


<b>Minutes CuS meeting, February 2<sup>nd</sup> and 3<sup>rd</sup>, 2015</b>	 <b>European forum for energy Business Information eXchange</b>
February 4 <sup>th</sup> , 2016	CuS, Structuring of the energy market, phase V

## Minutes – CuS project meeting

**Date:** Tuesday and Wednesday February 2<sup>nd</sup> and 3<sup>rd</sup>, 2015  
**Time:** 09:00 – 17:00 (18:00?) and 9:00 – 16:00  
**Place:** Fingrid's offices in Helsinki  
**Present:** Christian, DK  
Emma, SE  
Gerrit, NL  
Grazyna, PL  
Joachim, DE  
Kees, NL  
Minna, FI  
Ove, NO  
**Appendix A** CuS Work plan  
**Appendix B** How to link the Customer characteristics and the MP characteristics  
**Appendix C** Supplier Centric Billing (skeleton)  
**Appendix D** Change of MP attributes



Switch of Grid  
v0.1.pptx

**Attachments:** , see item 10, Preparations for start of “Switch of grid”

### 1 Approval of agenda

The agenda was approved.

### 2 Approval of minutes from previous meeting

The minutes from previous meeting was approved with the following comments:

- A clarification was added to the text in chapter 6, i.e.:

Preben had as action item from previous meeting to make a list of technology and fuel codes used in Denmark. Thereafter Kees and Preben would come up with a proposal for which codes to add to the ebIX® model. However, the list represents the codes used in Denmark today and the codes are not necessarily those that will be used in other countries. Hence, it was decided to say the **subset of the** codes should be agreed on a national bases.

### 3 Status for publication of CuS BRs and BIMs

The BRS for cancellations has been published at the ebIX® web-site.

*Actions from previous meeting:*

- Ove will put the BRS for alignment of MP characteristics and the BRS for alignment of meter characteristics on a Dropbox page after the meeting and send the link to Kees, see <https://www.dropbox.com/sh/wng67a18157cfr7/AAAz5Rcdir6JWlghCrdtX9Gaa?dl=0>;
- Kees will as former secretary in the ebIX® gas working group forward the link to the gas working group and ask them to review the gas part of the BRSs, for four weeks.
- Ove will send the document on circulation for comments to ebIX® Forum after the gas group has reviewed the document, unless the gas group comes up with blocking comments.

Since there were several comments to the BRS from the gas-group, see blow, the circulation for comments to ebIX® Forum was postponed.

#### 4 BRS for alignment of Meter Characteristics

Ove had as action from previous meeting to send the document on circulation for comments to ebIX® Forum after the gas group has reviewed the document, unless the gas group comes up with blocking comments. However, Lisbeth Frausing from DONG Energy came up with the following comment:

- **Alignment of Meter characteristics:** in the class diagram (1.4.1). I'm not sure that I understand the connection between meter and converter in the diagram in relation to gas. When there's a meter/converter relation it's normally 2 separate units with 2 different properties where the converter is the "billable" unit. Is it implied in the diagram, that the converter then overtakes the characteristics that's in the box for the meter? I get a bit confused because there's a box for converter saying that has to be defined nationally.

The BRS was reviewed and the following comments were made:

- The Converter is meant used for electricity ;
- Does the Converter have to be a "physical box"? Can it for instance be a "piece of software with a conversion factor"?

During the review it was noted that the datatype (BDT) of the coded attributes in the CuS BRSs sometimes is the BDT and sometimes the enumeration itself. Kees explained that he uses the enumeration in the EMD BRSs. The BDT shall only be used in the BIMs.

Circulation of the BRS to ebIX® Forum was postponed.

#### Action:

- All, especially Boštjan and Torleif, are asked to come up with better definition of the Converter, such as:
  - What is the use of the factor?
  - Is it a separate "physical box"?
  - Is it only used by the electricity sector, or also by the gas sector?
  - Current definition: *A unit that convert the voltage and/or current in order to enable measurement with a factor.*
- Ove will change the type of the coded attributes to be the enumeration itself, instead of the BDT (....Type).

#### 5 BRS for alignment of Metering Point Characteristics

Ove had as action from previous meeting renamed Business Entity View to Business Data View and remove most of the text, only referencing the Introduction to ebIX® Models. Further Ove had as action to send the document

on circulation for comments to ebIX® Forum after the gas group has reviewed the document, unless the gas group came up with blocking comments. However, Lisbeth Frausing from DONG Energy came up with the following comment:

- **Alignment of Metering Point characteristics:** in the class diagram (1.4.1) in Measurement Unit Common Code Cubic Meter is only per hour and not also per day as standard cubic metre and normalized cubic metre are. Why is that?

The BRS was reviewed and it was questioned if anybody are using cubic meter, or is it enough with standardised and normalised cubic meter? Gerrit verified in the Netherlands and they use all three (cubic meter per hour, standardised cubic meter per hour and normalised cubic meter per hour).

