



**Business Requirements  
for  
Request change of  
Metering Point  
characteristics**

Status: Approved by ebIX® Forum  
Version: 1.0  
Revision: B  
Date: June 2018

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## A. About this document

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

The change of Metering Point characteristics is a process where a party requests changes to the characteristics of a Metering Point. It is a prerequisite that the requesting party is authorised to change the concerning Metering Point characteristics, i.e. that the requesting party has a formal responsibility for the Metering Point, such as a Balance Supplier or Grid Access Provider. Further, it is a prerequisite that the party requesting a change is a responsible party for this or these characteristics, hence a Content Responsible Party has been introduced.

In some cases, another role than the Content Responsible Party may need to request updates of the MP characteristics, such as a Balance Supplier wanting to disconnect a MP. For this reason, this BRS introduces an update process, where an Initiator (Balance Supplier in the example) requests updates to a Content Responsible Role (Grid Access Provider in the example), who requests a change to the Metering Point Administrator. In this BRS the term “change” is used for changes to the MP register, while the term “update” is used for requests from an Initiator to the Content Responsible Role.

Note that this process NOT shall be used when special processes, such as Change of Supplier, End of Supply or Customer Move, are available.

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 MDS (Master Data Structuring) and are the basis for the Business Information Model, which is published in a separate document.

The Business Information Model is in turn the basis for the creation of XML schema's 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 ebIX® secretary at [secretary@ebix.org](mailto:secretary@ebix.org).

## A.2. References

### A.2.1. Standards

- [1] UML Profile for UN/CEFACT's Modelling Methodology (UMM), Base Module 2.0,  
([http://www.unece.org/cefact/umm/umm\\_index.html](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](http://www.ebix.org))

### A.2.2. ebIX® Documents

- [3] Introduction to ebIX® Business Requirements and Business Information Models  
([www.ebix.org](http://www.ebix.org))
- [4] ebIX® Business Requirements for measure ([www.ebix.org](http://www.ebix.org))
- [5] ebIX® Business Requirements for alignment of Metering Point characteristics ([www.ebix.org](http://www.ebix.org))
- [6] Recommended Identification Schemes for the European Energy Market ([www.ebix.org](http://www.ebix.org))
- [7] ebIX® code lists ([www.ebix.org](http://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 MDS see [www.ebix.org](http://www.ebix.org).

## A.4. Main changes since last version

Old	New	Clarification	Date
<b>Version 1.0.A</b>			
	First approved version		20180108
<b>Version 1.0.B</b>			
	Removal of names and email addresses.		20180605

# 1. Business Requirements View: Change of Metering Point characteristics

## 1.1. Business Domain View: Change of MP characteristics (Business Process UseCase)

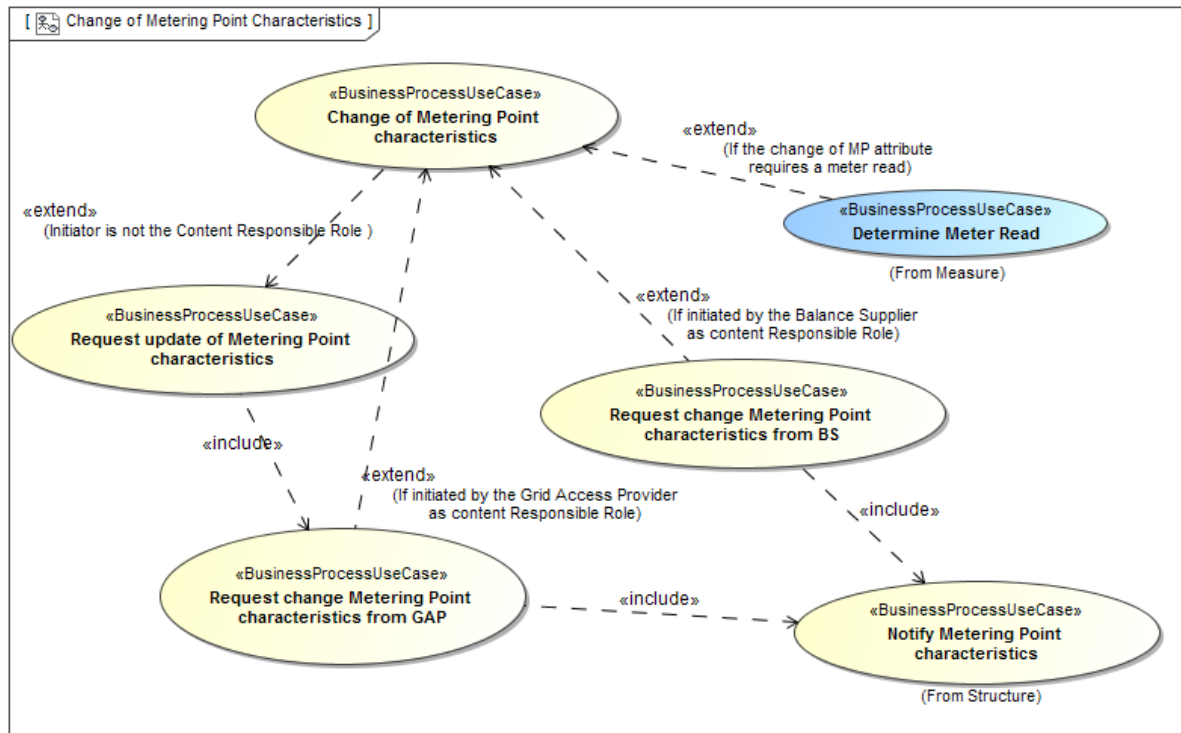


Figure 1 Change of Metering Point characteristics

### 1.1.1. Description

UseCase description: Change of Metering Point characteristics	
definition	This is the process where a party <sup>1 and 2</sup> (Market Role), such as Balance Supplier or Metered Data Responsible can request changes to relevant Metering Point characteristics for a specified Metering Point. The request is sent to the Content Responsible Role for the Metering Point characteristics in question, who requests change of the Metering Point characteristics with the Metering Point Administrator, if the change is accepted. The Metering Point Administrator makes all necessary changes, including distribution of master data for alignment of the business partners' administration.
beginsWhen	When a party needs to change or update master data for a specific Metering Point.
preCondition	<ul style="list-style-type: none"> <li>The party is authorised to request changes and updates to these Metering Point characteristics.</li> </ul>
endsWhen	<p>When the following are fulfilled:</p> <ul style="list-style-type: none"> <li>Master data has been changed in the Metering Point administration;</li> <li>The Content Responsible Role has accepted the change;</li> <li>All Affected Roles have received changed master data from the Metering Point Administrator;</li> <li>Meter read has been exchanged, if the change of MP attribute requires a meter read.</li> </ul> <p>or the request to update master data from the Initiator was rejected by the Content Responsible Role, or the request to change master data for the Metering Point from the Content Responsible role was rejected by the Metering Point Administrator.</p>
postCondition	Changed Metering Point characteristics for the Metering Point are received by all Affected Roles, or the request is rejected.
exceptions	A request for change or update of master data may be cancelled, dependent on national rules
actions	See 1.1.1.1

<sup>1</sup> The number of *Initiators* may vary between countries.

<sup>2</sup> A party is linked to the *Metering Point* at a given time, i.e. an old supplier is not authorised to request changes to a Metering Point.

## 1.1.1.1. Business process

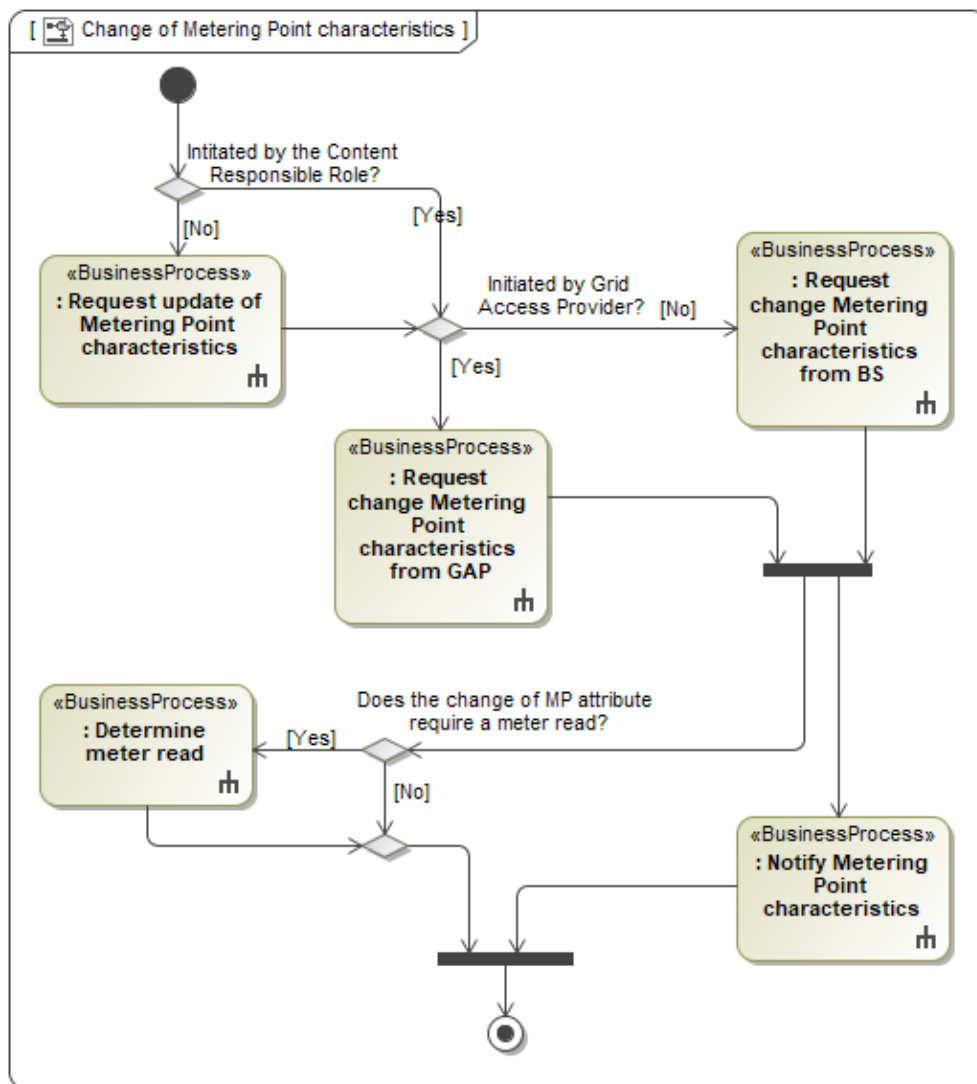


Figure 2 Business Process Change of Metering Point characteristics

Remark: Because these are business requirements, the activity diagrams are kept simple. A consequence is; a "failure" in a sub process is seen as an end of the total process.



