



**Business Requirements
for
Alignment of
characteristics for a
Customer linked to a
Metering Point**

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A. About this document

This document is a business requirements specification for the alignment of characteristics for a Customer linked to a Metering Point process within the structuring process of the European energy market.

The process for alignment of characteristics for a Customer linked to a MP is based on a supplier centric model, i.e. where the Balance Supplier is responsible 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 Balance Supplier and the Grid Access Provider. The BRS shows two basic processes; A process where an Entitled Role, such as a Grid Access Provider, requests characteristics of a Customer from the Party Administrator, such as the Balance Supplier, and a process where the Party Administrator notifies the Entitled Role with changes to the Customer characteristics. This BRS will not include transfer of Customer data directly between Balance Suppliers.

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

We assume that there some time in the future will be a “Party register”, independent of the Metering Point register, maintained by a Party Administrator. However, currently there is no Party Administrator anywhere, hence the concept will be elaborated at a later phase.

As a general introduction ebIX® has published a separate document “Introduction to ebIX® Business Requirements and Business Information Models” [3]. The introduction also includes the generic model elements that are not specific for a particular business process.

In line with UN/CEFACT Modelling Methodology version 2 (UMM-2) ebIX® defines the business requirements before starting the actual modelling. These requirements have been specified by the ebIX® work group “ebIX® working group for Master Data Structuring and harmonisation in the European energy market” (MDS) and are the basis for the Business Information Model (BIM) which is published in a separate document.

The Business Information Model is in turn the basis for the creation of XML schemas and is expected to be the basis for the specification of web services in a next version of the model document. Since ebIX® supports both EDIFACT and XML the model will also serve as the basis for the creation of Message Implementation Guides for the mapping to EDIFACT UNSM’s. The Business Information Model and the syntax specific structures are specified by the ebIX® Technical Committee (ETC).

A.1. Comments to the ebIX® model

If you have comments or suggestions to the requirements please contact any member of the project group or directly to Ove Nesvik, ove.nesvik@edisys.no.

A.2. References

A.2.1. Standards

- [1] UML Profile for UN/CEFACT's Modelling Methodology (UMM), Base Module 2.0,
(http://www.unece.org/cefact/umm/umm_index.html)
- [2] The Harmonized Role Model (for the Electricity Market) by ebIX®, ENTSO-E, and EFET
(www.ebix.org)

A.2.2. ebIX® Documents

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

A.3. Participants in the project

These Business Requirements as part of the ebIX® Model for the European Energy Market (*see [3]*) are made in a project with the members of MDS. For a list of members of Members see www.ebix.org.

A.4. Main changes since last version

Old	New	Clarification	Date
1.0.A			
	First version approved by ebIX® Forum		20170905
1.0.B			
	Addition of clarifying text		20180108