Circulation of the BRS to ebIX® Forum was postponed until the action item is answered.

Based on ETC comments the following changes was made:

- Addition of an attribute “Number of phases”;
- Addition of an attribute “Current limitation”;
- Specified that the address language shall be “ISO 639-1 two digit language code”.

Kees distributed during the meeting an overview over requested codes for REC20 for Utilities:

	Code requested	Description	Present as	Not present in rev11e2015
1.	NM3	Normalised cubic metre	NM3	
2.	SM3	Standard cubic metre	SM3	
3.	Q32	Standard cubic metre per day	Q37	
4.	Q33	Standard cubic metre per hour	Q38	
5.	Q34	Normalized cubic metre per day	Q39	
6.	Q35	Normalized cubic metre per hour	Q40	
7.	Q36	kilo Watt hour per normalized cubic metre		X
8.	Q37	kilo Watt hour per standard cubic metre		X
9.	Q38	Joule per normalised cubic metre		X
10.	Q39	Joule per standard cubic metre		X

Remark:

We noticed that the codes Q32 – Q36 are already in use at the moment. So we understand, that for these codes alternatives had to be found. But we cannot find the alternatives in the published rec20-rev11e2015.xls. Given the change from code Q32 to code Q37 one would expect codes Q41 – Q44 to be assigned to the now missing codes.

The following codes are already present:

**MQH** cubic meter per hour  
**G52** cubic meter per day

**Conclusion** (copied from item 6, BRS for alignment of Customer master data – to be further discussed):

- Mandates should be registered, where there is a link between the MP and the Customer, i.e. either in the MP register or in a separate contract register.
  - A Customer can mandate a party, earliest from the move-in date.

**Action:**

- Gerrit will find extra information (use, definition, examples) for next meeting (for next version of the BRS) related to:
  - Max consumption (for large users);
    - From Gerrit after the meeting:

Max consumption is used for gas: it is the max gas flow (m3/hr) of the last three years used for gas transport tariffing. So potentially typical Dutch.
  - Type of connection (normal, special, etc.).
- Ove will clean up the class diagrams in the BRS.

## 6 BRS for alignment of Customer master data

Ove had as actions from previous meeting cleaned up the BRS, including the attributes and related definitions.

Ove had also an action item to make a small discussion document on how to link the Customer characteristics and the MP characteristics, see Appendix B.

The need for linking the Customer characteristics and the MP characteristics caused a longer discussion:

- In the current ebIX® model the main master data register is the Metering Point register. It was questioned if we need to introduce a new Customer register in addition;
- Do we need a “Customer move in date”? I.e. to be able to verify how long back in time the Customer and others, such as third parties, can get historical metered data;
- Do we need a mandate register? I.e. a register showing which parties that can request historical metered data from the MP, on behalf of the Customer;
- Gerrit mentioned that there might be a privacy issue, i.e. that it may be illegal to exchange Customer information. There has been an ongoing debate in the Netherlands for several years and currently there are no information exchange of Customer contact information between the DSOs and the BSs;
  - This is coming from an EU directive that is valid without any need for updating national regulations, called “The data protection act, directive or something similar”.

**Conclusion (to be kept in the coming agenda):**

- 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;
- When there is a unique Customer ID, there are no basic differences between Customer master data and “party master data”;
- Mandates should be registered, where there is a link between the MP and the Customer, i.e. either in the MP register or in a separate contract register. This conclusion is most relevant for the MP Characteristics and will be further discussed under BRS for alignment of MP characteristics;
  - A Customer can mandate a party, earliest from the move-in date.
- For clustering of MPs belonging to one Customer, we use the MP register, but it does not seem to be needed to exchange this information in any document exchange.

**Action:**

- Kees will contact GS1 and Ove will contact colleagues with knowledge of other markets (finance, trade, health care....) , asking for how alignment of party master data (market parties, similar to suppliers and traders) is handled

ETC had proposed a set of changes, mainly addition of codes, which was postponed until next meeting.

## 7 Request change of attributes connected to a MP

Ove had as homework made a first draft BRS for change of MP characteristics. The BRS should be based on “change BRS principles”, i.e. request change of MP characteristics with a response (confirm and reject), and possible notifications to Affected Roles.

The attributes in Appendix D was gone through and the following MP characteristics were picked as changeable:

- Metering Point Address (MDR/BS);
- Geographical Coordinates (MDR/BS);
- Metering Method (BS);
- Meter Reading Periodicity (BS).

In addition the following attributes were wanted only by the Netherlands:

- Settlement method (BS);
- Scheduled Meter Reading Date (BS);
- (Physical Status Of Metering Point) (BS);
- Metered data collection method (BS);
- Estimated annual Volume and related Meter Time Frame Type (BS).