### 1.1.1.2. Sequence diagram: Request change of MP characteristics

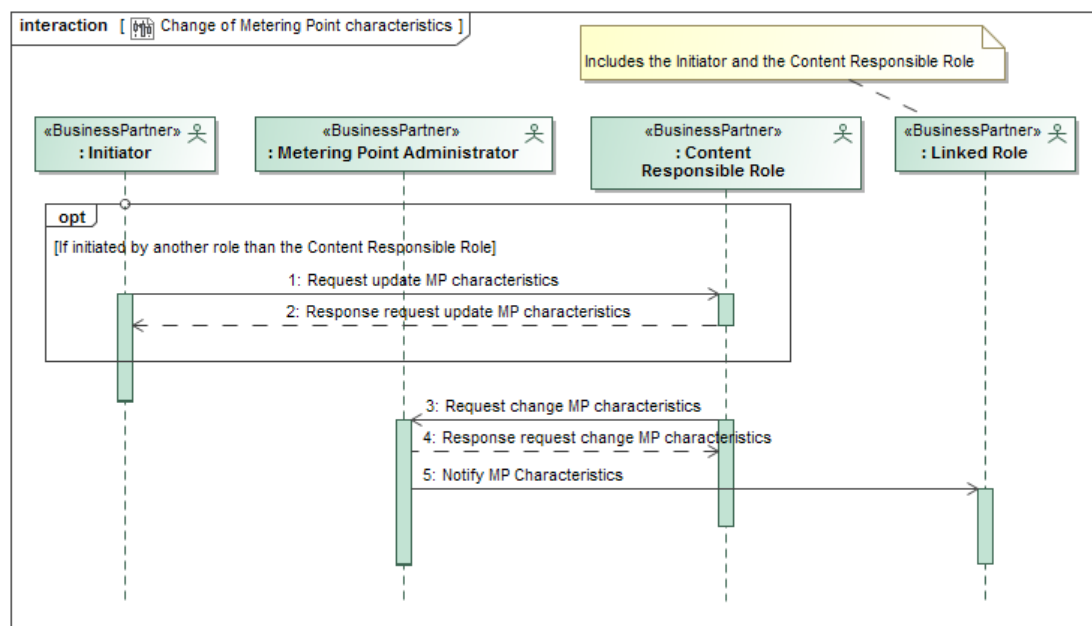


Figure 1 Sequence diagram: Request change of Metering Point characteristics

### 1.1.2. Request update of Metering Point characteristics

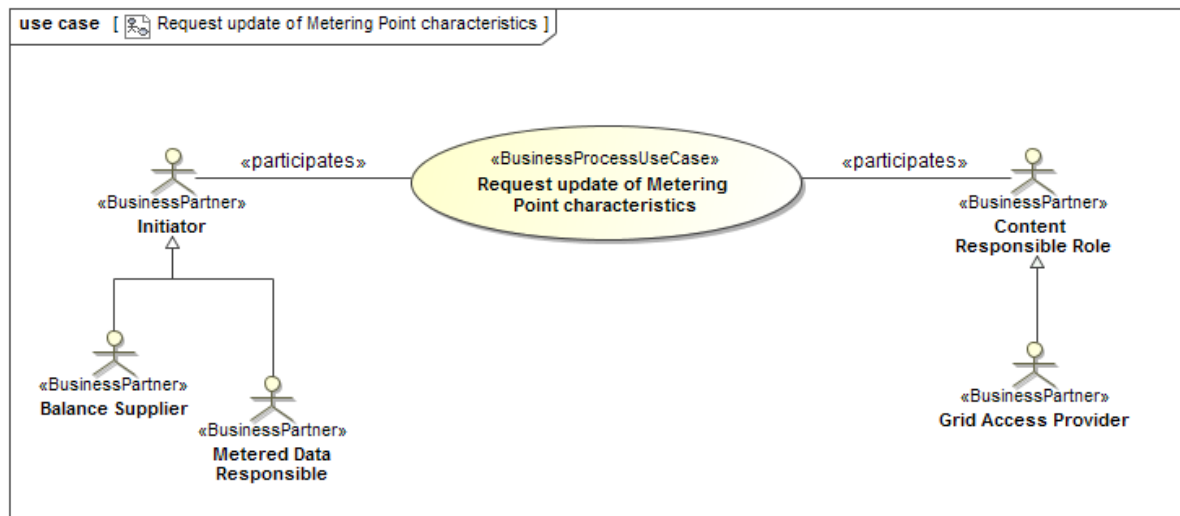


Figure 3 Request update of Metering Point characteristics

#### 1.1.2.1. Description

UseCase description: Request update of Metering Point characteristics			
definition	In this process an Initiator, such as the Metered Data Responsible or the Balance Supplier, requests an update of one or more characteristics in a Metering Point with the Content Responsible Role for those Metering Point characteristics, who confirms or rejects it.		
beginsWhen	When the Initiator has the need to update MP characteristics and decides to send a request for update of one or more characteristics of a Metering Point to the Content Responsible Role.		
preCondition	The Initiator must be linked/known to the Metering Point.		
	The following roles can request an update of Metering Point characteristics:		
	Metring Point characteristics	Initiator	Content Responsible role
	Metering Point Address	<ul style="list-style-type: none"><li>Metered Data Responsible</li><li>Balance Supplier</li></ul>	Grid Access Provider
	Geographical Coordinate	<ul style="list-style-type: none"><li>Metered Data Responsible</li><li>Balance Supplier</li></ul>	Grid Access Provider
	Metering Method	<ul style="list-style-type: none"><li>Balance Supplier</li></ul>	Grid Access Provider
	Meter Reading Periodicity	<ul style="list-style-type: none"><li>Balance Supplier</li></ul>	Grid Access Provider
	Physical Status Of Metering Point	<ul style="list-style-type: none"><li>Balance Supplier</li></ul>	Grid Access Provider
endsWhen	When the request for update of Metering Point characteristics is confirmed or rejected.		

postCondition	The update of Metering Point characteristics has been confirmed or rejected by the Content Responsible Role.
exceptions	A request for update of master data may be cancelled, dependent on national rules.
actions	See 1.1.2.2

### 1.1.2.2. Business process

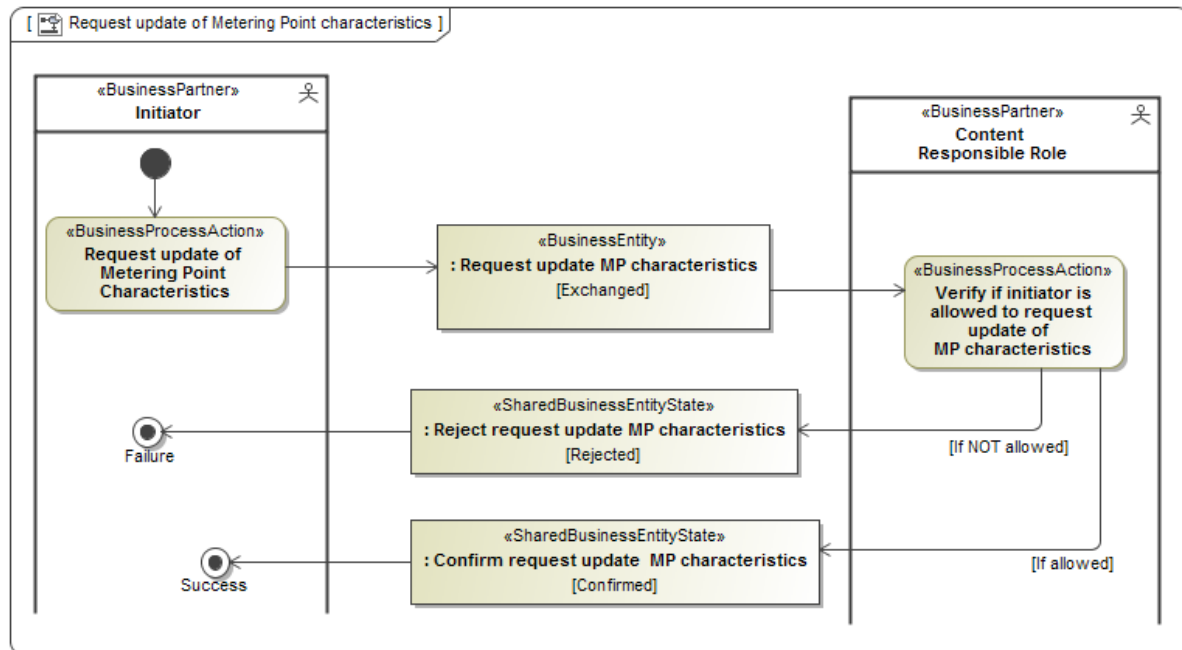


Figure 4 Business Process: Request update of Metering Point characteristics

### 1.1.3. Request change Metering Point characteristics from Grid Access Provider (GAP)

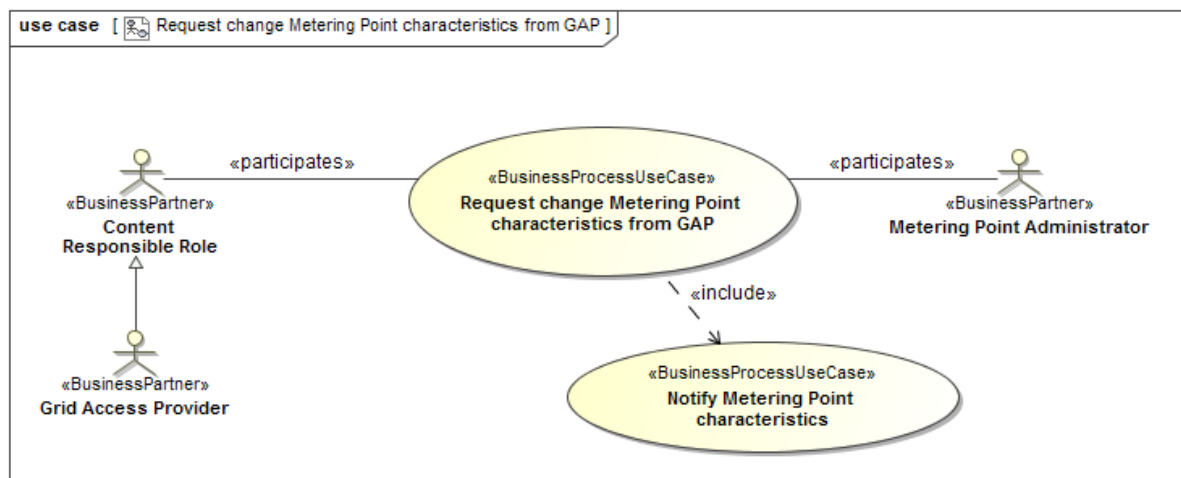


Figure 5 Request change of Metering Point characteristics from GAP

#### 1.1.3.1. Description

UseCase description: Request change Metering Point characteristics from GAP	
definition	<p>In this process the Content Responsible Role, Grid Access Provider, requests a change of one or more Metering Point characteristics with the Metering Point Administrator, who confirms or rejects it.</p> <p>The Request change Metering Point characteristics from GAP is a generic process where almost all attributes from the Metering Point characteristics can be changed, except:</p> <ul style="list-style-type: none"> <li>• MP parties</li> <li>• Administrative status</li> </ul>
beginsWhen	When the Content Responsible Role has accepted a request for update of Metering Point characteristics from an Initiator, or the Content Responsible Role himself has the need to change the Metering Point characteristics.
preCondition	The Content Responsible Role must be linked/known to the Metering Point.
endsWhen	When the change of the Metering Point characteristics is confirmed or rejected.
postCondition	The change of Metering Point characteristics has been confirmed or rejected by the Metering Point Administrator.
exceptions	A request for change of master data may be cancelled, dependent on national rules
actions	See 1.1.3.2