1. Business Requirements View: Alignment of characteristics for a Customer linked to a MP

1.1. Alignment of characteristics for a Customer linked to a MP (Business Process UseCase)

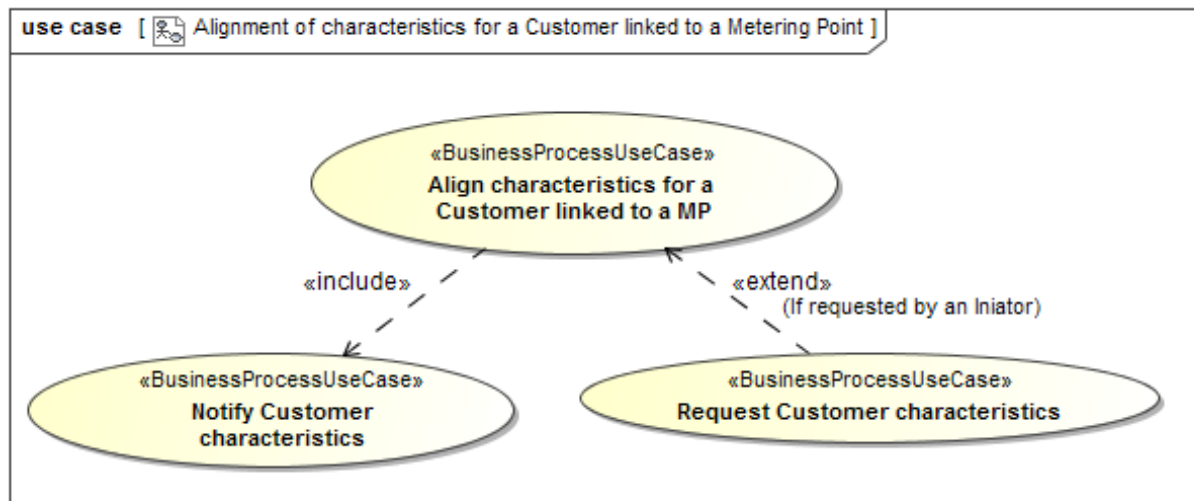


Figure 1 Alignment of characteristics for a Customer linked to a Metering Point

1.1.1. Description

UseCase description: Alignment of characteristics for a Customer linked to a Metering Point	
definition	<p>This is the process where a Supplier (Candidate harmonised role: Party Administrator) can notify Customer characteristics to parties (roles) entitled to receive Customer characteristics. As an extension, an <i>Entitled Role</i> can request such configuration characteristics.</p> <p>The processes may be run at predefined time intervals for periodical alignments.</p> <p>The Customer characteristics are always related to a Metering Point.</p> <p>The Request Customer characteristics process will return the Customer characteristics elements the requesting party needs to fulfil its obligations in the energy market.</p>
beginsWhen	When the Supplier (Candidate harmonised role: Party Administrator) need to inform the <i>Entitled Roles</i> of changes to the Customer characteristics, or an <i>Entitled Role</i> has requested such information.
