3.4.1 Element definitions: Request change characteristics of a Customer at an AP

Class/attribute	Sector ⁶	Description
«Business entity» Request change characteristics of a Customer at an Accounting Point		The information set to be used when an Energy Supplier requests change of characteristics of a Customer at an Accounting Point to the Party Administrator.
Start date		The requested date from the Energy Supplier, when the change to the characteristics of the Customer at the Accounting Point are or will be valid.
Energy Supplier ID		The unique identification of the Energy Supplier that requests change characteristics of a Customer at an Accounting Point.
Customer name		The name of the Customer.
Customer Identity		The identification of a Customer
ID		The (unique) identification of this ID type of the Customer.
ID Type		The type of identification used for this identification of the Customer in question.
«Business entity» Accounting Point		A domain under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined. Additional information: This is a type of Metering Point.
Identification		The unique identification of the Accounting Point this Customer is linked to.
Contact Details		Details of a Contact for this Customer, which is connected to this Accounting Point.
Contact Type		The type of relation between this Contact and the Accounting Point, such as Invoice Contact, Neighbour or Housekeeper.
Name		The name of this Contact
Communication Details		Details of the possible communication with this Customer Contact.
Communication Channel		The code specifying the channel or way communication with this Customer or Contact can be made, such as telephone or email.

⁶ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ⁶	Description
Communication Number/Address		A text string of characters that makes up the complete number or address for this communication.
Preferred		Indication (Boolean) if this is the preferred communication channel for this Customer or Contact.
Address		The physical or postal address for a Customer or Contact.
Address type		The type of address, such as postal address or visiting address
Post Office Box		The unique identifier, expressed as text, of a container commonly referred to as a box, in a post office or other postal service location, assigned to a person or organization, where postal items may be kept for this address.
Street Name		The name, expressed as text, of this street or thoroughfare of this address.
Building Number		The number, expressed as text, of the building or house on this street at this address. ⁷
Room Identification		The identification, expressed as text, of the room, suite, office or apartment as part of this address.
Floor Identification		The identification by name or number, expressed as text, of the floor in the building as part of this address.
Postcode		The code specifying the postcode of this address.
City Name		The name, expressed as text, of the city, town or village of this address.
Country		The unique identifier of the country for this address (Reference ISO 3166 and UN/ECE Rec 3).
City Sub Division Name		A name, expressed as text, of a sub-division of a city for this address, for example a district or borough.
Municipality		A town or district that has local government.
Address Language		The language in which the address is specified.

⁷ The Building Number may include a “Building Number Extension”, such as one or more character making the address unique.

Class/attribute	Sector ⁶	Description
Request change characteristics of a Customer at an Accounting Point Additions		Additional information related to the request for change of characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Energy Supplier.
Request change characteristics of a Customer at an Accounting Point, Async Additions		Additional information related to the request for change characteristics of a Customer at an Accounting Point, needed when using asynchronous communication.

3.5 Confirm request change characteristics of a Customer at an AP (Class Diagram)

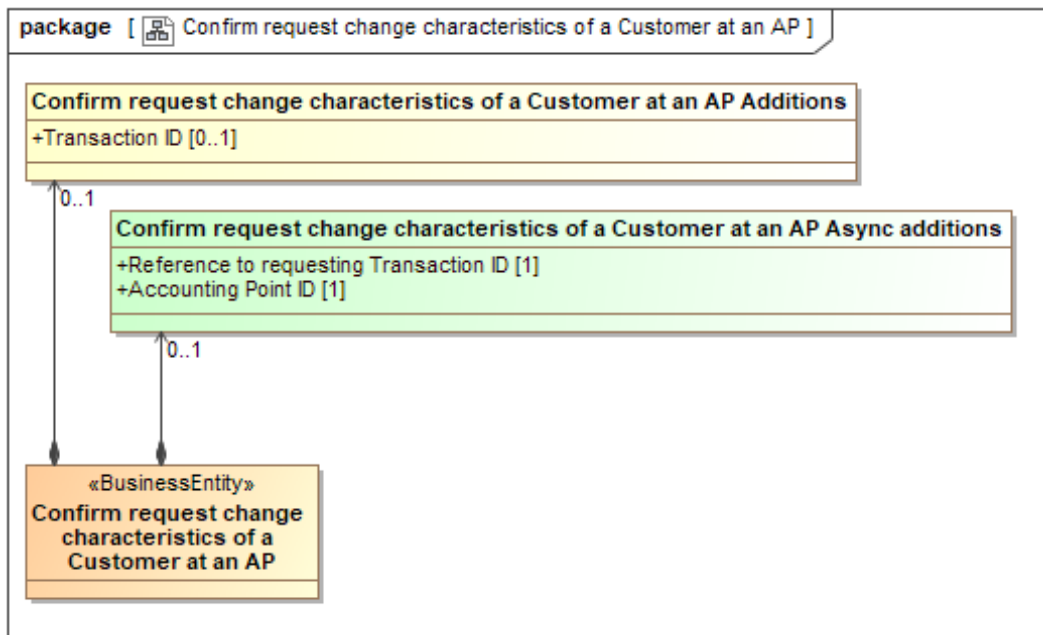


Figure 17 Class diagram: Confirm request change characteristics of a Customer at an Accounting Point

3.5.1 Element definitions: Confirm request change characteristics of a Customer at an Accounting Point

Class/attribute	Sector ⁸	Description
«Business entity» Confirm Request change characteristics of a Customer at an Accounting Point		The information set sent from the Party Administrator to the Energy Supplier when confirming a request for change of characteristics of a Customer at an Accounting Point.
Confirm Request change characteristics of a Customer at an Accounting Point Additions		Additional information related to confirming the Request change characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Party Administrator.

⁸ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ⁸	Description
Confirm Request change characteristics of a Customer at an Accounting Point Async Additions		Additional information, related to the confirmation of the Request change characteristics of a Customer at an Accounting Point, needed when using asynchronous communication.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the requesting Energy Supplier.
Accounting Point ID		The unique identification of the Accounting Point the change of characteristics of a Customer at an Accounting Point is confirmed for.