### 1.1.3.2. Business process

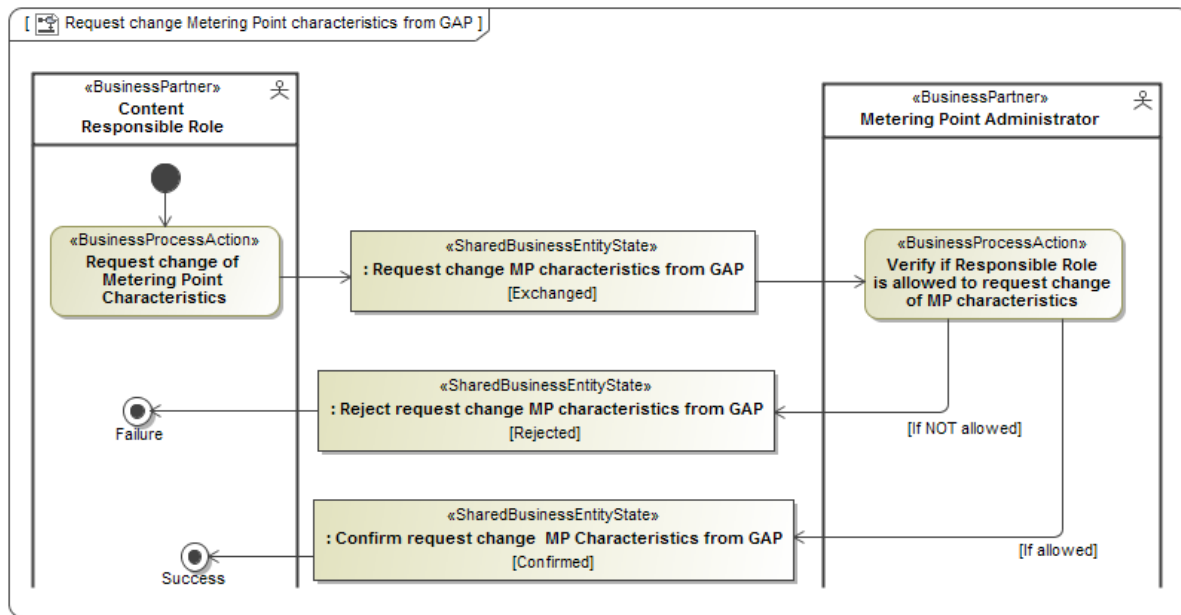


Figure 6 Business Process: Request change of Metering Point characteristics from GAP

### 1.1.4. Request change Metering Point characteristics from Balance Supplier (BS)

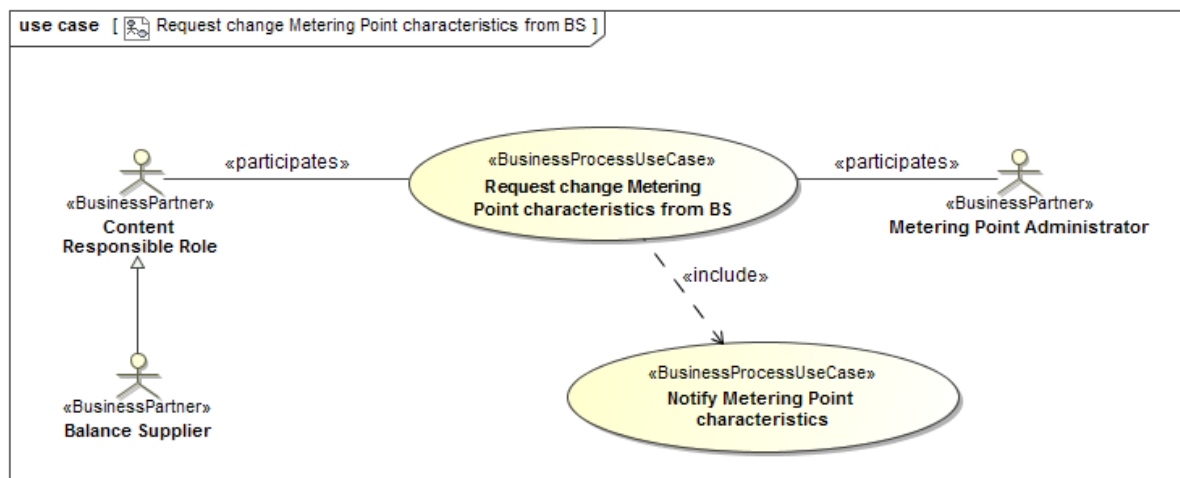


Figure 7 Request change of Metering Point characteristics from BS

#### 1.1.4.1. Description

UseCase description: Request change Metering Point characteristics from Balance Supplier (BS)	
definition	<p>In this process the Content Responsible Role, Balance Supplier, requests a change of one or more Metering Point characteristics with the Metering Point Administrator, who confirms or rejects it.</p> <p>The Request change Metering Point characteristics from Balance Supplier (BS) is process where the following attributes can be changed:</p> <ul style="list-style-type: none"> <li>• Customer Name</li> <li>• Customer ID</li> </ul>
beginsWhen	When the Content Responsible Role himself has the need to change the Metering Point characteristics.
preCondition	The Content Responsible Role must be linked/known to the Metering Point.
endsWhen	When the change of the Metering Point characteristics is confirmed or rejected.
postCondition	The change of Metering Point characteristics has been confirmed or rejected by the Metering Point Administrator.
exceptions	A request for change of master data may be cancelled, dependent on national rules.
actions	See 1.1.3.2

### 1.1.4.2. Business process

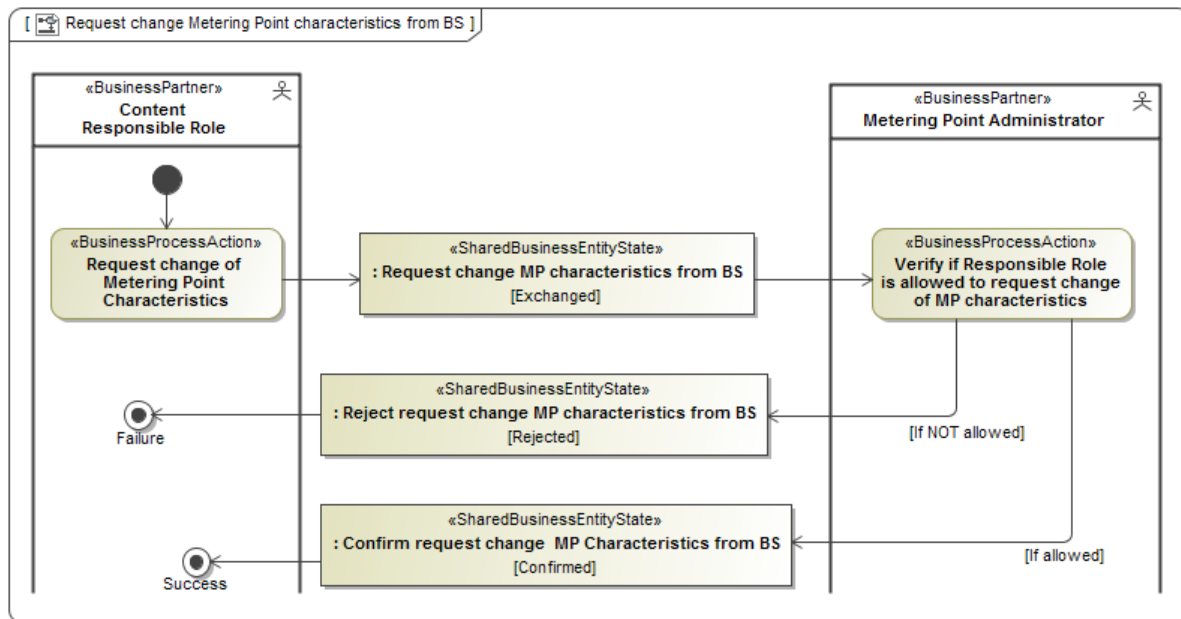


Figure 8 Business Process: Request change of Metering Point characteristics from BS

### 1.1.5. Notify Metering Point Characteristics

Notify Metering Point Characteristics is documented in a separate document, see [5]. In this document, the “Linked parties” are specified.

### 1.1.6. Determine Meter Read

The Process Area *Determine Meter Read* is documented in the ebIX® model Measure [4].

## 1.2. Business Partner View

### 1.2.1. Business partners related to Request change of Metering Point characteristics

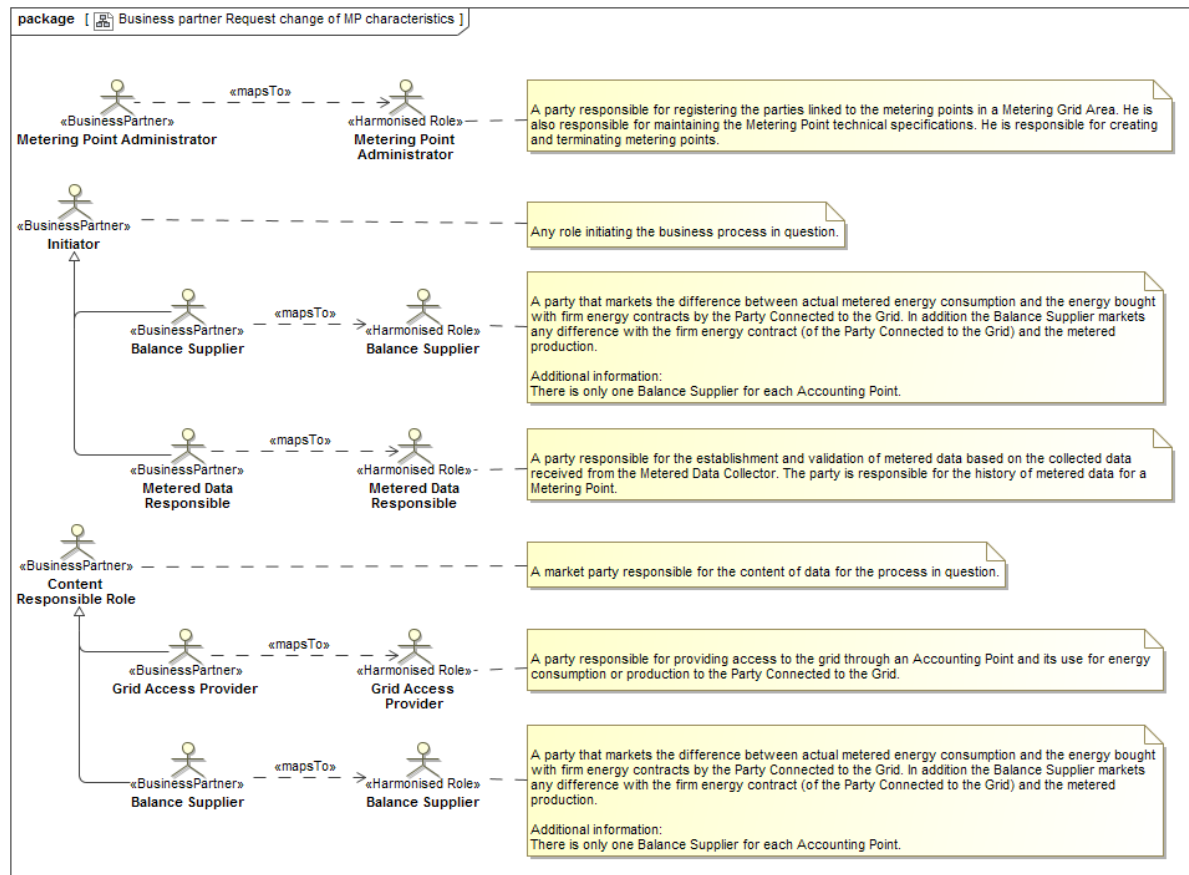


Figure 9 Business partners related to Request change of Metering Point characteristics