preCondition	<p>The Supplier (Candidate harmonised role: Party Administrator) needs to inform the <i>Entitled Roles</i> about changes to Customer characteristics.</p> <p>If Customer characteristics are requested by an <i>Entitled Role</i>, the requestor must be authorised to receive Customer characteristics, i.e. that the</p>

	requestor has a formal responsibility for, or is mandated by, the <i>Customer</i> , such as a <i>Metered Data Responsible</i> or a <i>Grid Access Provider</i> .
endsWhen	When the <i>Entitled Role(s)</i> has (have) received the Customer characteristics, or a request for Customer characteristics has been rejected.
postCondition	The Customer characteristics are aligned between the Supplier (Candidate harmonised role: Party Administrator) and <i>Entitled Role(s)</i> .
exceptions	None
actions	Not relevant at this level.

1.2. Business Domain View: Notify Customer characteristics (Business Process UseCase)

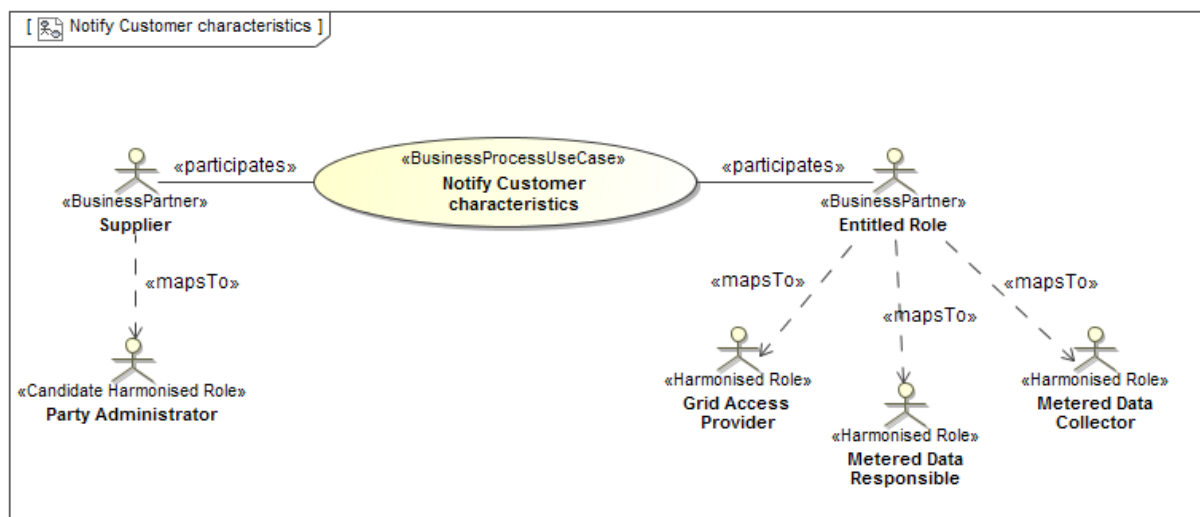


Figure 2 Notify Customer characteristics

1.2.1. Description

UseCase description: Notify Customer characteristics	
definition	In this process, the Supplier (Candidate harmonised role: Party Administrator) distributes Customer characteristics for a Metering Point to the Entitled Role ¹ after update of one or more of the Customer

¹ In a supplier-centric model, the Entitled Role is the Grid Access Provider. Based on national rules, this may be extended to other roles, such as the Metered Data Collector or the Metered Data Responsible.