3.6 Reject request change characteristics of a Customer at an AP (Class Diagram)

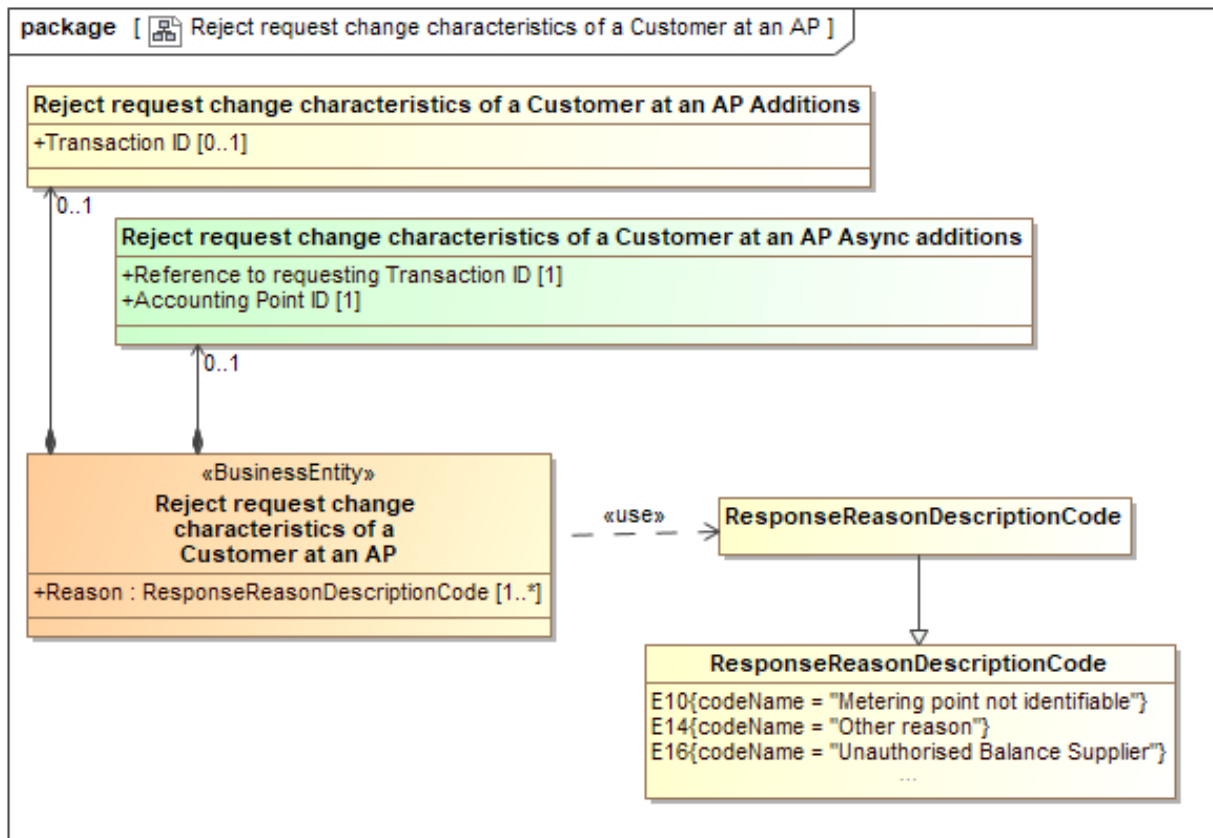


Figure 18 Class diagram: Reject request change characteristics of a Customer at an Accounting Point

3.6.1 Element definitions: Reject request change characteristics of a Customer at an Accounting Point

Class/attribute	Sector ⁹	Description
«Business entity» Reject Request change characteristics of a Customer at an Accounting Point		The information set sent from the Party Administrator to the Energy Supplier when rejecting a request for change of characteristics of a Customer at an Accounting Point.
Reason		A code specifying (one of) the reason(s) for the rejection of the Request change characteristics of a Customer at an Accounting Point.

⁹ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ⁹	Description
Reject Request change characteristics of a Customer at an Accounting Point Additions		Additional information related to rejecting the Request change characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Party Administrator.
Reject Request change characteristics of a Customer at an Accounting Point Async Additions		Additional information, related to the rejection of the Request update characteristics of a Customer at an Accounting Point, needed when using asynchronous communication.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the requesting Energy Supplier.
Accounting Point ID		The unique identification of the Accounting Point The request for update of characteristics of a Customer at an Accounting Point is rejected for.