Further, the following processes were proposed as candidates for a special process and added to the work-list:

- End of balance responsibility;
- “Request action”, such as disconnect MP, read meter, ....;
- Meter reading (meter stand) from the Customer sent in via the BS.

### **Action:**

- All are asked to review the list of attributes wanted from the Netherlands, i.e. to see if there is a national need for a request to change:
  - Settlement method (BS);
  - Scheduled Meter Reading Date (BS);
  - (Physical Status Of Metering Point) (BS);
  - Metered data collection method (BS);
  - Estimated annual Volume and related Meter Time Frame Type (BS).
- Ove will update the BRS:
  - There will be separate request for the four attributes;
  - There will be a confirmation without the changed attributes;
  - There will be MP characteristics to the requestor and other affected roles;
  - The following attributes can for the time being be changed:
    - Metering Point Address (MDR/BS);
    - Geographical Coordinate (MDR/BS);
    - Metering Method (BS);
    - Meter Reading Periodicity (BS).

## 8 Combined grid and supply billing

Kees had as actions from previous meeting made a first skeleton for “Supplier centric billing”, see Appendix C.

From discussion:

- Preconditions:

- Metered data are available for both the DSO and the BS;
- The tariffs, fees and subscriptions are available on web or similar;
- It is a “subcontractor model”:
  - A “subcontractor model” (also called wholesale model) where the Supplier bills the Customer for the whole cost, both grid and energy cost. The grid cost is settled between the DSO and the Supplier, independent of the settlement with the Customer;
  - A “power of attorney model” where the DSO still owns the debt against the customer, even if the grid cost is billed by the supplier.
- The UseCase Align Master Data Product mainly contain exchange of tariffs;
- The UseCase Money Transfer Grid Cost is invoicing of the grid cost from the DSO to the BS. The name is chosen to avoid all the restrictions that apply to a formal invoice;
- The first BRS was suggested to be limited to combined billing of households;
- Kees took up the question where the process should be modelled, in CuS or EMD. Kees thinks that the Customer Billing and Money Transfer Grid Cost UseCases should be modelled in EMD, since this is “transaction data”. Align Master Data Product and Align Master Data Party are related to master data and should be modelled in CuS;
- It was proposed to rename the UseCase “Money Transfer Grid Cost” to “Grid Cost Billing” or something better explaining the content of the process. However, the UseCase was renamed to “Procurement Billing Data Aggregated per Supplier”.

#### **Conclusions:**

- We will start with the UseCases:
  - Customer Billing;
  - Procurement Billing Data Aggregated per Supplier (Money Transfer Grid Cost).
- If the UseCases “Customer Billing” and “Procurement Billing Data Aggregated per Supplier” will be transferred to EMD will be dependent on the EMD discussion at the ebIX® forum meeting in March.

#### **Action:**

- Kees will make a small document with updated UseCases, preconditions etc., which we will hand over to EMD, if ebIX® Forum agree to do the modelling in EMD.

## **9 Preparations for start of “interfering processes”**

Gerrit, Thibaut and Christian had as homework from previous meeting sent the Dutch, Belgian and the Danish descriptions, while Emma and Ove presented Swedish and Norwegian descriptions at the meeting. However, all the inputs have different structures, hence it was difficult to combine them in one document.

It was agreed to use “Intersecting processes” instead of “interfering processes”.

#### **Conclusion:**

- We use the Dutch proposal as a basis for an ebIX® proposal for handling of intersecting processes;
- National processes only used in one country will not be present in the ebIX® proposal, such as:
  - Move out from MP reported to DSO in Norway.

#### **Action:**

- All are asked to review the Dutch proposal on intersecting processes and make comments and additions to it based on national rules and needs.

## 10 Preparations for start of “Switch of grid”

Gerrit showed a PowerPoint presentation explaining the consequences found after the move of MPs between MGAs in the Netherlands. The presentation is attached.

Discussion:

- The intention with the process is to exchange a document on a Metering Point level, where the relevant MPs are sent together with its new MGA;
- Emma proposed to make a list over events that can happen, such as a merger of two companies, and show which processes (BRSs) that are affected by the event.

During this item it was proposed making a new BRS for switch of Grid Access Provider (GAP). A request/confirm process sent from the Old GAP (should it be the New GAP?) to the Metering Point Administrator (MPA) with a notification (MP characteristics) to affected roles.

Further, the switch of grid process led to the proposal of reviewing already published and draft BRSs to see if there is a need to add notifications or other exchanges from the MPA to the GAP, especially useful when there is a data hub handling the MP register.

**Action:**

- Ove will make a first draft of a new BRS for switch of Metering Grid Area. A request/confirm process sent from the Old GAP to the Metering Point Administrator (MPA) with a notification (MP characteristics) to affected roles.
- Emma will make a list over events that can happen, such as a merger of two companies, and show which processes (BRSs) that are affected by the event.