	characteristics. A main reason for alignment of Customer characteristic is for billing purposes.
beginsWhen	When there have been changes to Customer characteristics in the Metering Point that a Supplier (Candidate harmonised role: Party Administrator) is responsible for.
preCondition	One or more of the Customer characteristics for this Metering Point have been changed. There are one or more Entitled Roles that are authorised for the Customer characteristics.
endsWhen	When the Entitled Roles have received the notification.
postCondition	The Supplier (Candidate harmonised role: Party Administrator) has notified the Customer characteristics for this Metering Point to the Entitled Roles.
exceptions	Time constraints are based on national rules. In the ebIX® model there is no information exchange between a new and an old Balance Supplier, i.e. the Party Administrator is only linked to the Customer as long as the Balance Supplier has a valid supply contract with the Customer.
actions	See 1.2.2

1.2.2. Business Process

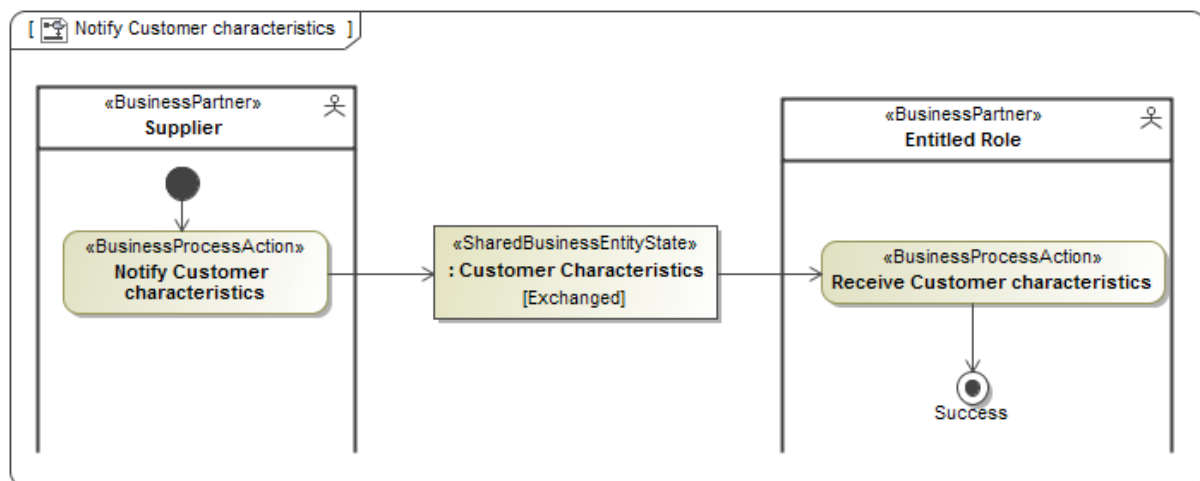


Figure 3 Business Process Notify Customer characteristics

1.3. Request Customer characteristics (Business Process UseCase)

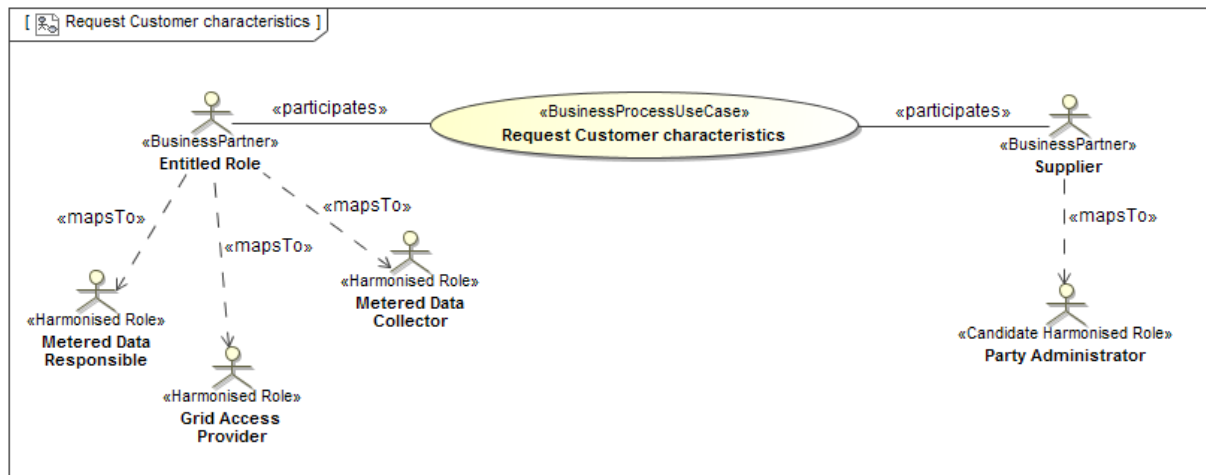


Figure 4 Request Customer characteristics

1.3.1. Description

UseCase description: Request Customer characteristics	
definition	This is the process where the Entitled Role can align its Customer characteristics for a Metering Point with the Supplier (Candidate harmonised role: Party Administrator).
beginsWhen	When the Entitled Role needs to align its master data for this Metering Point.
preCondition	The Supplier (Candidate harmonised role: Party Administrator) knows the Entitled Role. The Entitled Role is authorised to receive Customer characteristics.
endsWhen	When the Entitled Role has received the Customer characteristics for this Metering Point from the Supplier (Candidate harmonised role: Party Administrator) or the request was rejected.
postCondition	The Entitled Role has received Customer characteristics for this Customer or the request is rejected.
exceptions	None
actions	See 1.3.2