3.7 Request update characteristics of a Customer at an AP (Class Diagram)

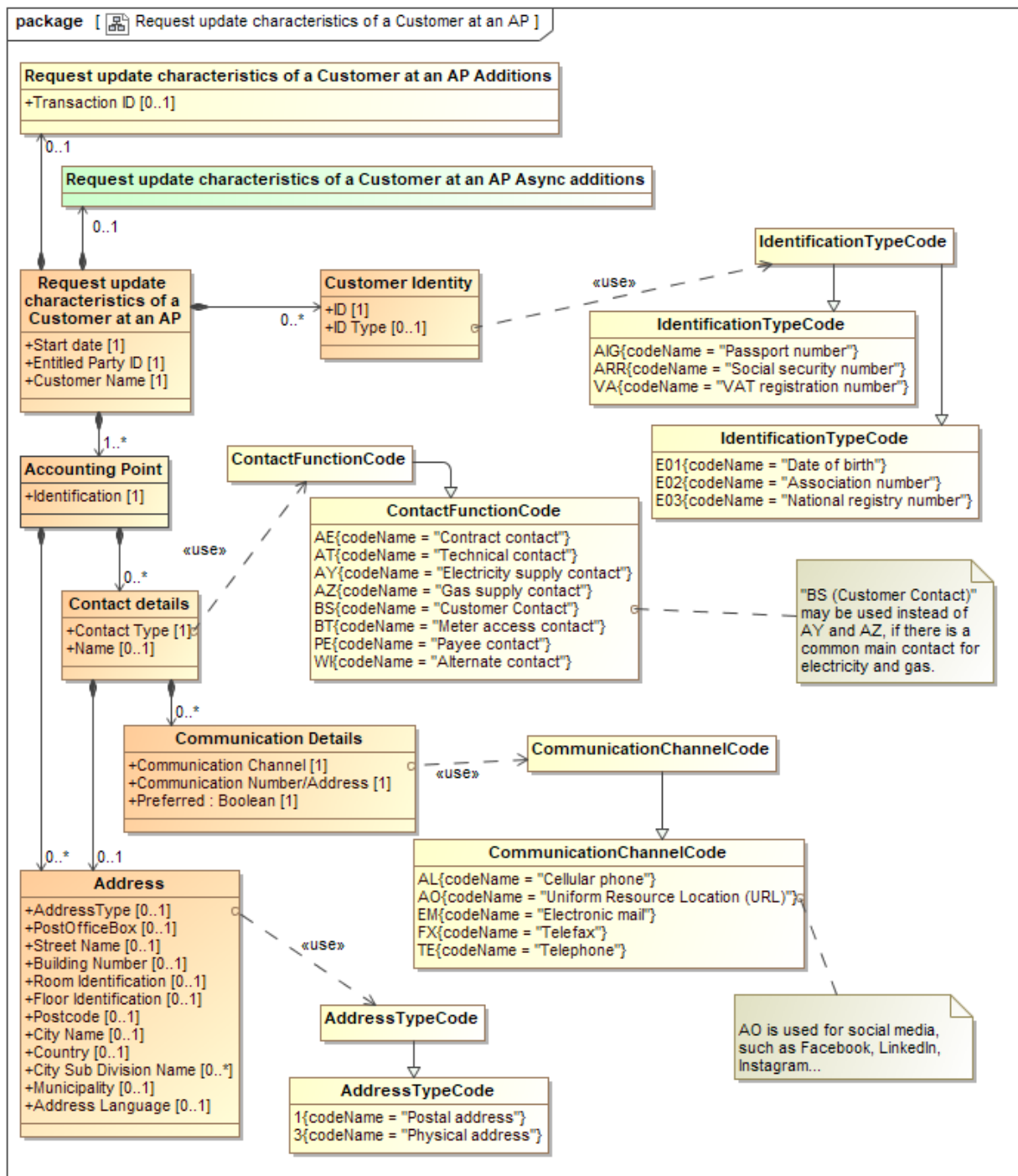


Figure 19 Class diagram: Request update characteristics of a Customer at an Accounting Point

Remark: The Accounting Point ID is added to be able to link the characteristics of a Customer at an Accounting Point to the energy market processes.

3.7.1 Element definitions: Request update characteristics of a Customer at an AP

Class/attribute	Sector ¹⁰	Description
«Business entity» Request update characteristics of a Customer at an Accounting Point		The information set to be used when an Entitled Party requests update of characteristics of a Customer at an Accounting Point to the Energy Supplier.
Start date		The requested date from the Entitled Party, when the update to the characteristics of the Customer at the Accounting Point are or becomes valid.
Entitled Party ID		The unique identification of the Entitled Party that requests update characteristics of a Customer at an Accounting Point.
Customer name		The name of the Customer.
Customer Identity		The Identification of a Customer
ID		The (unique) identification of this ID type of the Customer.
ID Type		The type of identification used for this identification of the Customer in question.
«Business entity» Accounting Point		A domain under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined. Additional information: This is a type of Metering Point.
Identification		The unique identification of the Accounting Point where this Customer is linked to.
Contact Details		Details of a Contact for this Customer, which is connected to this Accounting Point.
Contact Type		The type of relation between this Contact and the Accounting Point, such as Invoice Contact, Neighbour or Housekeeper.
Name		The name of this Contact
Communication Details		Details of the possible communication with this Customer Contact.
Communication Channel		The code specifying the channel or way communication with this Customer or Contact can be made, such as telephone or email.

¹⁰ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ¹⁰	Description
Communication Number/Address		A text string of characters that makes up the complete number or address for this communication.
Preferred		Indication (Boolean) if this is the preferred communication channel for this Customer or Contact.
Address		The physical or postal address for a Customer or Contact.
Address type		The type of address, such as postal address or visiting address
Post Office Box		The unique identifier, expressed as text, of a container commonly referred to as a box, in a post office or other postal service location, assigned to a person or organization, where postal items may be kept for this address.
Street Name		The name, expressed as text, of this street or thoroughfare of this address.
Building Number		The number, expressed as text, of the building or house on this street at this address. ¹¹
Room Identification		The identification, expressed as text, of the room, suite, office or apartment as part of this address.
Floor Identification		The identification by name or number, expressed as text, of the floor in the building as part of this address.
Postcode		The code specifying the postcode of this address.
City Name		The name, expressed as text, of the city, town or village of this address.
Country		The unique identifier of the country for this address (Reference ISO 3166 and UN/ECE Rec 3).
City Sub Division Name		A name, expressed as text, of a sub-division of a city for this address, for example a district or borough.
Municipality		A town or district that has local government.
Address Language		The language in which the address is specified.

¹¹ The Building Number may include a “Building Number Extension”, such as one or more character making the address unique.

Class/attribute	Sector ¹⁰	Description
Request update characteristics of a Customer at an Accounting Point Additions		Additional information related to the request for update of characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Entitled Party.
Request update characteristics of a Customer at an Accounting Point, Async Additions		Additional information related to these characteristics of a Customer at an Accounting Point, needed when using asynchronous communication.