## 11 Preparations for “MPs having multiple parties with similar roles, e.g. a MP with different BRPs for production and consumption”

Metering Points with several suppliers was assumed to be non-existent, i.e. if there are different suppliers for production and consumption, the MP should be split into two MPs. The same apply for MPs having several BRPs. The item was closed.

## 12 Meeting schedule

- Wednesday June 1<sup>st</sup> and Thursday June 2<sup>nd</sup> in Berlin;
- Wednesday September 7<sup>th</sup> and Thursday September 8<sup>th</sup> in Poland;
- Tuesday November 22<sup>nd</sup> and Wednesday November 23<sup>rd</sup> Belgium or Slovenia.

## 13 AOB

## Appendix A CuS Work plan

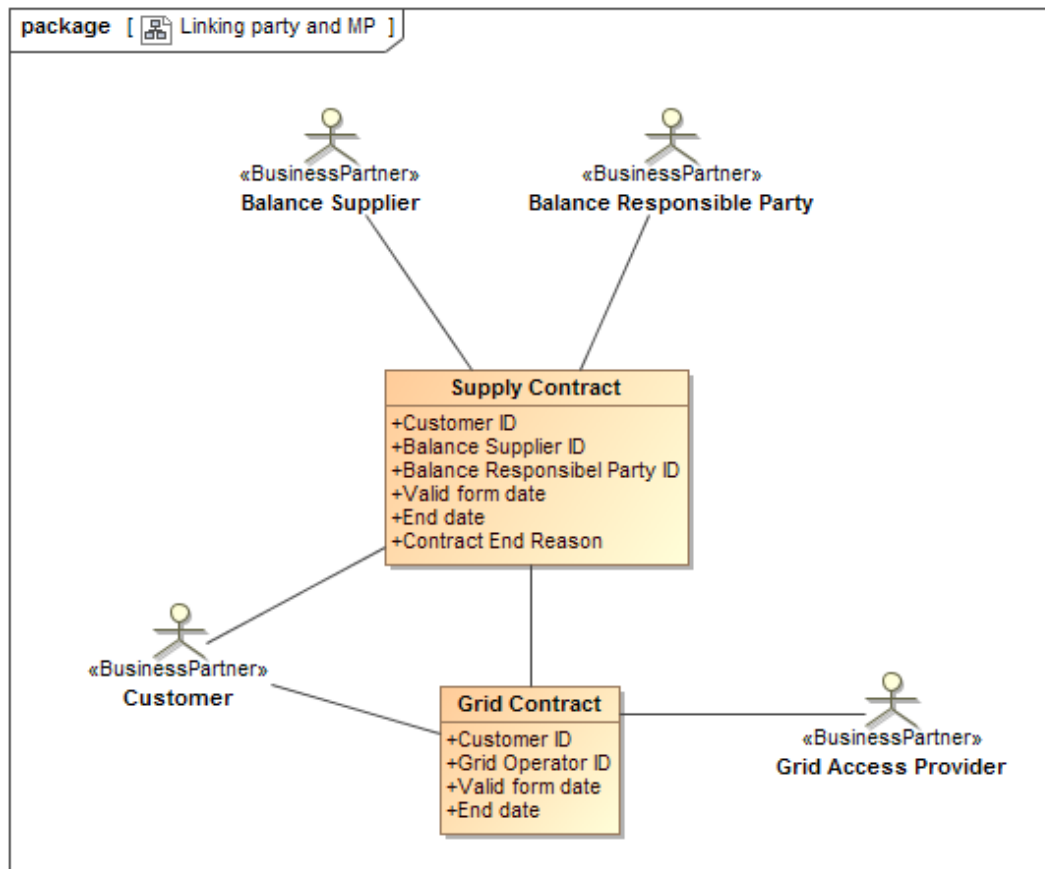
#	Activity	Priority	Start	End
A)	Master data for parties, both for the actors in the energy industry, such as BRPs and BSs, and the PCG, including how to handle the different attributes related to the Consumer, such as consumer contact information (e.g. address and invoice address).	1 <sup>st</sup>	Q4/2014	Q4/2015
B)	Request change of attributes connected to a MP, such as Closing and Reopening MPs, Change of Metering Method and Change of time frames	2 <sup>nd</sup>	Q1/2015	Q4/2015
C)	Combined grid and supply billing (invoicing), including MD for products, such as; grid fees, grid subscriptions, ...	3 <sup>rd</sup>	Q2/2015	Q2/2016
D)	Interfering processes – a matrix of processes with priorities, when a given process is interfered by another, such as when a customer move comes in the middle of a change of supplier process.	4 <sup>th</sup>	Q2/2015	Q3/2016
E)	“Switch of grid”, for instance a part of a Metering Grid Area (MGA), such as a village, that is transferred from one GAP and MGA to another	5 <sup>th</sup>	Q3/2015	Q2/2016
F)	MPs having multiple parties with similar roles, e.g. a MP with different BRPs for production and consumption	6 <sup>th</sup>	Q4/2015	Q4/2016
G)	Change of BRP in Metering Grid Area, “Price Area” or country (not at MP level) (Proposed by DK), i.e. a “bulk change of BRP (and/or BS?)”	7 <sup>th</sup>	TBD	TBD
H)	Efficient data alignment, including the possibility to request historical and/or future master data.	8 <sup>th</sup>	TBD	TBD
I)	Master data for domains, such as which MGAs that belongs to a MBA and related characteristics of these domains	Awaiting network codes from ENTSO-E	TBD	TBD
J)	New processes for “demand/response”, which may add new tasks for the MDA	Awaiting EMD survey and ebIX® Forum decision	TBD	TBD
K)	Combined switch documents and related customer master data	Awaiting “Master data for parties”	TBD	TBD
L)	Review of published BRs: <ul style="list-style-type: none"> <li>The MP parties will be linked to the MP instead of the “document”, to be in line with BIM and CIM</li> </ul>	TBD	TBD	TBD
M)	Handling of “Installation Metering Points” and/or fields (may be related to the item above)	TBD	TBD	TBD
N)	“Life cycle of a MP”, including how technical events interact with administrative processes and responsibilities	TBD	TBD	TBD
O)	Request for services. The item concerns chargeable and non-chargeable requests from BS, third parties etc. to the DSO for changes to a MP or a Meter, such as: <ul style="list-style-type: none"> <li>Request for metered data from third parties</li> <li>“Request action”, such as disconnect MP</li> <li>Request to read meter</li> </ul>	TBD	TBD	TBD