1.3.2. Business Process

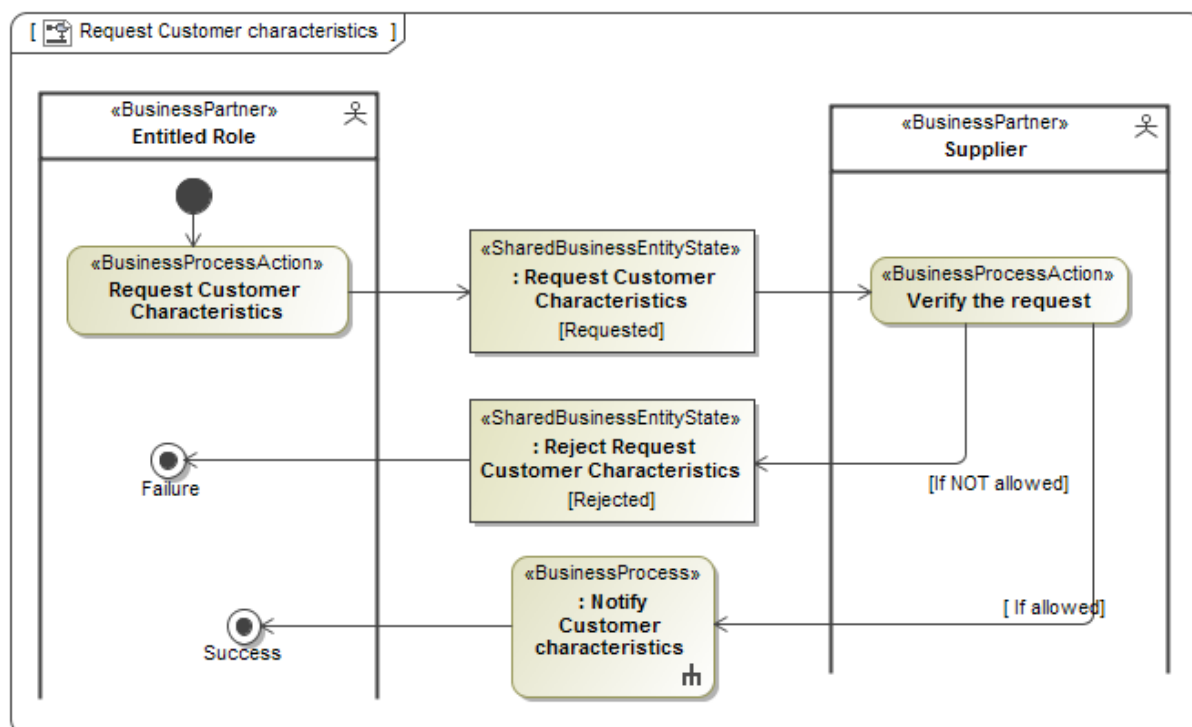


Figure 5 Business Process: Request Customer characteristics

1.4. Business Partner View

1.4.1. Business Partners for alignment of characteristics for a Customer linked to a MP

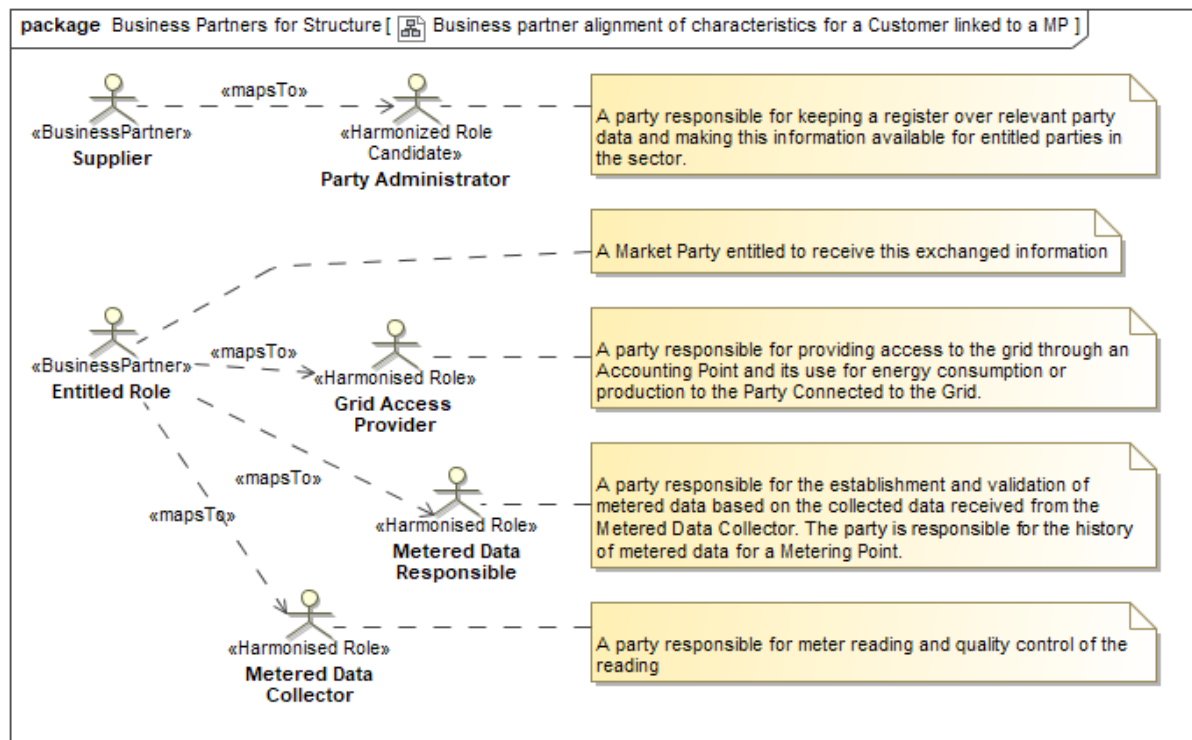


Figure 6 Business Partners related to alignment of characteristics for a Customer linked to a Metering Point

1.5. Business Data View

A general introduction to the Business Data View can be found in the Introduction to ebIX® Business Requirements and Business Information Models (www.ebix.org) [3].