3.8 Confirm request update characteristics of a Customer at an AP (Class Diagram)

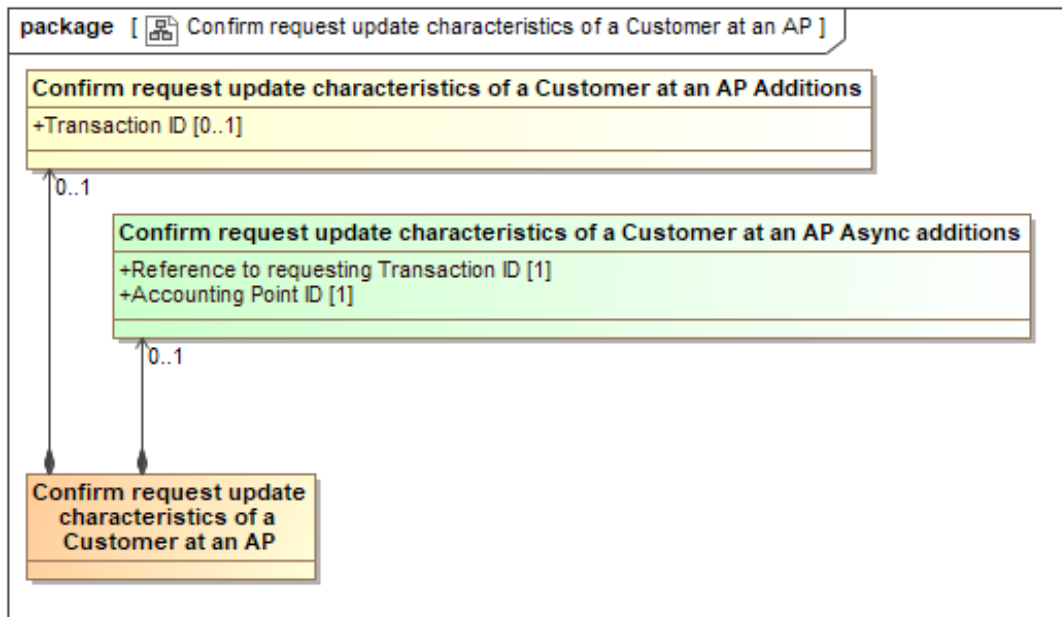


Figure 20 Class diagram: Confirm request update characteristics of a Customer at an Accounting Point

3.8.1 Element definitions: Confirm request update characteristics of a Customer at an Accounting Point

Class/attribute	Sector ¹²	Description
«Business entity» Confirm Request update characteristics of a Customer at an Accounting Point		The information set sent from the Energy Supplier to the Entitled Party when confirming a request for update of characteristics of a Customer at an Accounting Point.
Confirm Request update characteristics of a Customer at an Accounting Point Additions		Additional information related to confirming the Request update characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Energy Supplier.

¹² It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ¹²	Description
Confirm Request update characteristics of a Customer at an Accounting Point Async Additions		Additional information, related to the confirmation of the Request update characteristics of a Customer at an Accounting Point, needed when using asynchronous communication.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the requesting Entitled Party.
Accounting Point ID		The unique identification of the Accounting Point the update of characteristics of a Customer at an Accounting Point is confirmed for.

3.9 Reject request update characteristics of a Customer at an AP (Class Diagram)

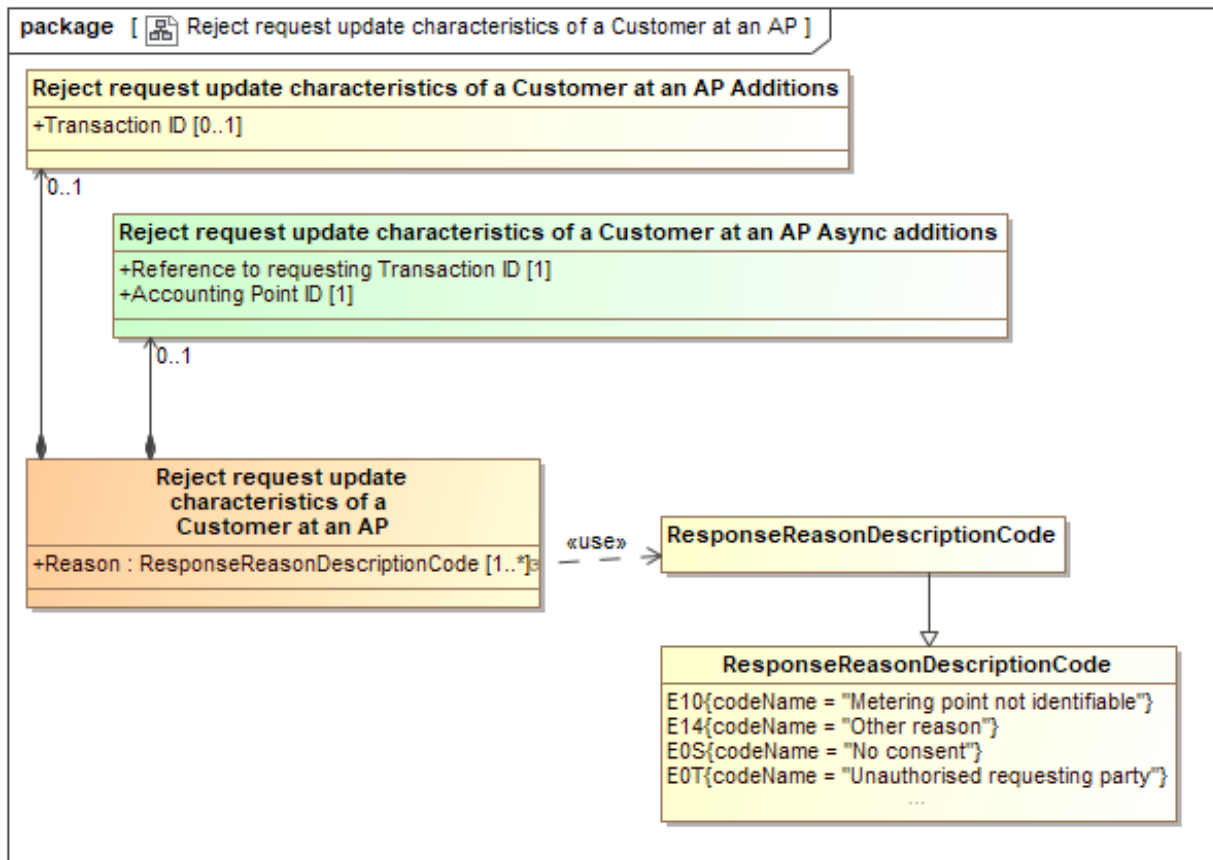


Figure 21 Class diagram: Reject request update characteristics of a Customer at an Accounting Point

3.9.1 Element definitions: Reject request update characteristics of a Customer at an Accounting Point

Class/attribute	Sector ¹³	Description
<p>«Business entity» Reject Request update characteristics of a Customer at an Accounting Point</p>		The information set sent from the Energy Supplier to the Entitled Party when rejecting a request for update of characteristics of a Customer at an Accounting Point.
Reason		A code specifying (one of) the reason(s) for the rejection of the Request update characteristics of a Customer at an Accounting Point.