P)	<p>The possible role of a datahub in the processes (Proposed by DK)</p> <ul style="list-style-type: none"> <li>• Seen from the supplier side</li> <li>• Seen from the DSO side</li> <li>• Seen from the metering side</li> </ul> <p>When adding a datahub to a market the datahub will replace the DSOs, to a large extend, i.e. the MPA will be the datahub. Among others, the proposal include processes between the GAP and the MPA.</p>	TBD	TBD	TBD
Q)	QA of the CuS model and consistency of the CuS and EMD models	TBD	TBD	TBD
R)	New (enhanced) processes for labelling	TBD	TBD	TBD
S)	<p>Review the need for extension of the BRS for cancellation with:</p> <ul style="list-style-type: none"> <li>• Reason for cancellation attribute</li> <li>• Cancellation of master- and measured data</li> </ul>	TBD	TBD	TBD
T)	Request for end of balance responsibility	TBD	TBD	TBD
U)	Meter reading (meter stand) from the Customer sent in via the BS	TBD	TBD	TBD

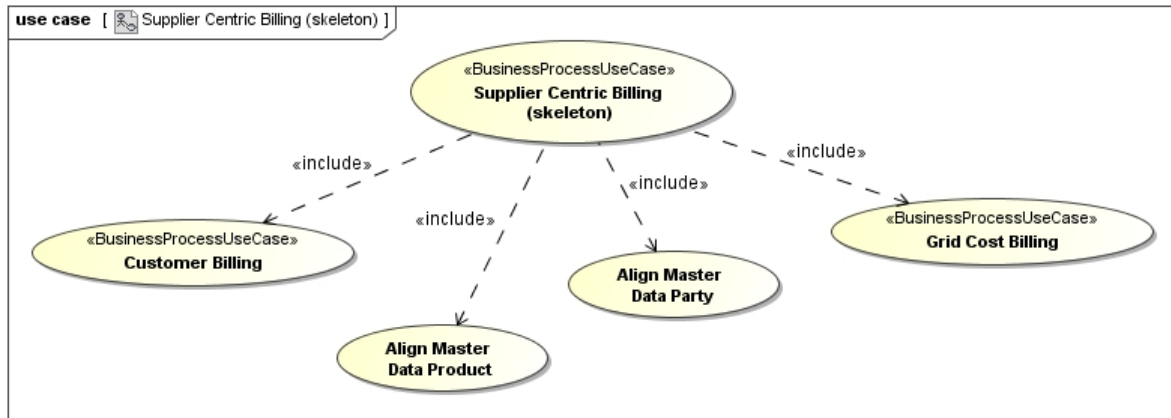
## Appendix B How to link the Customer characteristics and the MP characteristics

One option is to link the Customer characteristics and the MP characteristics via a Contract, as is specified by the Norwegian Elhub project:

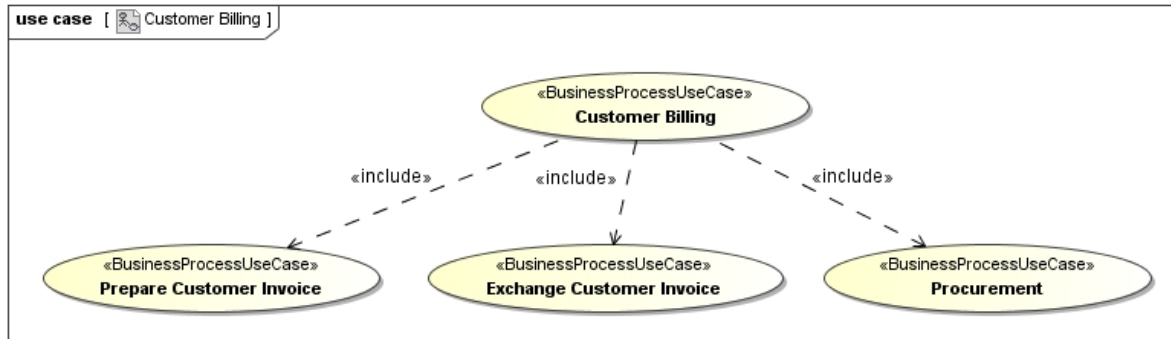


## Appendix C Supplier Centric Billing (skeleton)

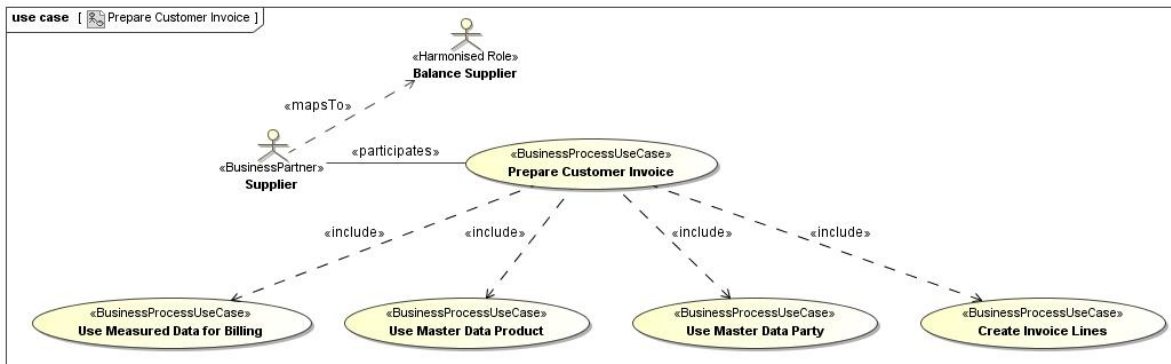
### C.1 Skeleton



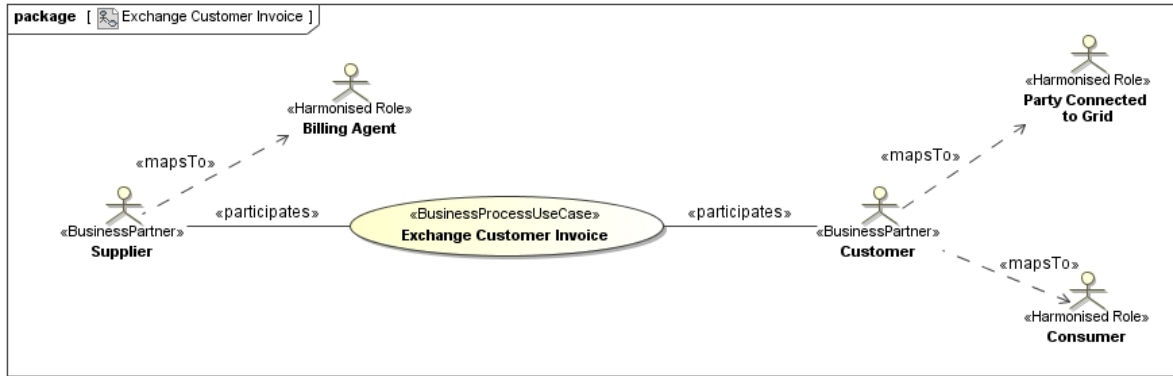
### C.2 Customer Billing



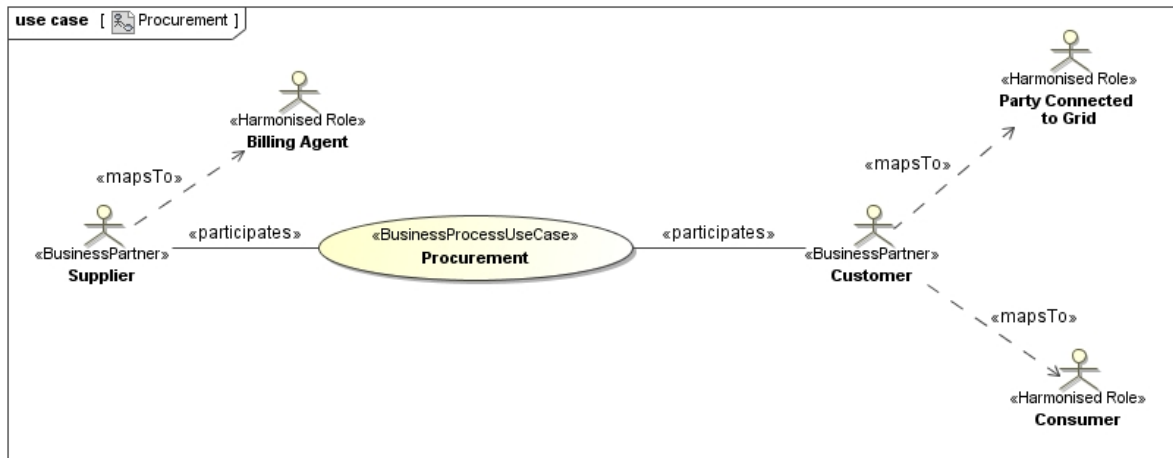
### C.3 Prepare Customer Invoice



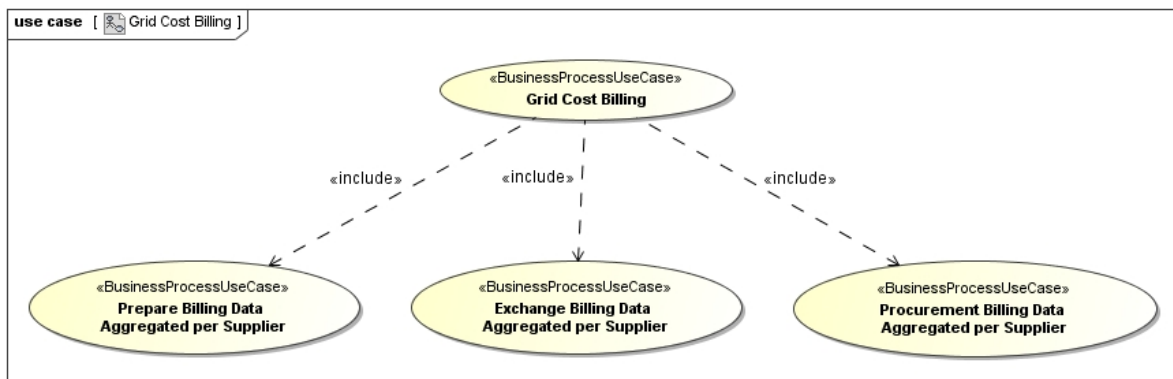
## C.4 Exchange Customer Invoice



## C.5 Procurement



## C.6 Grid Cost Billing



## Appendix D Change of MP attributes

MP characteristics attributes	Question 1: Which role(s) is responsible for an element?								Question 2: Do we see a need for a new ebIX® update process covering the change in the MP administration, initiated by the responsible role?							
	BE	DE	DK	NL	NO	PL	SE	SI	BE	DE	DK	NL	NO	PL	SE	SI
«Business entity» Metering Point																
Identification <sup>1</sup>	GAP	GAP	GAP	GAP	GAP	GAP	GAP		No	Yes <sup>2</sup>	No	No	No	No		
«Business entity» Metering Grid Area																
Identification	GAP	GAP	GAP	GAP	GAP	GAP	GAP		No	Yes <sup>3</sup>	No	Yes	Yes <sup>4</sup>	No		
«Business entity» Aggregated Reception Station																