1.5.1. Customer characteristics (Class Diagram)

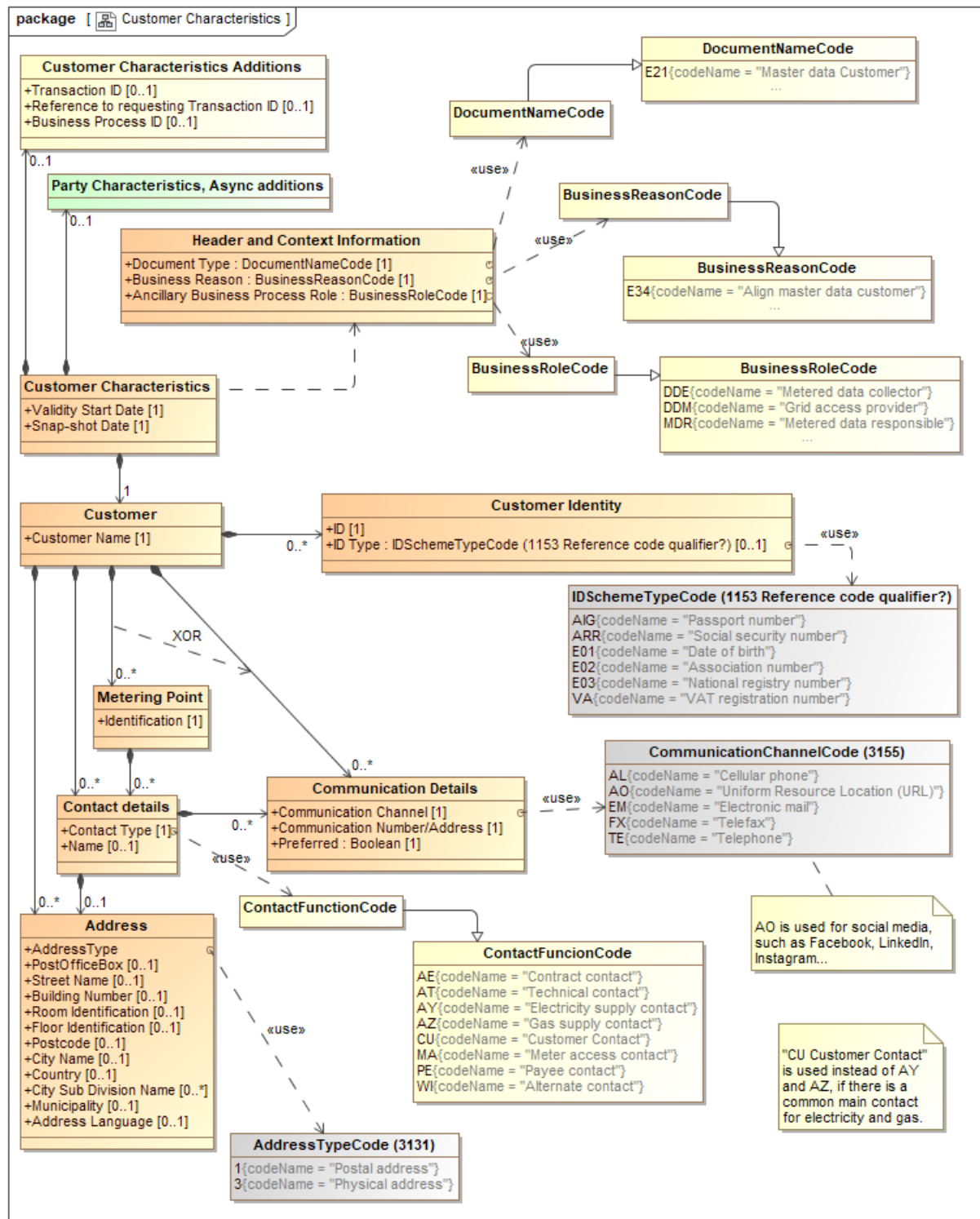


Figure 7 Customer characteristics

The Metering Point ID is added to be able to link the Customer Characteristics to the energy market processes.

1.5.1.1. Element definitions, Customer characteristics

Class/attribute	Sector ²	Description
«Business entity» Customer characteristics		The information set related to the Customer in a Metering Point sent by the Supplier (Candidate harmonised role: Party Administrator) to an Entitled Role in response to a request or when notifying characteristics for a Customer linked to a Metering Point.
Validity start date		The date when the content of this business document becomes or became valid.
Snap-shot date		The date or date/time when this set of Customer Characteristics was derived from the Party Administration
Customer		The Customer (or legal entity) having the grid contract in a Metering Point.
Customer name		The name of the Customer.
Customer Identity		The Identification of a Customer
ID		The (unique) identification of the Customer.
ID Type		The Identification scheme used for this identification of the Customer in question.
«Business entity» Metering Point		An entity where energy products are measured or computed.
Identification		The unique identification of the Metering Point that is linked to this Customer.
Contact Details		Details of a Contact for this Customer, which is connected to this Metering Point.
Contact Type		The type of relation between this Contact and the Metering 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 can be made, such as telephone or email.
Communication Number/Address		A text string of characters that makes up the complete number or address for this communication.

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

Class/attribute	Sector ²	Description
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. 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.
Customer characteristics Additions		Additional information related to these Customer characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Supplier (Candidate harmonised role: Party Administrator).

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
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.
Business process ID		The unique identification, given by the Supplier (Candidate harmonised role: Party Administrator), of these Customer Characteristics.
Customer characteristics, Async Additions		Additional information related to these Customer characteristics, needed when using asynchronous communication.
Header and Context Information		The set of information specifying the information to be added to this payload "Customer characteristics" in order 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" (Supplier (Candidate harmonised role: Party Administrator)), responsible for the process/this exchange.