¹³ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

Class/attribute	Sector ¹³	Description
Reject Request update characteristics of a Customer at an Accounting Point Additions		Additional information related to rejecting the Request update characteristics of a Customer at an Accounting Point, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Energy Supplier.
Reject Request update characteristics of a Customer at an Accounting Point Async Additions		Additional information, related to the rejection of the Request update characteristics of a Customer at an Accounting Point, needed when using asynchronous communication.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the requesting Entitled Party.
Accounting Point ID		The unique identification of the Accounting Point The request for update of characteristics of a Customer at an Accounting Point is rejected for.

Appendix A. Header and Context information for the class diagrams

A.1. Header and Context Information attributes definitions

Class/attribute	Sector ¹⁴	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. Characteristics of a Customer at an Accounting Point

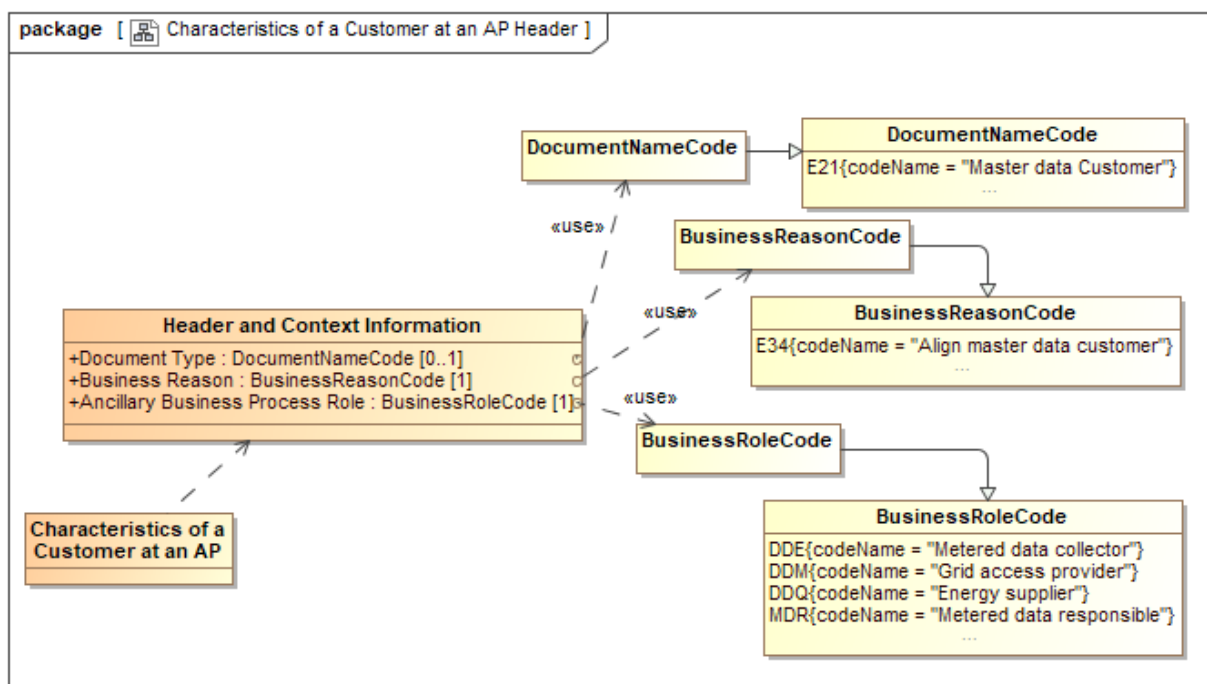


Figure 22 Class diagram: Header and Context Information: Characteristics of a Customer at an Accounting Point

¹⁴ It is assumed that Accounting Points are uniquely dedicated to either electricity or to gas.

A.3. Request characteristics of a Customer at an Accounting Point

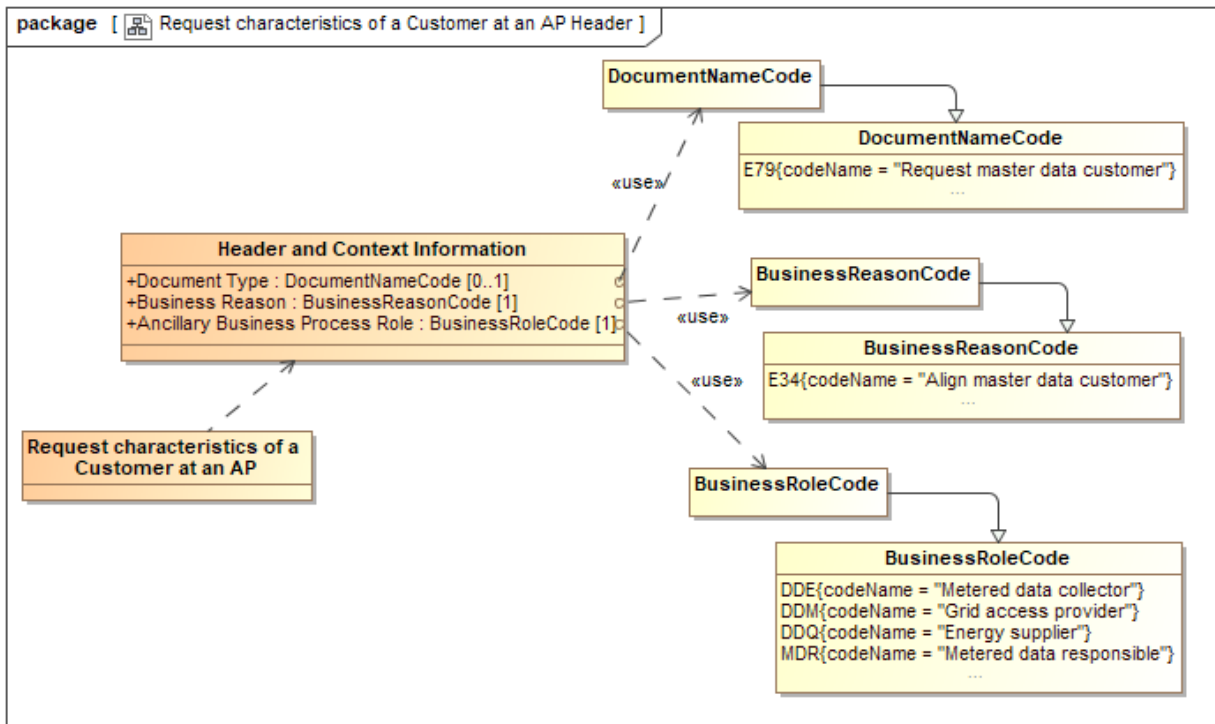


Figure 23 Class diagram: Header and Context Information: Request characteristics of a Customer at an Accounting Point