Identification	GAP	GAP	na	GAP	na	na			No	No	na	Yes	na	na		
Metering Point Address																
City Name	GAP	GAP	GAP	GAP	GAP	GAP			Yes <sup>BE1</sup>	No	No	No	No	No		
Street Name	GAP	GAP	GAP	GAP	GAP	GAP			Yes <sup>BE1</sup>	No	No	No	No	No		
Building Number	GAP	GAP	GAP	GAP	GAP	GAP			Yes <sup>BE1</sup>	No	No	No	No	No		
Postcode	GAP	GAP	GAP	GAP	GAP	GAP			Yes <sup>BE1</sup>	No	No	No	No	No		
Room Identification	GAP	GAP	GAP	GAP	GAP	GAP			Yes <sup>BE1</sup>	No	No	No	No	No		
Floor Identification	GAP	GAP	GAP	GAP	GAP	GAP			Yes <sup>BE1</sup>	No	No	No	No	No		
Country	GAP	GAP	GAP	GAP	GAP	GAP			Yes <sup>BE1</sup>	No	No	No	No	No		
Geographical Coordinate																
Latitude	na	na	na	GAP	GAP	GAP			na	No	No	No	No	No		

<sup>1</sup> There is a need for a process for creation and ending of MPs

<sup>2</sup> Yes, because there already is a process in place in Germany where the BS can correct mistakes in the MP ID

<sup>3</sup> Yes, because there already is a process in place in Germany

BE1 = the MPA has to be warned by the GAP that a MP address has been adapted (push notification)