1.5.1.2. Customer characteristics (State Diagram)

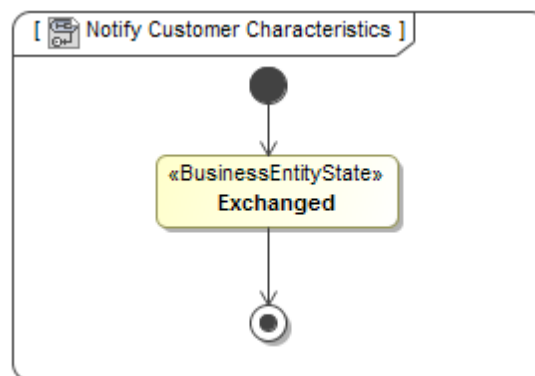


Figure 8 Customer characteristics

1.5.2. Request Customer characteristics (Class Diagram)

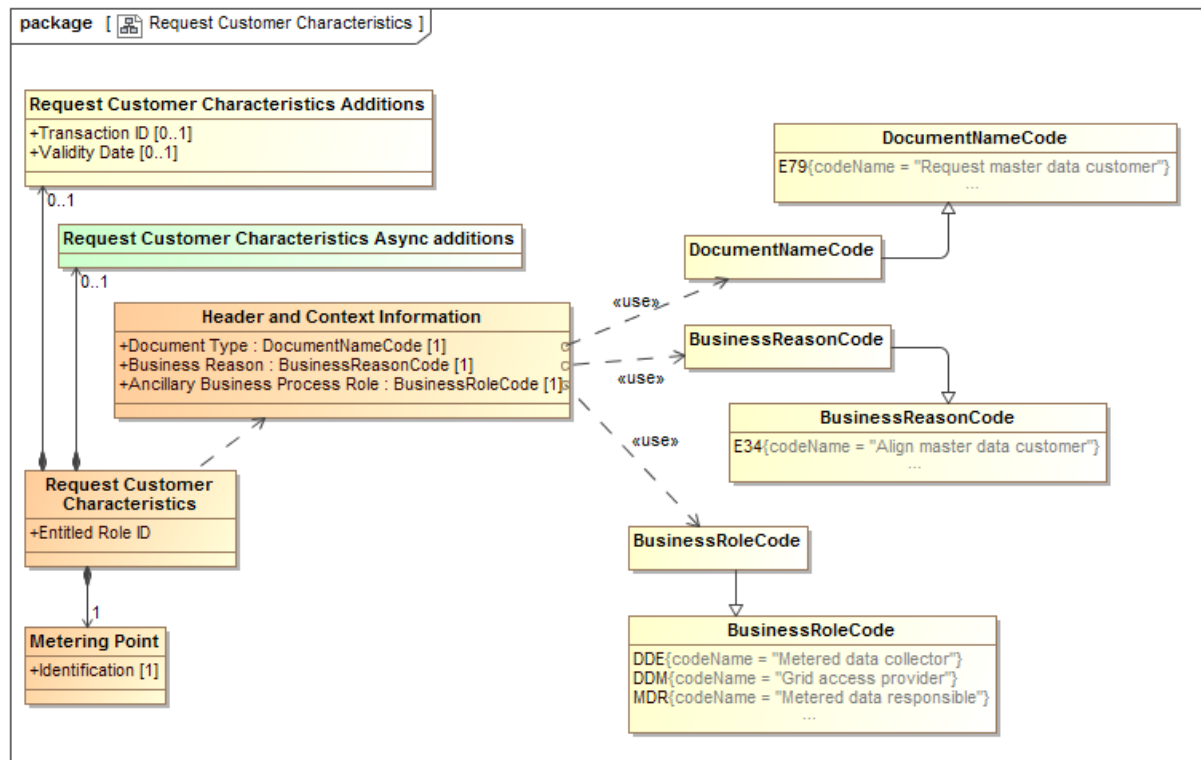


Figure 9 Request Customer characteristics

1.5.2.1. Element definitions, Request Customer characteristics

Class/attribute	Sector ⁴	Description
«Business entity» Request Customer characteristics		The information set to be sent by an Entitled Role to the Supplier (Candidate harmonised role: Party Administrator) when requesting characteristics for a Customer linked to a Metering Point.
Entitled Role ID		The unique identification of the Entitled Role that requests Customer characteristics.
«Business entity» Metering Point		The entity where energy products are measured or computed for which the Customer characteristics are requested.
Identification		The unique identification of the Metering Point this Request Customer characteristics is intended for.
Request Customer Characteristics Additions		Additional information, related to this Request Customer characteristics, to be agreed on a national level.

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

Class/attribute	Sector ⁴	Description
Transaction ID		The unique identification of this set of information, given by the Grid Access Provider.
Validity Date		The date for when the requested Customer characteristics are valid.
Request Customer characteristics Async Additions		Additional information, related to Requested Customer characteristics, needed when using asynchronous communication (however not used in this request).
Header and Context Information		The set of information specifying the information to be added to this payload "Request Customer characteristics" in order 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" (Supplier (Candidate harmonised role: Party Administrator)), responsible for the process/this exchange.