A.4. Reject request characteristics of a Customer at an Accounting Point

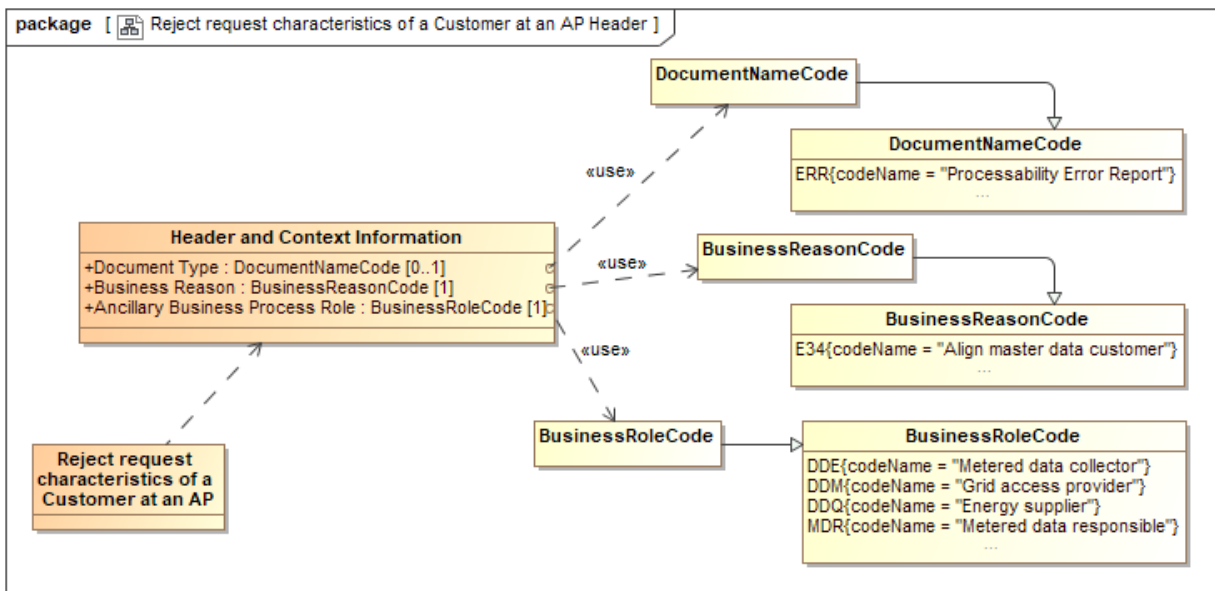


Figure 24 Class diagram: Header and Context Information: Reject request characteristics of a Customer at an Accounting Point

A.5. Request change characteristics of a Customer at an Accounting Point

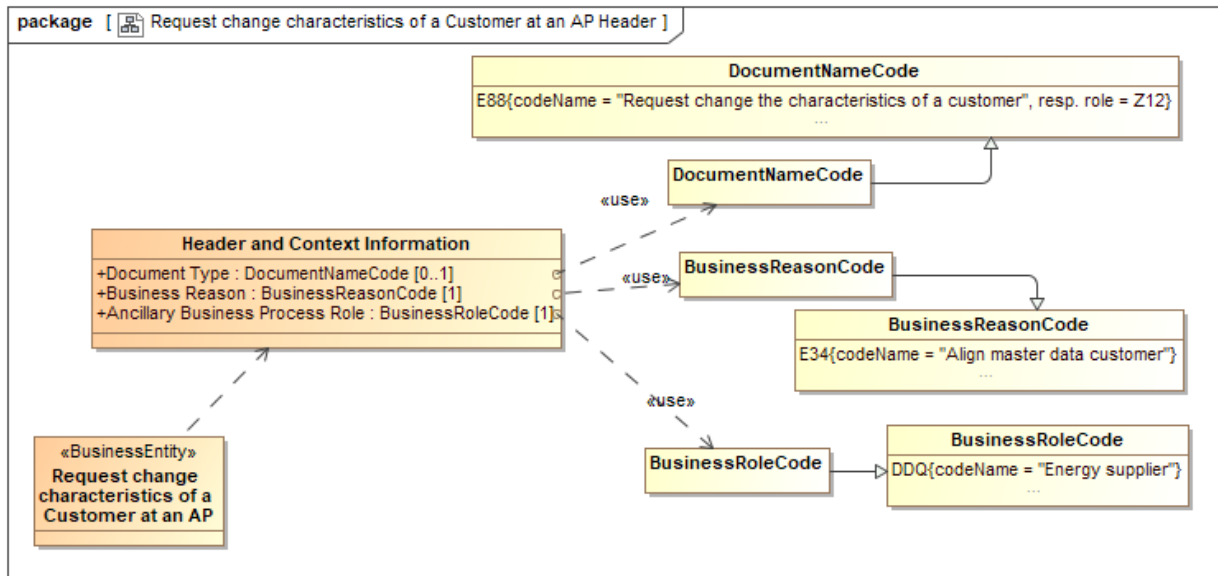


Figure 25 Class diagram: Header and Context Information: Request change characteristics of a Customer at an Accounting Point