### 1.3. 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](http://www.ebix.org)) [3].

### 1.3.1. Request update MP characteristics (Class Diagram)

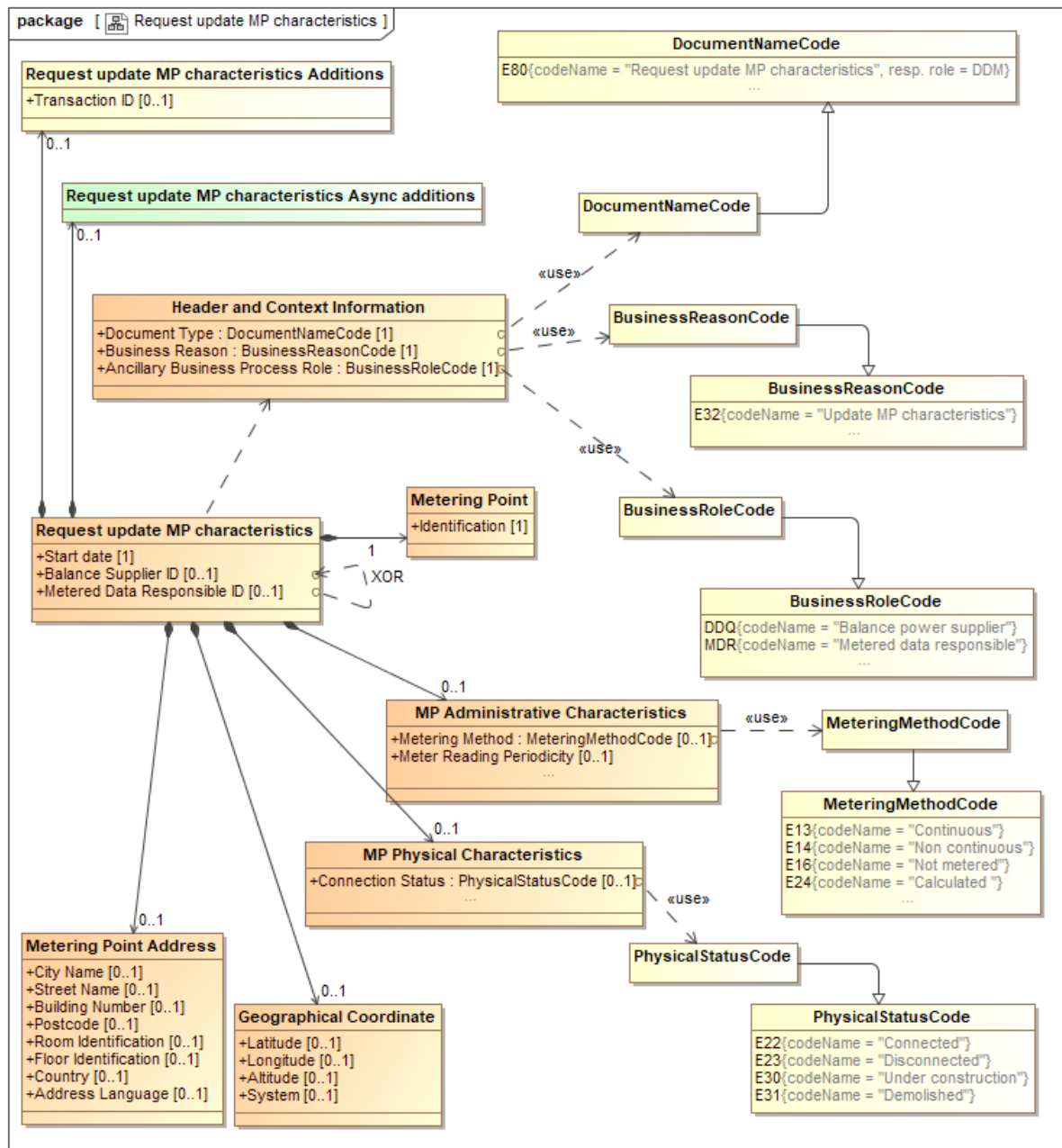


Figure 10 Request update MP characteristics

### 1.3.1.1. Element definitions, Request update MP characteristics

Class/attribute	Sector <sup>3</sup>	Description
«Business entity» Request update MP characteristics		The information set to be sent from an Initiator to the Metering Point Administrator when requesting update of Metering Point characteristics in a Metering Point.
Start date		The requested date from the initiator, when the changes to the Metering Point characteristics are to become valid.
Balance Supplier ID		The unique identification of the Balance Supplier that requests update of Metering Point characteristics in a Metering Point.
Metered Data Responsible ID		The unique identification of the Metered Data Responsible that requests update of Metering Point characteristics in a Metering Point.
«Business entity» Metering Point		An entity where energy products are measured or computed.
Identification		The unique identification of the Metering Point the Request Metering Point characteristics is intended for.
MP Administrative characteristics		The relevant administrative characteristics of this Metering Point.
Metering Method		A code specifying how the energy volumes are established for this Metering Point, such as continuous, non-continuous- or not-metered.
Meter Reading Periodicity		The length of time between the meter readings.
MP Physical Characteristics		The relevant physical characteristics of this Metering Point.
Connection Status		A code specifying if the installation of the Metering Point is physically connected to the grid and energy flow is possible.
Geographical Coordinate		The set of geographical coordinates of this Metering Point.
Latitude		The measure of the latitude as an angular distance north or south from the Equator meridian to the meridian of this Metering Point for this geographical coordinate. (Reference ISO 6709).
Longitude		The measure of the longitude as an angular distance east or west from the Greenwich meridian to the meridian of this Metering Point (Reference ISO 6709).
Altitude <sup>4</sup>	Gas	The measure of the altitude that reflects the vertical elevation of this Metering Point above a surface for this geographical coordinate (Reference ISO 6709).

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

<sup>4</sup> The altitude of the meter may be used in the gas sector for correction purposes.

Class/attribute	Sector <sup>3</sup>	Description
System		The unique identifier of the reference system used for measuring this geographical coordinate.
Metering Point Address		The address of the Metering Point.  May be repeated if more than one language is used nationally.
City Name		The name, expressed as text, of the city, town or village of 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. <sup>5</sup>
Postcode		The code specifying the postcode of this address.
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.
Country		The unique identifier of the country for this address (Reference ISO 3166 and UN/ECE Rec 3).
Address language		The language in which the address is specified.
Request update MP characteristics Additions		Information related to the document exchange, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Initiator.
Request update MP characteristics Async Additions		Information related to the document exchange, needed when using asynchronous communication.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

<sup>5</sup> The Building Number may include a “Building Number Extension”, such as one or more character making the address unique.