1.5.2.2. Request Customer characteristics (State Diagram)

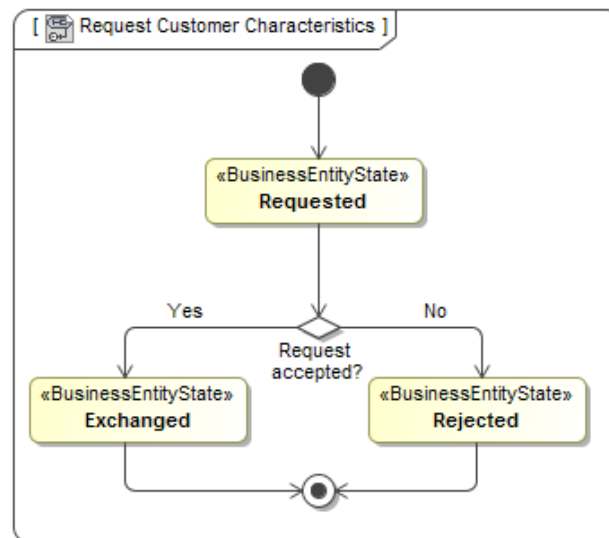


Figure 10 Request Customer characteristics

1.5.3. Reject Request Customer characteristics (Class Diagram)

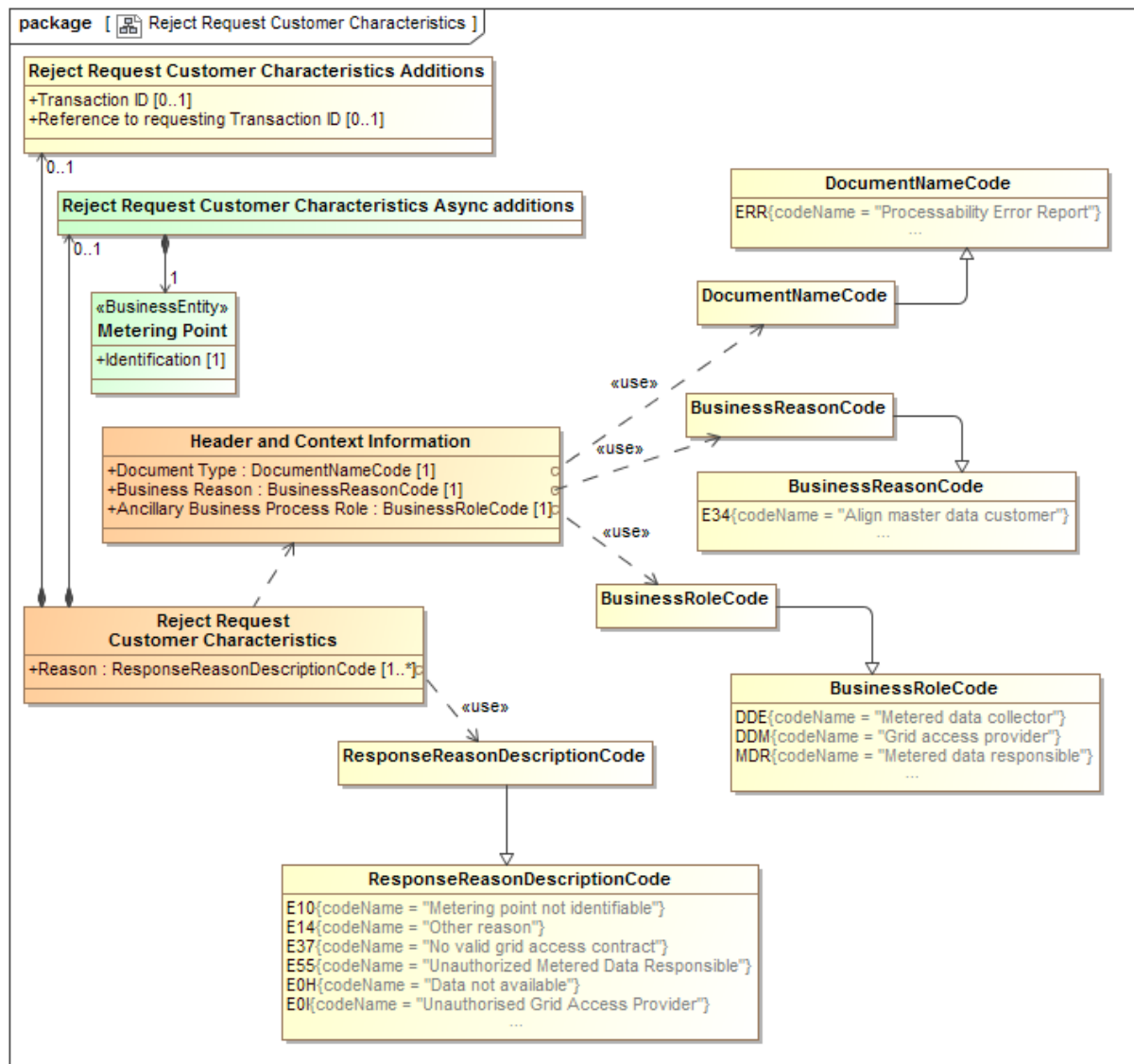


Figure 11 Reject Request Customer characteristics

1.5.3.1. Element definitions, Reject Request Customer characteristics

Class/attribute	Sector ⁵	Description
«Business entity» Reject Request Customer characteristics		The information set sent from the Supplier (Candidate harmonised role: Party Administrator) to the Entitled Role when rejecting a Request characteristics for a Customer linked to a Metering Point.
Reason		One or more codes specifying the reason(s) for the rejection of the Request Customer characteristics.

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

Class/attribute	Sector ⁵	Description
Reject Request Customer Characteristics Additions		Additional information related to rejecting the Request Customer characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Balance Supplier.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the requesting Grid Access Provider.
Reject Request Customer characteristics Async Additions		Additional information, related to the rejection of the Request Customer characteristics, needed when using asynchronous communication.
«Business entity» Metering Point		An entity where energy products are measured or computed.
Identification		The unique identification of the Metering Point the Request Customer characteristics was intended for.
Header and Context Information		The set of information specifying the information to be added to this payload “Reject Request Customer characteristics” in order 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” (Supplier (Candidate harmonised role: Party Administrator)), responsible for the process/this exchange.