A.6. Confirm request change characteristics of a Customer at an Accounting Point

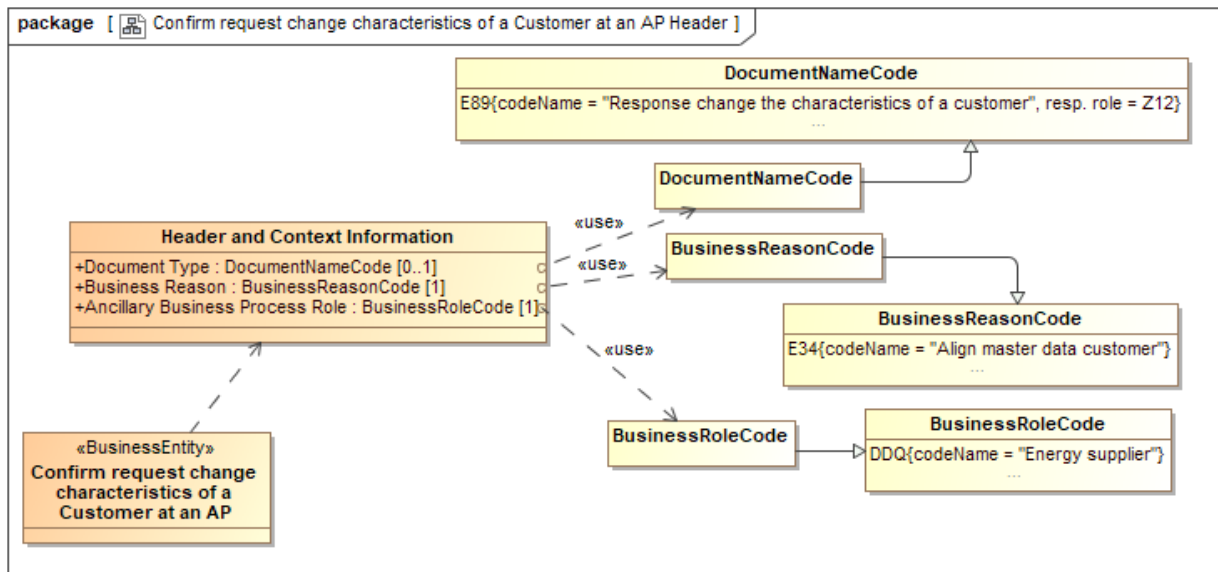


Figure 26 Class diagram: Header and Context Information: Confirm request change characteristics of a Customer at an Accounting Point

A.7. Reject request change characteristics of a Customer at an Accounting Point

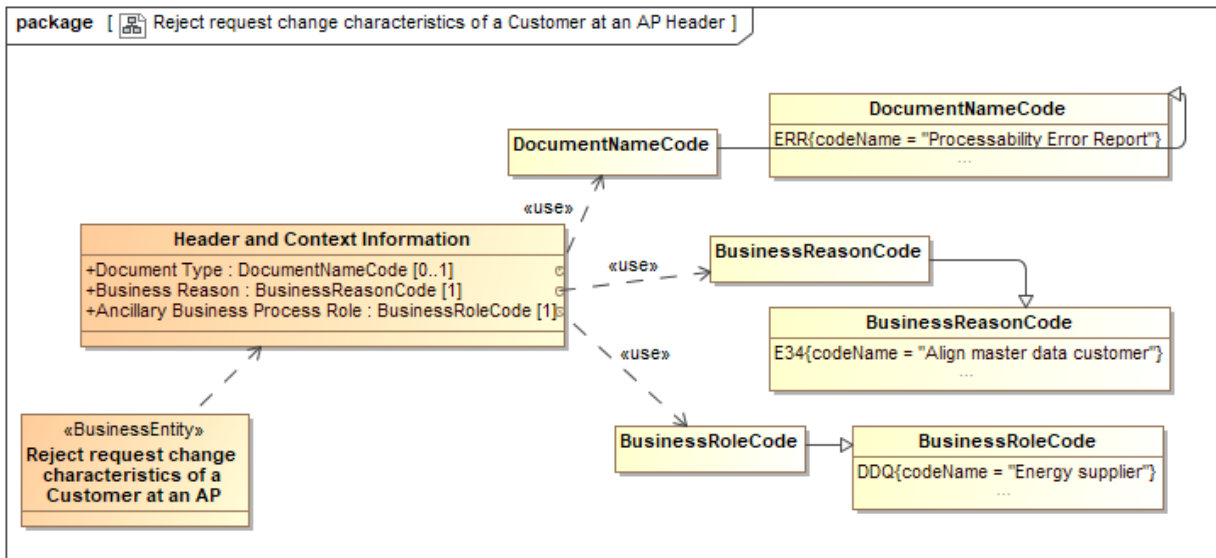


Figure 27 Class diagram: Header and Context Information: Reject request change characteristics of a Customer at an Accounting Point

A.8. Request update characteristics of a Customer at an Accounting Point

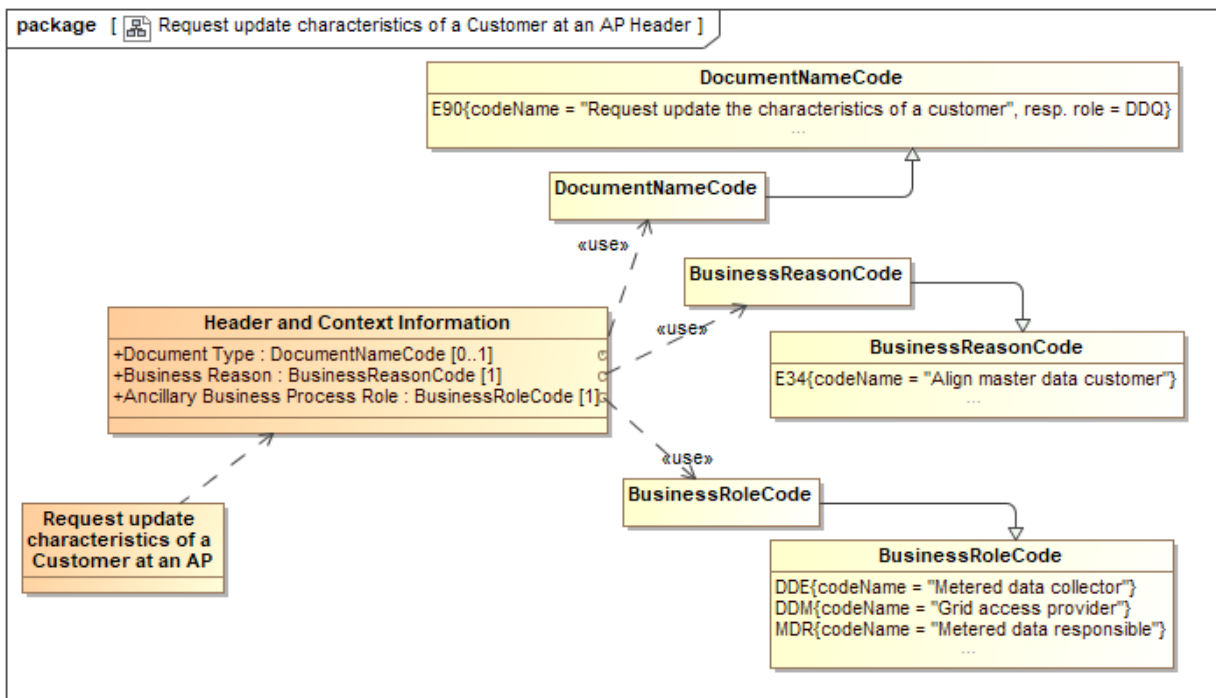


Figure 28 Class diagram: Header and Context Information: Request update characteristics of a Customer at an Accounting Point