### 1.3.1.2. Request update MP characteristics (State Diagram)

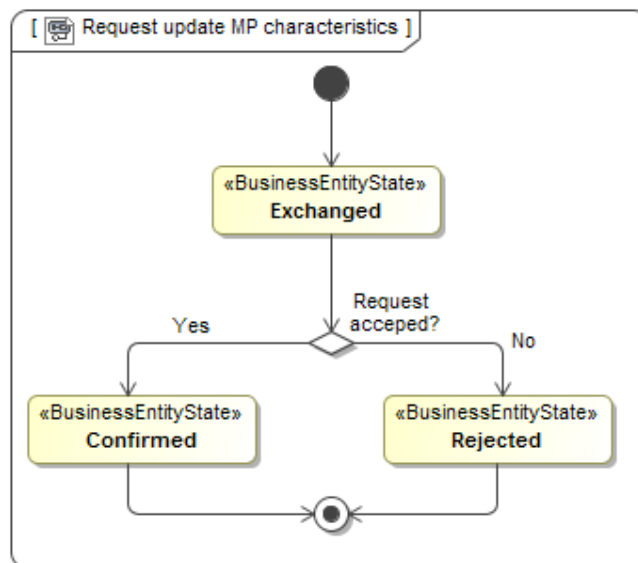


Figure 11 State Diagram Request update MP characteristics

### 1.3.2. Confirm request update of MP characteristics (Class Diagram)

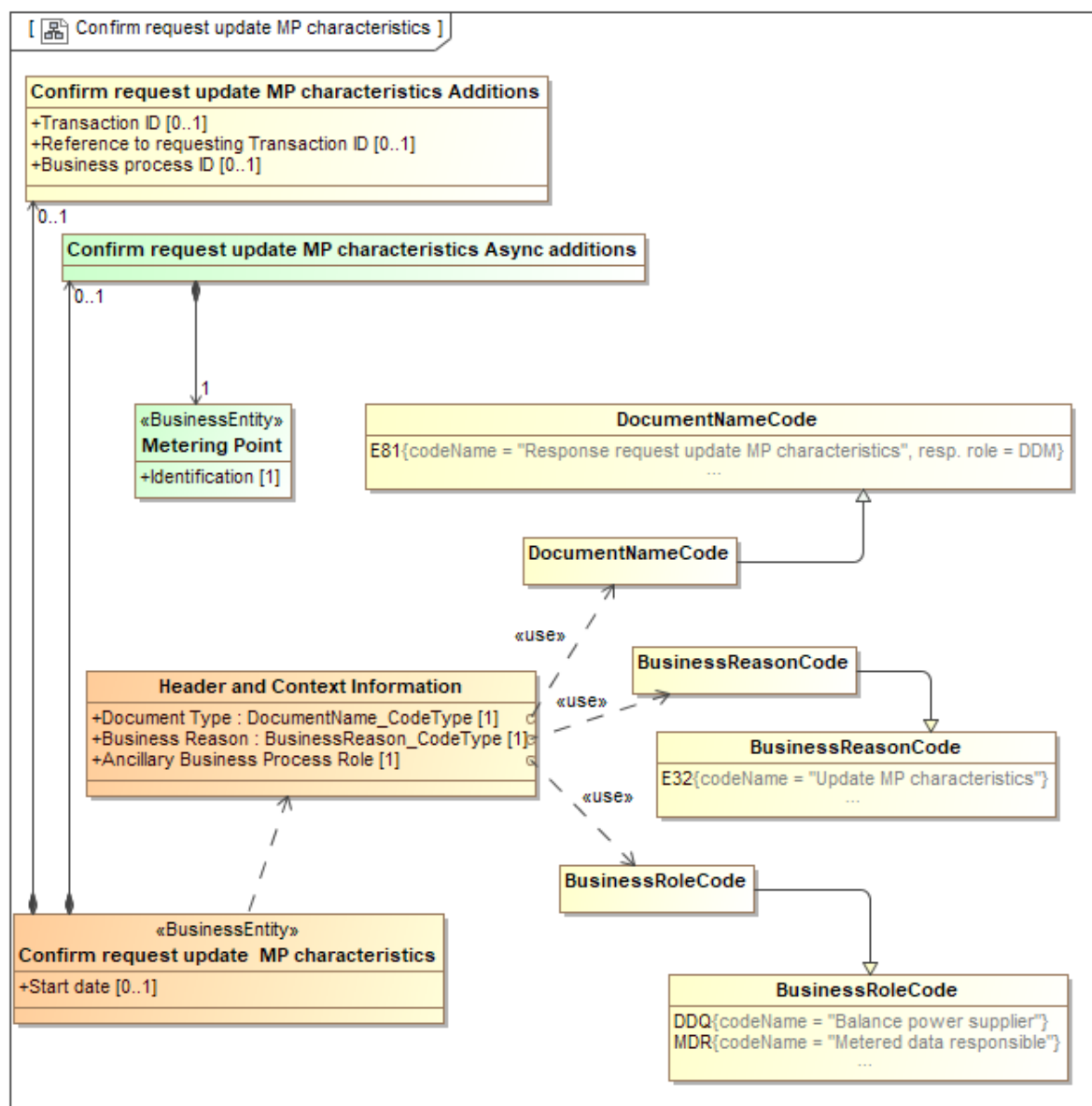


Figure 12 Confirm request update of MP characteristics

### 1.3.2.1. Element definitions, Confirm request update of MP characteristics

Class/attribute	Sector <sup>6</sup>	Description
«Business entity» Confirm request update MP characteristics		The information set to be sent from the Metering Point Administrator to the Initiator when confirming a request for update of Meter Metering Point characteristics.
Start date		The confirmed start date for this requested update. <b>Dependency:</b> <ul style="list-style-type: none"> <li>The usage of Start date is dependent on national rules.</li> </ul>
Confirm request update MP characteristics Additions		Information related to the document exchange, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Initiator.
Reference to requesting Transaction ID		The Transaction ID from the request.
Business process ID		The unique identification of the instance of the process that this transaction is a part of.
Confirm request update MP characteristics Async Additions		Information related to the document exchange, 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 update Metering Point characteristics is intended for.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

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

### 1.3.3. Reject request update MP characteristics (Class Diagram)

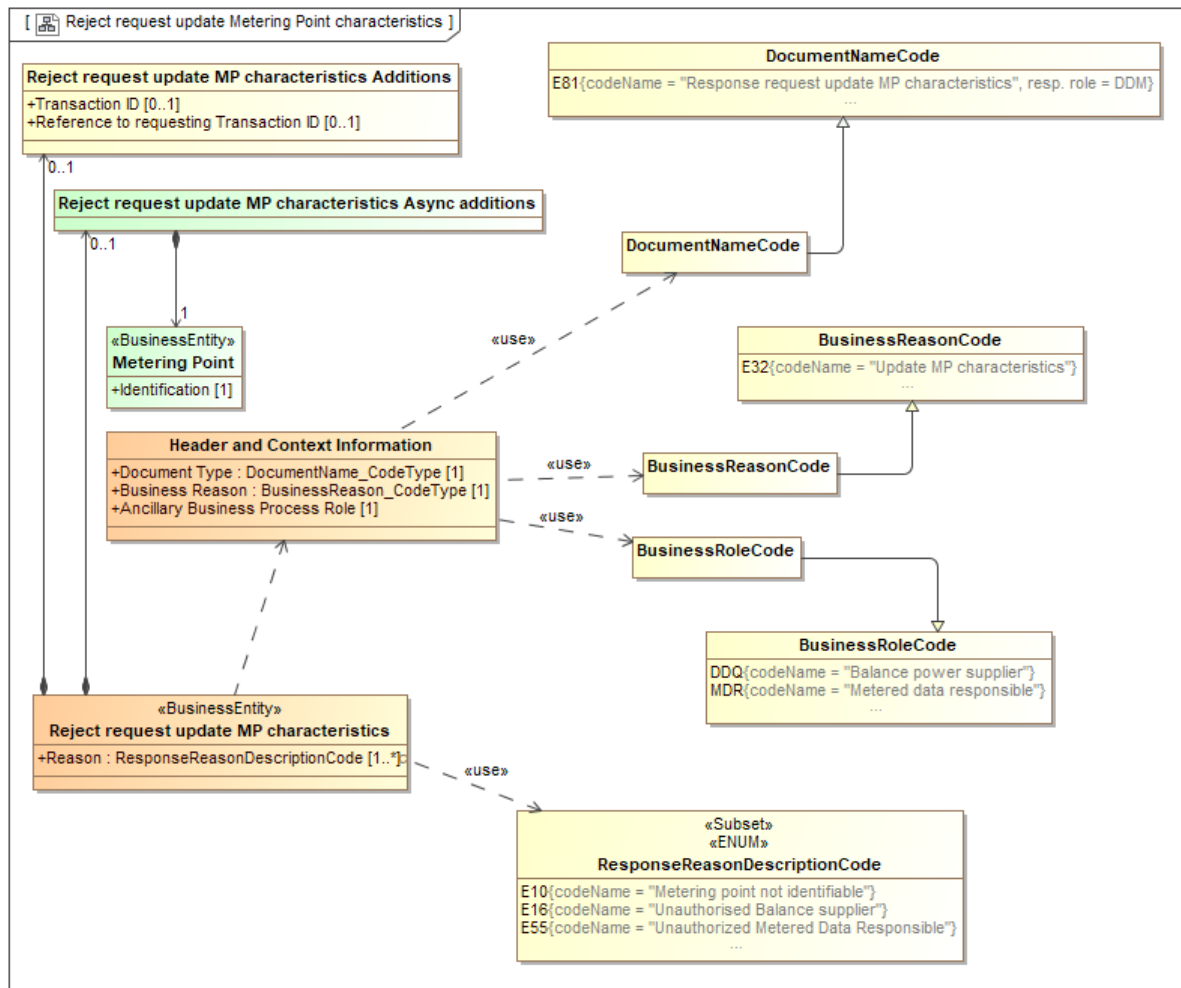


Figure 13 Reject request update MP characteristics



### 1.3.3.1. Element definitions, Reject request update MP characteristics

Class/attribute	Sector <sup>7</sup>	Description
«Business entity» Reject Request update MP characteristics		The information set sent from the Grid Access Provider to the Initiator, i.e. Balance Supplier or Metered Data Responsible when rejecting a request for update of Metering Point characteristics.
Reason		A code specifying (one of) the reason(s) for the rejection of the request for update of Metering Point characteristics.
«Business entity» Metering Point		An entity where energy products are measured or computed.
Identification		The unique identification of the Metering Point the rejected Request Metering Point characteristics was intended for.
Reject request update MP characteristics Additions		Additional information related to rejecting the request for update of Metering Point characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Metering Point Administrator.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the Initiator.
Reject request update MP characteristics Async Additions		Additional information, related to the rejection of the request for update of Metering Point characteristics, needed when using asynchronous communication.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

<sup>7</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.

The diagram illustrates the relationships between various entities and their attributes, organized into several main sections:

- Request change MP characteristics from GAP**: Includes Transaction ID [0..1] and Validity Start Date [1].
- Header and Context Information**: Includes Document Type : DocumentNameCode [1], Business Reason : BusinessReasonCode [1], and Ancillary Business Process Role : BusinessRoleCode [1].
- Metering Point**: Includes Identification [1].
- Metering Point Address**: Includes City Name [0..1], Street Name [0..1], Building Number [0..1], Postcode [0..1], Room Identification [0..1], Floor Identification [0..1], Country [0..1], and Address Language [0..1].
- Geographical Coordinate**: Includes Latitude [0..1], Longitude [0..1], Altitude [0..1], and System [0..1].
- Reconciliation Information**: Includes Product Type : EnergyProductIdentifier [1], Standard Load Profile [0..1], and Direction : MeteringPointTypeCode [0..1].
- Estimated Annual Volume**: Includes Quantity [1], Meter Time Frame Type : MeterTimeFrameCode [0..1], and Measure Unit : MeasurementUnitCommonCode [1].
- MP Physical Characteristics**: Includes Connection Status : PhysicalStatusCode [0..1], Disconnection Method : DisconnectionMethodCode [0..1], Capacity of the Metering Point [0..1], Capacity of the Metering Point Measurement Unit : MeasurementUnitCommonCode [0..1], Number Of Phases [0..1], Current Limitation [0..1], Current limitation Measure Unit : MeasurementUnitCommonCode [0..1], Voltage Level : VoltageLevelCode [0..1], and Pressure level : PressureLevelCode [0..1].
- MP Administrative Characteristics**: Includes Balance Group ID [0..1], Type Of Metering Point : MeteringPointTypeCode [1], Metering Method : MeteringMethodCode [1], Settlement Method : SettlementMethodCode [1], Scheduled Meter Reading Date [0..1], Meter Reading Periodicity [0..1], Metered Data Collection Method [0..1], Grid Agreement Type : GridAgreementTypeDescriptionCode [0..1], Contracted Connection Capacity [0..1], Contracted Connection Capacity Measure Unit : MeasurementUnitCommonCode [0..1], and Disconnection Contract : IndicatorType [0..1].
- Metering Grid Area**: Includes Identification [1] and MGA Name [0..1].
- Aggregated Reception Station**: Includes Identification [1].
- Calorific Value Area**: Includes Identification [1].
- Energy Label**: Includes Technology : EnergyGenerationTechnologyTypeCode [0..1] and Fuel [0..1].
- EnergyGenerationTechnologyTypeCode**: Includes T01 (Solar), T02 (Wind), T03 (Hydro), T04 (Marine), and T05 (Thermal).
- MeasurementUnitCommonCode**: Includes MAW (Megawatt), KWT (Kilowatt), MOH (Cubic Meter per Hour), Q37 (Standard cubic metre per day), Q38 (Standard cubic metre per hour), Q39 (Normalized cubic metre per day), Q40 (Normalized cubic metre per hour), and G52 (Cubic metre per day).
- VoltageLevelCode**: Includes E04 (High voltage), E05 (Medium voltage), E06 (Low voltage), E07 (High voltage / transformation), E08 (Medium voltage / transformation), and E09 (Low voltage / transformation).
- PressureLevelCode**: Includes E10 (Low), E11 (High), and E34 (Medium).
- PhysicalStatusCode**: Includes E22 (Connected), E23 (Disconnected), E30 (Under construction), and E31 (Demolished).
- DisconnectionMethodCode**: Includes E36 (Remote), E37 (Manual), E38 (Manual outside), and E39 (Manual inside).
- MeteringPointTypeCode**: Includes E17 (Consumption), E18 (Production), and E19 (Combined).
- MeteringMethodCode**: Includes C37 (Continuous), C38 (Non continuous), C16 (Not metered), and C24 (Calculated).
- SettlementMethodCode**: Includes S01 (Profiled) and S02 (Non profiled).
- MeteredDataCollectionMethodCode**: Includes D01 (Automatic (AMR)) and D02 (Manual).
- GridAgreementTypeDescriptionCode**: Includes E01 (Contract directly between Grid operator and Customer) and E02 (Contract between Supplier and Grid operator).

Relationships are indicated by dashed arrows labeled "use". The diagram also includes notes about enumerations valid for electricity (purple background) and gas (blue background).