A.9. Confirm request update characteristics of a Customer at an Accounting Point

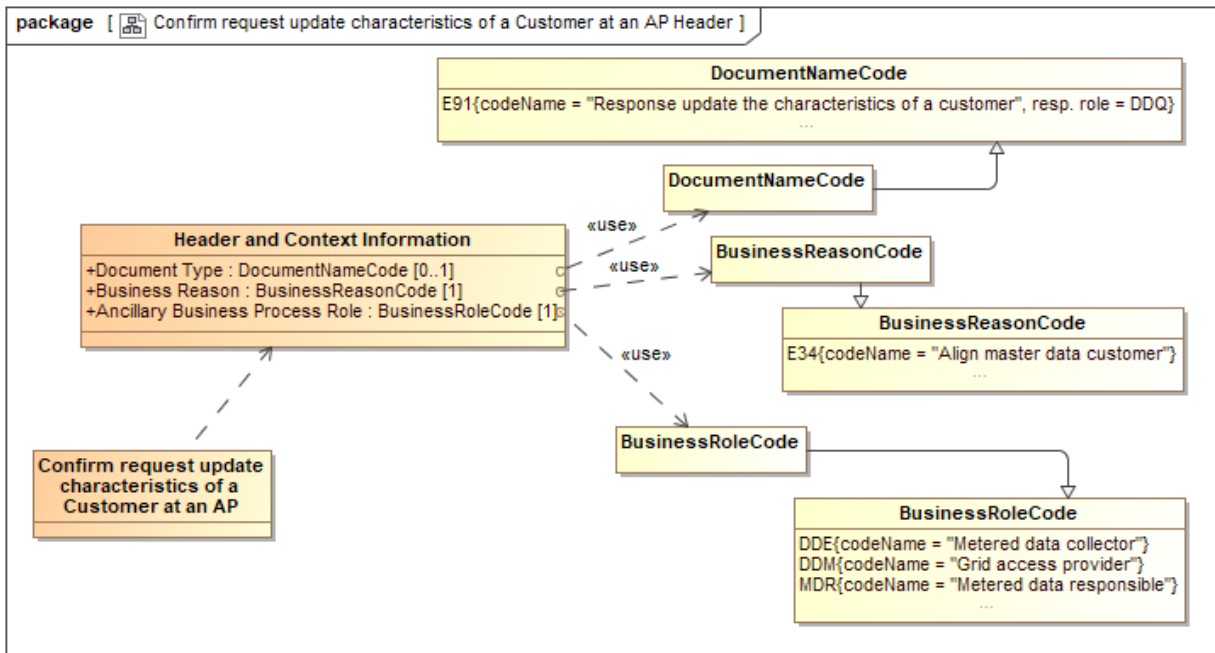


Figure 29 Class diagram: Header and Context Information: Confirm request update characteristics of a Customer at an Accounting Point

A.10. Reject request update characteristics of a Customer at an Accounting Point

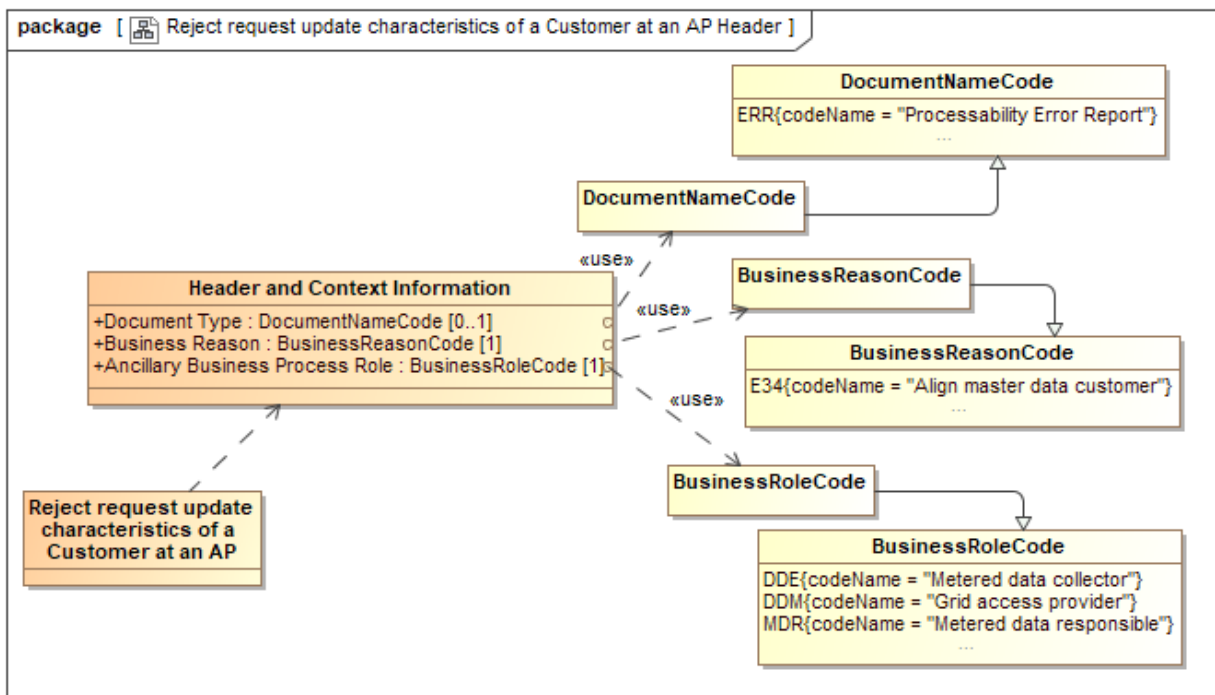


Figure 30 Class diagram: Header and Context Information: Reject request update characteristics of a Customer at an Accounting Point