**Figure 14** Request change MP characteristics from GAP

### 1.3.4.1. Element definitions, Request change MP characteristics from GAP

Class/attribute	Sector <sup>8</sup>	Description
«Business entity» Request change MP characteristics from GAP		The information set to be sent from a Content Responsible Role to the Metering Point Administrator when requesting change of Metering Point characteristics.
Validity start date		The date when the content of this business document becomes or became valid.
«Business entity» Metering Point		An entity where energy products are measured or computed.
Identification		The unique identification of the Metering Point the Request Metering Point characteristics is intended for.
Metering Point Address		The address of the Metering Point.  May be repeated if more than one language is used nationally.
City Name		The name, expressed as text, of the city, town or village of 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. <sup>9</sup>
Postcode		The code specifying the postcode of this address.
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.
Country		The unique identifier of the country for this address (Reference ISO 3166 and UN/ECE Rec 3).
Address language		The language in which the address is specified.
Geographical Coordinate		The set of geographical coordinates of this Metering Point.
Latitude		The measure of the latitude as an angular distance north or south from the Equator meridian to the meridian of this Metering Point for this geographical coordinate. (Reference ISO 6709).
Longitude		The measure of the longitude as an angular distance east or west from the Greenwich meridian to the meridian of this Metering Point (Reference ISO 6709).

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

<sup>9</sup> The Building Number may include a "Building Number Extension", such as one or more character making the address unique.

Class/attribute	Sector <sup>8</sup>	Description
Altitude <sup>10</sup>	Gas	The measure of the altitude that reflects the vertical elevation of this Metering Point above a surface for this geographical coordinate (Reference ISO 6709).
System		The unique identifier of the reference system used for measuring this geographical coordinate.
MP Administrative characteristics		The relevant administrative characteristics of this Metering Point.
Balance Group ID		The unique identification of the Balance Group to which this Metering Point belongs.
Type Of Metering Point		A code specifying the direction of the active energy flow in this Metering Point, such as consumption, production or combined.
Metering Method		A code specifying how the energy volumes are established for this Metering Point, such as continuous- non-continuous- or not-metered.
Settlement Method		A code specifying how the energy volumes are treated for settlement for this Metering Point, such as profiled or non-profiled. <sup>11</sup>
Scheduled Meter Reading Date		The indication of when the regular meter reading is scheduled.
Meter Reading Periodicity		The length of time between the meter readings.
Metered Data Collection Method		A code specifying how a Metered Data Collector collects data from the Meter for this Metering Point, such as Automatic or Manually.
Grid Agreement Type		Specification of type of grid contract, such as if the contract is directly between the Grid Access Provider and the Grid Customer, or through the Balance Supplier.
Contracted Connection Capacity		Quantitative information about the capacity of the connection that is contracted for the Metering Point.
Contracted Connection Capacity Measure Unit		The unit of measure used for the Contracted Connection Capacity.
Disconnection Contract		Disconnection Contract indicates if there is a contract at the Metering Point for disconnection as a result of the demand side management or the load management for this Metering Point. The element is Boolean and used for both gas and electricity.

<sup>10</sup> The altitude of the meter may be used in the gas sector for correction purposes.

<sup>11</sup> A profiled Metering Point is always a part of the reconciliation process as opposed to non-profiled.

Class/attribute	Sector <sup>8</sup>	Description
Energy Label		A class indicating the origin of the energy produced at this Metering Point
Technology		An indication of the technology of the energy production, or part of the energy production, that is potentially fed into the grid at this Metering Point.
Fuel		An indication of the fuel used for the energy production, or part of the energy production, that is potentially fed into the grid at this Metering Point.
«Business entity» Metering Grid Area	Elec	A Metering Grid Area is a physical area where consumption, production and exchange of (electrical) energy can be metered. It is delimited by the placement of meters for period measurement (continuous metering) for input to, and withdrawal from the area. It can be used to establish the sum of consumption and production with no period measurement (profiled metering points) and network losses.
Identification		The unique identification of the Metering Grid Area to which this Metering Point belongs.
Name		The name, in clear text, of the Metering Grid Area.
«Business entity» Aggregated Reception Station	Gas	An administrative entity that represents one or more reception (and distribution) stations for gas (which are physical installations). This entity functions as the exchange point between grids where calorific value and volumes are established.  Dependency: Use either Aggregated Reception Station or Calorific Value Area.
Identification		The unique identification of the Aggregated Reception Station to which this Metering Point belongs.
«Business entity» Calorific Value Area	Gas	A Calorific Value Area is a predefined set of Metering Points for which the same established calorific value is applied.
Identification		The unique identification of the Calorific Value Area to which this Metering Point belongs.
MP Physical Characteristics		The relevant physical characteristics of this Metering Point.
Connection Status		A code specifying if the installation of the Metering Point is physically connected to the grid and energy flow is possible.
Disconnection Method		The Disconnection Method is an indication of how the Metering Point is physically connected or disconnected.

Class/attribute	Sector <sup>8</sup>	Description
Capacity of the Metering Point		<p>Capacity of a Metering Point is the maximum physical capacity of the Metering Point.</p> <p>For electricity, the maximum capacity for the Metering Point is given in kW or MW or calculated from the nominal voltage level, number of phases and current limitations. The “Capacity of a Metering Point” can be sent as the calculated capacity in kW or MW and/or as a combination of:</p> <ul style="list-style-type: none"> <li>• Number of phases</li> <li>• Fuse size</li> <li>• Voltage level</li> </ul>
Capacity of the Metering Point Measure Unit		<p>The measure unit used for the capacity of the Metering Point.</p> <p>For gas the maximum capacity for the Metering Point is given in m<sup>3</sup>/hour, usually determined by the physical constraints of the (nozzles in the) Meter.</p>
Number of phases	Elec	The number of phases in the Metering Point, either 1 or 3.
Current limitation	Elec	The current limitation, i.e. maximum current or fuse size, for the Metering Point in Ampere
Current limitation Measure Unit	Elec	The measure unit used for the current limitation, i.e. Ampere
Voltage Level	Elec	A code specifying the voltage level of the grid where the installation of the Metering Point is connected.
Pressure level	Gas	A code specifying the gas pressure in the grid where the installation of the Metering Point is connected.
Reconciliation Information		Characteristics of the energy volume for this Metering Point for reconciliation purposes.
Product Type		A code specifying the energy product for the estimated annual volume.
Standard Load Profile		The standard load profile for this Metering Point.
Direction		A code specifying the direction of the energy in the estimated annual volume for this Metering Point, such as consumption or production.
Estimated annual volume		The energy volume used for profiled nomination and allocation for this Metering Point.
Quantity		The estimated annual volume for the specified time frame.
Meter Time Frame Type	Elec	A code specifying the tariff time frame for this estimated annual volume.
Measure Unit		The unit of measure used for the Estimated Annual Volume.

Class/attribute	Sector <sup>8</sup>	Description
Request change MP characteristics from GAP Additions		Information related to the document exchange, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Initiator.
Request change MP characteristics from GAP Async Additions		Information related to the document exchange, needed when using asynchronous communication.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

### 1.3.4.2. Request change MP characteristics from GAP (State Diagram)

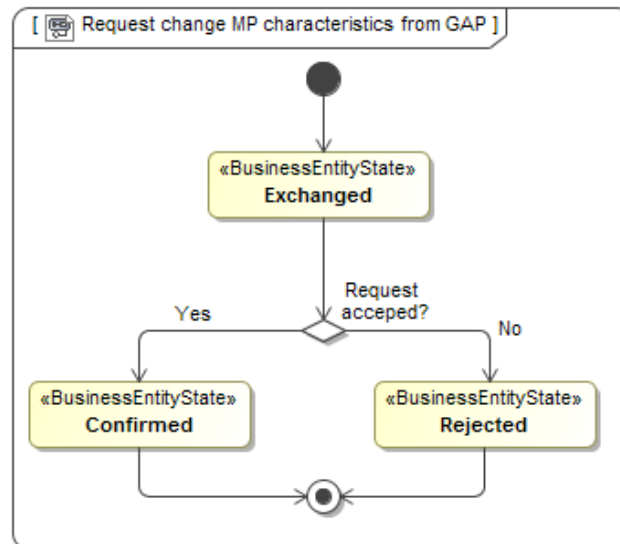


Figure 15 State Diagram: Request change MP characteristics from GAP

### 1.3.5. Confirm request change MP characteristics from GAP (Class Diagram)

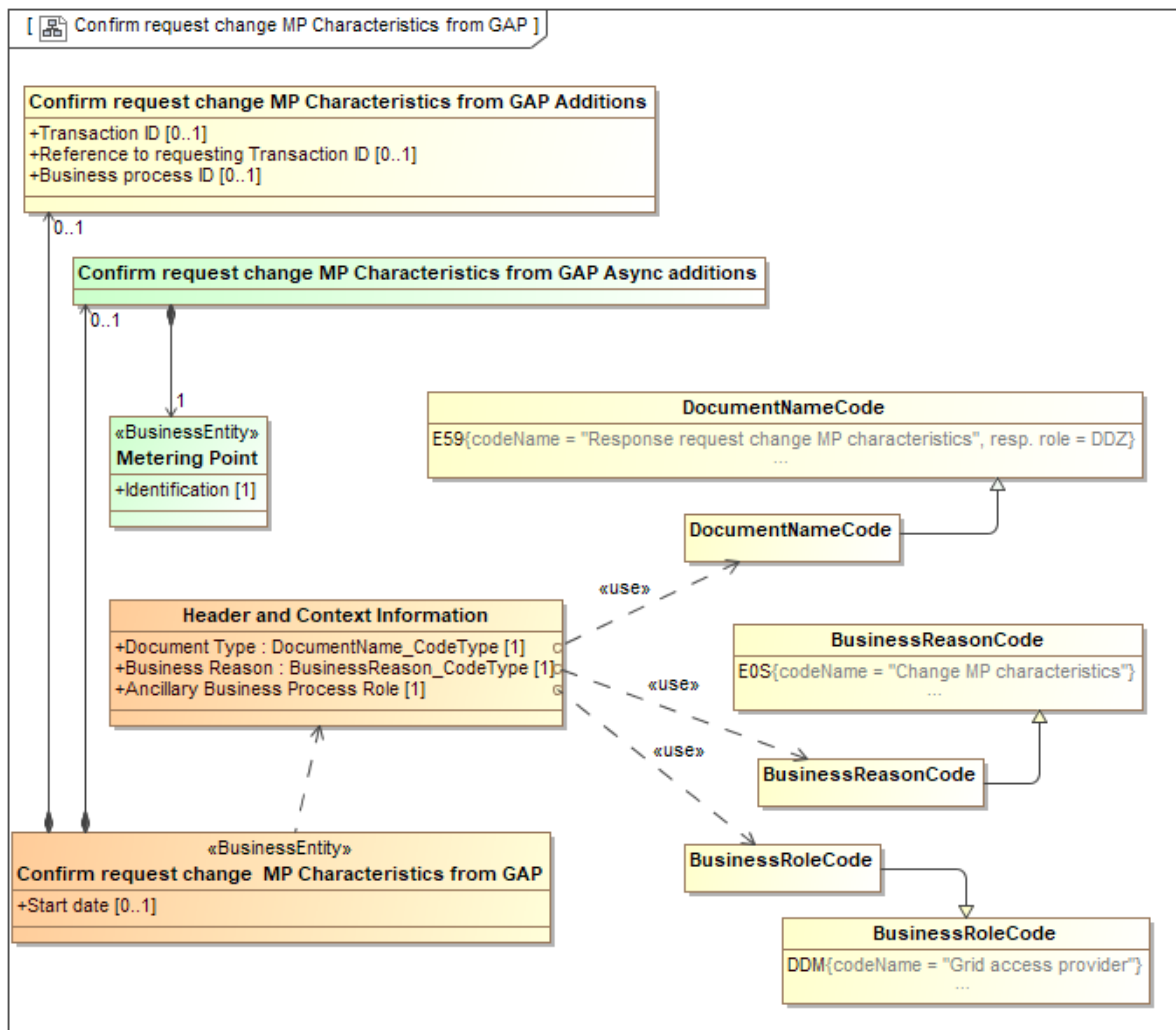


Figure 16 Confirm request change MP characteristics from GAP



### 1.3.5.1. Element definitions, Confirm request change MP characteristics from GAP

Class/attribute	Sector <sup>12</sup>	Description
«Business entity» Confirm request change MP characteristics from GAP		The information set to be sent from the Metering Point Administrator to the Content Responsible Role when confirming a request for change of Meter Metering Point characteristics.
Start date		The confirmed start date for this requested change. <b>Dependency:</b> <ul style="list-style-type: none"> <li>The usage of Start date is dependent on national rules.</li> </ul>
Confirm request change MP characteristics from GAP Additions		Information related to the document exchange, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Initiator.
Reference to Requesting Transaction ID		The Transaction ID from the request.
Business Process ID		The unique identification of the instance of the process that this transaction is a part of.
Confirm request change MP characteristics from GAP Async Additions		Information related to the document exchange, 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 change Metering Point characteristics is intended for.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

<sup>12</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.

### 1.3.6. Reject request change MP characteristics from GAP (Class Diagram)

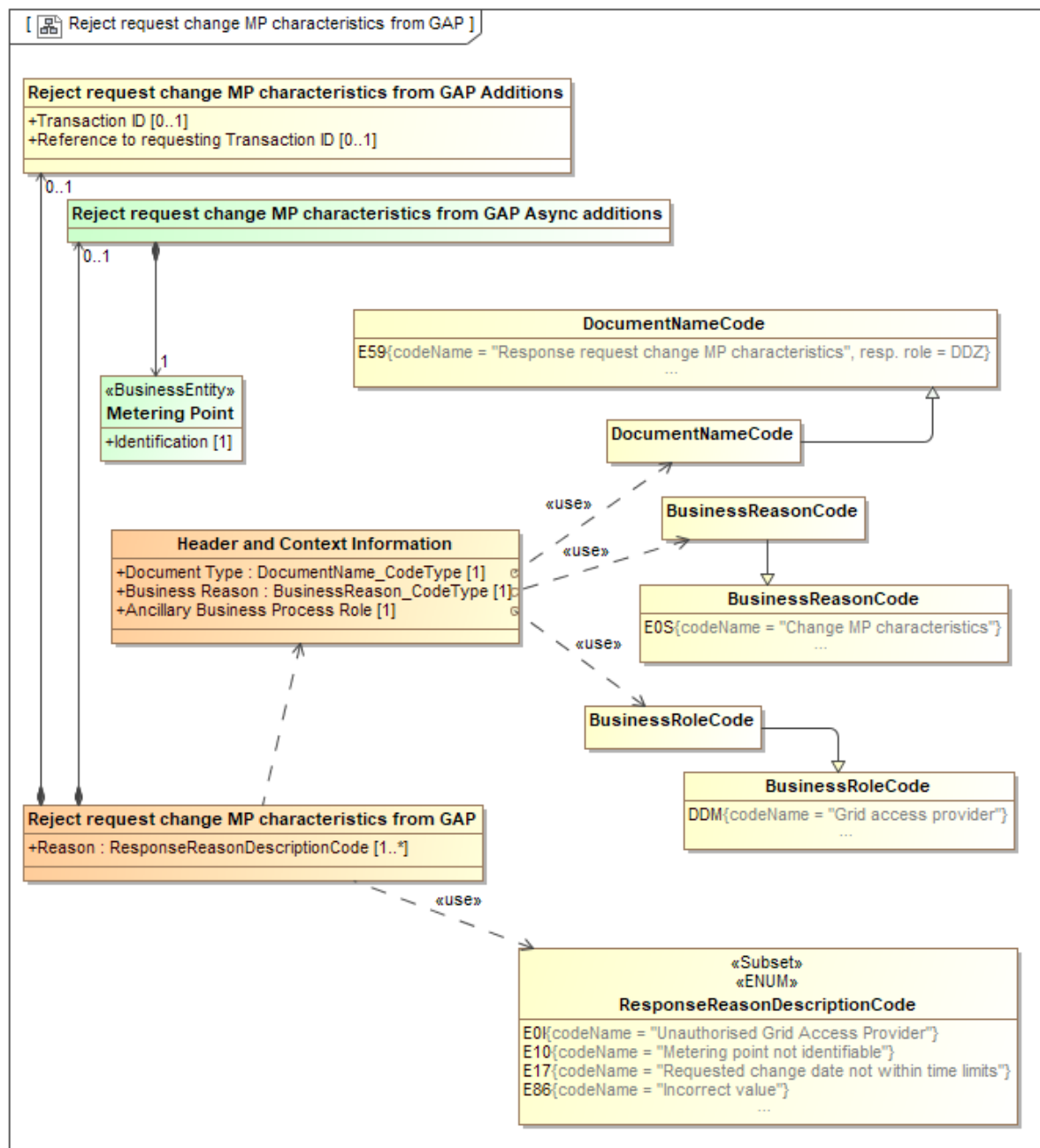


Figure 17 Reject request change MP characteristics from GAP

### 1.3.6.1. Element definitions, Reject request change MP characteristics from GAP

Class/attribute	Sector <sup>13</sup>	Description
«Business entity» Reject request change MP Characteristics from GAP		The information set sent from the Metering Point Administrator to the Content Responsible Role, i.e. Grid Access Provider, when rejecting a request for change of Metering Point characteristics.
Reason		A code specifying (one of) the reason(s) for the rejection of the request for change of Metering Point characteristics.
Reject request change MP Characteristics Additions		Additional information related to rejecting the request for change of Metering Point characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Metering Point Administrator.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the Initiator.
Reject request change MP Characteristics Async Additions		Additional information, related to the rejection of the request for change of Metering Point 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 rejected Request Metering Point characteristics was intended for.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

<sup>13</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.

### 1.3.7. Request change MP characteristics from Balance Supplier (BS) (Class Diagram)

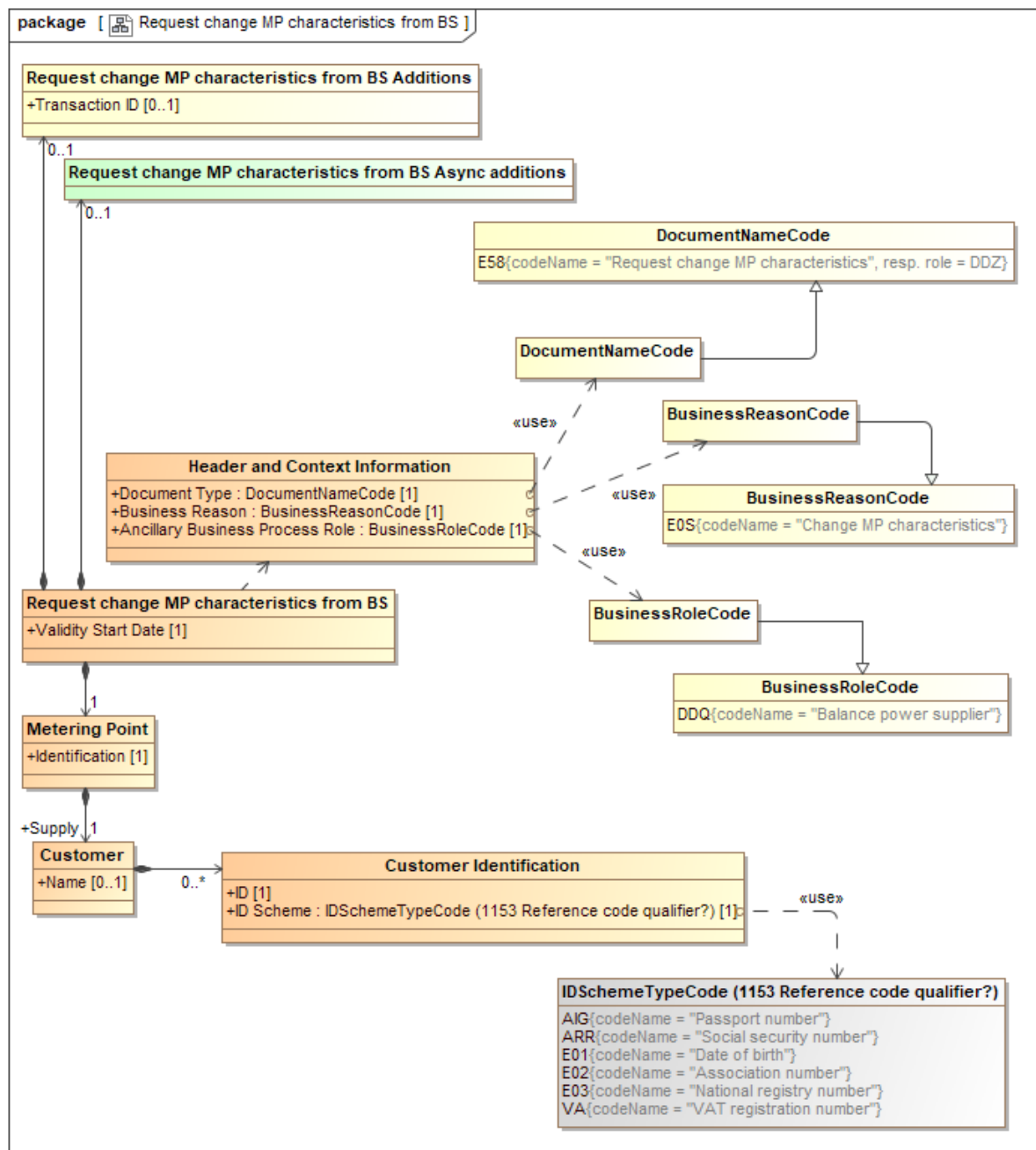


Figure 18 Request change MP characteristics from BS

### 1.3.7.1. Element definitions, Request change MP characteristics from BS

Class/attribute	Sector <sup>14</sup>	Description
«Business entity» Request change MP characteristics from BS		The information set to be sent from a Content Responsible Role to the Metering Point Administrator when requesting change of Metering Point characteristics.
Validity start date		The date when the content of this business document becomes or became valid.
«Business entity» Metering Point		An entity where energy products are measured or computed.
Identification		The unique identification of the Metering Point the Request Metering Point characteristics is intended for.
Supply Customer		The Customer that has the contract for supply of energy for this Metering Point
Name		The name of this Supply Customer
Customer Identification		The Identification of a Customer
ID		The unique identification of the Customer at the Metering Point.
ID Scheme		The Identification scheme used for the identification of the Customer in question
Request change MP characteristics from BS Additions		Information related to the document exchange, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Initiator.
Request change MP characteristics from BS Async Additions		Information related to the document exchange, needed when using asynchronous communication.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

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

### 1.3.7.2. Request change MP characteristics from BS (State Diagram)

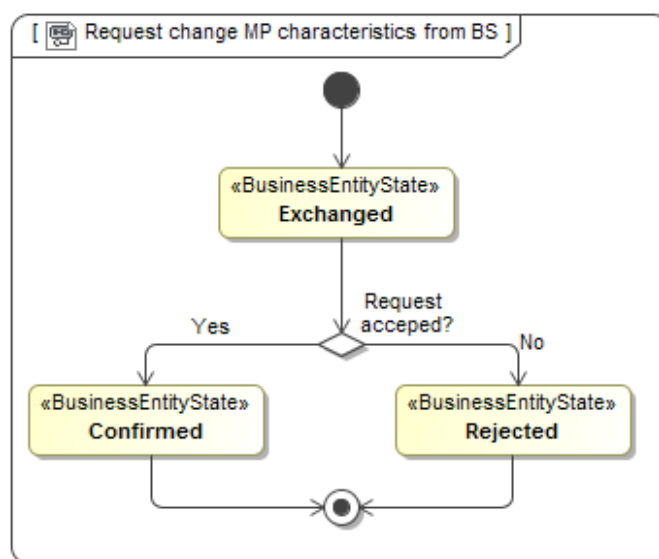


Figure 19 State Diagram Request change MP characteristics from BS

### 1.3.8. Confirm request change MP characteristics from Balance Supplier (Class Diagram)

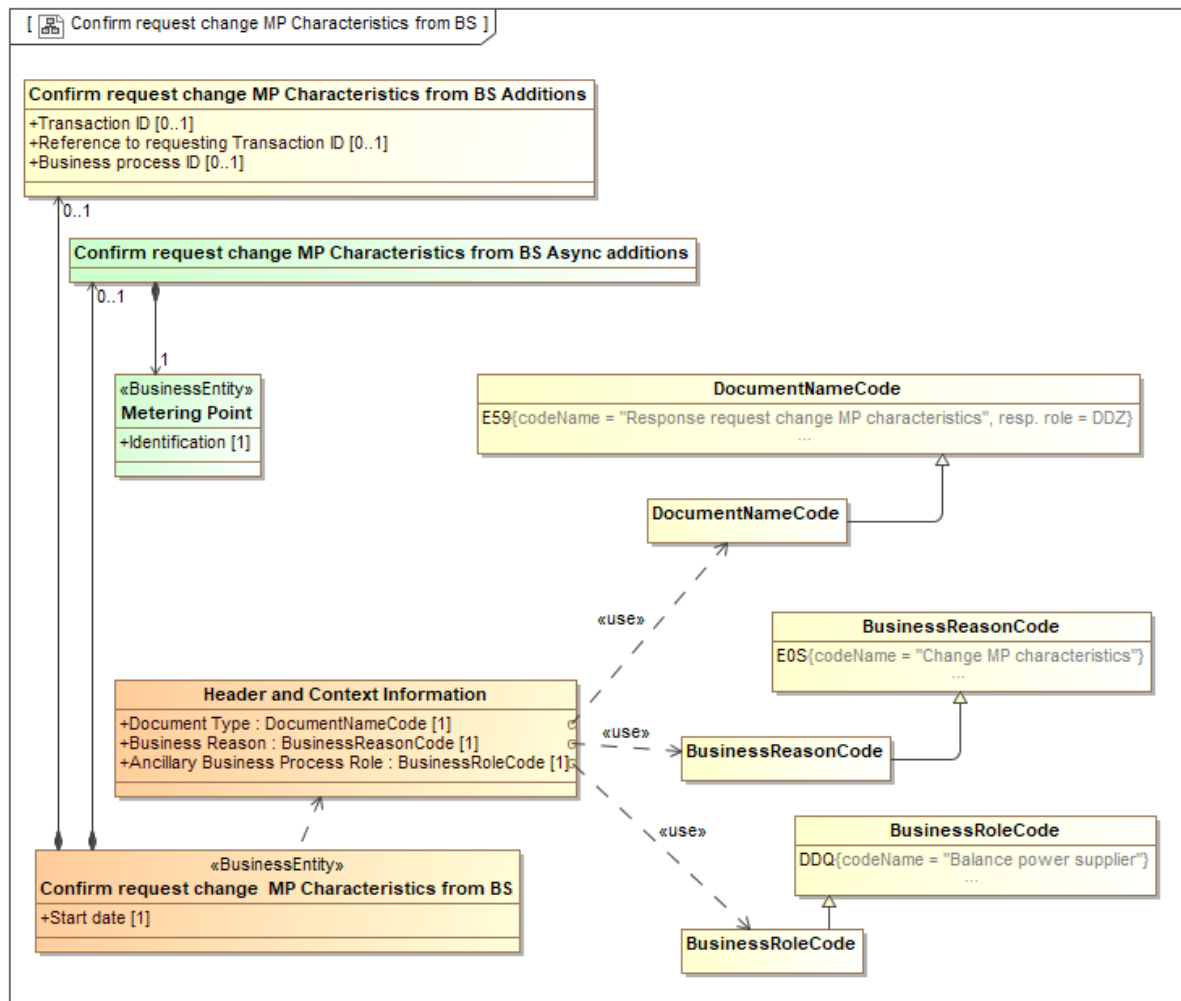


Figure 20 Confirm request change MP characteristics from Balance Supplier

### 1.3.8.1. Element definitions, Confirm request change MP characteristics from Balance Supplier (BS)

Class/attribute	Sector <sup>15</sup>	Description
«Business entity» Confirm request change MP characteristics from BS		The information set to be sent from the Metering Point Administrator to the Content Responsible Role when confirming a request for change of Metering Point characteristics.
«Business entity» Metering Point		An entity where energy products are measured or computed.
Identification		The unique identification of the Metering Point the request change Metering Point characteristics is intended for.
Confirm request change MP characteristics from BS Additions		Information related to the document exchange, to be agreed on a national level.
Transaction ID		The unique identification of this set of information, given by the Initiator.
Reference to Requesting Transaction ID		The Transaction ID from the request.
Business Process ID		The unique identification of the instance of the process that this transaction is a part of.
Confirm request change MP characteristics from BS Async Additions		Information related to the document exchange, needed when using asynchronous communication.
Start Date		The confirmed start date for this change.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

<sup>15</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.



### 1.3.9. Reject request change MP characteristics (Class Diagram)

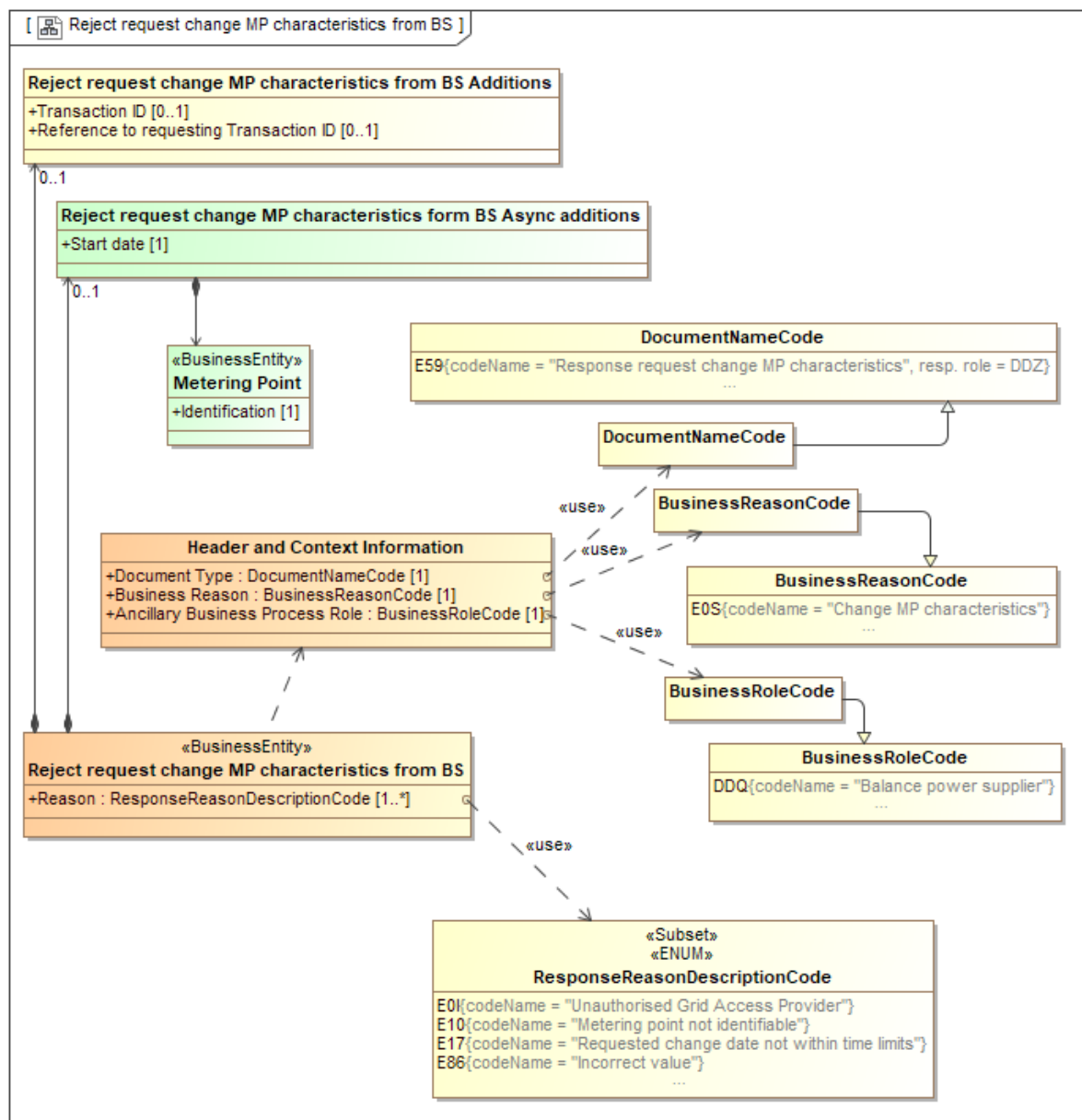


Figure 21 Reject request change MP characteristics from BS

### 1.3.9.1. Element definitions, Reject request change MP characteristics from BS

Class/attribute	Sector <sup>16</sup>	Description
«Business entity» Reject request change MP Characteristics from BS		The information set sent from the Metering Point Administrator to the Content Responsible Role, i.e. Balance Supplier, when rejecting a request for change of Metering Point characteristics.
Reason		A code specifying (one of) the reason(s) for the rejection of the request for change of Metering Point characteristics.
«Business entity» Metering Point		An entity where energy products are measured or computed.
Identification		The unique identification of the Metering Point the rejected Request Metering Point characteristics was intended for.
Reject request change MP Characteristics from BS Additions		Additional information related to rejecting the request for change of Metering Point characteristics, to be agreed on a national level.
Transaction ID		The unique identification of this set of information given by the Metering Point Administrator.
Reference to requesting Transaction ID		The Transaction ID from the request, where this is the response for, given by the Initiator.
Reject request change MP Characteristics from BS Async Additions		Additional information, related to the rejection of the request for change of Metering Point characteristics, needed when using asynchronous communication.
Header and Context Information		The set of information specifying the information to be added to this payload 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 role responsible for the process/this exchange.

<sup>16</sup> It is assumed that Metering Points are uniquely dedicated to either electricity or to gas.