<sup>4</sup> MGA and MBA Master Data, MBA-MGA relations and MGA-MGA relations

MP characteristics attributes	Question 1: Which role(s) is responsible for an element?								Question 2: Do we see a need for a new ebIX® update process covering the change in the MP administration, initiated by the responsible role?							
	BE	DE	DK	NL	NO	PL	SE	SI	BE	DE	DK	NL	NO	PL	SE	SI
Longitude	na	na	na	GAP	GAP	GAP			na	No	No	No	No	No		
Altitude <sup>5</sup>	na	na	na	GAP	GAP	GAP			na	No	No	No	No	No		
System	na	na	na	GAP	GAP	GAP			na	No	No	No	No	No		
Metering Point Party																
Balance Supplier ID	BS	BS	BS	BS	BS	BS			No	No	No	No	No	No		
Metered Data Responsible ID	na	MDR	na	MDR	na	na			No	No	No	No	No	No		
Balance Responsible Party ID	BS	BS/ GAP	BS	BS/ BRP	BS	BS/ BRP			No	No	Yes <sup>6</sup>	Yes <sup>7</sup>	No	Yes <sup>8</sup>		
Transport Capacity Responsible Party ID	na	BS/ GAP	BS <sup>9</sup>	BS/ TCR	na	na			na	No	No	Yes <sup>10</sup>	No	No		
Grid Access Provider ID	GAP	GAP	GAP	GAP	GAP	GAP			Yes	Yes	No	Yes	No	No		
Supply Customer																
Name	BS	BS	BS	BS	BS	BS			Yes	Yes	Yes	Yes	Yes	Yes		
ID	BS	BS	BS	na	BS	BS			Yes	Yes	Yes	Yes	Yes	Yes		
Grid Customer																
Name	GAP	GAP	na	GAP	BS	GAP			na	No	No	Yes	No	No		
ID	na	na	na	na	BS	GAP			na	No	No	na	No	No		
Metering Point characteristics																

<sup>5</sup> The altitude of the meter may be used in the gas sector for correction purposes.

<sup>6</sup> Denmark want a process for bulk change of BRP

<sup>7</sup> Netherlands want to open the process so that also the BRP can request the change – A bulk change process is already in place

<sup>8</sup> Poland want to open the process so that also the BRP can request the change and a bulk change process is already defined

<sup>9</sup> In Denmark the BS is covered by the Shipper together with the TCR

<sup>10</sup> Netherlands want to open the process for the TCR – A bulk change process is already in place

MP characteristics attributes	Question 1: Which role(s) is responsible for an element?								Question 2: Do we see a need for a new ebIX® update process covering the change in the MP administration, initiated by the responsible role?							
	BE	DE	DK	NL	NO	PL	SE	SI	BE	DE	DK	NL	NO	PL	SE	SI
Balance Group ID	na	BS	na	na	na	na			na	Yes	No	No	No	No		
Type Of Metering Point	BS/ GAP	GAP	GAP	GAP	GAP	GAP			No	Yes	No	Yes	Yes	Yes		
Metering Method	BS <sup>11</sup> / GAP	GAP	na	GAP	GAP	GAP			NO	Yes	na	Yes	Yes	Yes		
Settlement Method	GAP	GAP	GAP	GAP	GAP	GAP			No	Yes	Yes	Yes	Yes	Yes		
Scheduled Meter Reading Date	BS/ GAP	GAP	GAP	MDR	GAP	GAP			No	Yes	Yes	No	No	Yes		
Grid Agreement Type		GAP	na	na/BS	BS	BS/ GAP				Yes	No	Yes	Yes	Yes		
Meter Reading Periodicity	BS/ GAP	BS	na	MDR	GAP	GAP			Yes	Yes	No	Yes	No	Yes		
Metering Point Electricity Voltage Level	GAP	GAP/ Cust.	na	GAP	na	GAP			Yes	Yes	No	Yes	na	Yes		
Administrative Status Of Metering Point	BS	na	na	na	GAP	na			No	na	na	na	na	na		
Physical Status Of Metering Point	BS/ GAP	BS/ GAP	GAP	GAP	GAP	BS/ GAP			Yes	Yes	Yes	Yes	Yes	Yes		
Contracted Connection Capacity	BS	BS	GAP	GAP	GAP	BS/ GAP			No	Yes	No	Yes	No	Yes		
Contracted Connection Capacity Measure Unit	Na	GAP	GAP	GAP	GAP	GAP			na	Yes	No	Yes	No	Yes		
Gas pressure level	GAP	na	na	GAP	na	na			Yes	No	No	Yes	No	na		
Metered data collection method	GAP	GAP/ BS	GAP	GAP/ MDR	GAP	GAP			Yes	Yes	No	Yes	No	Yes		

<sup>11</sup> for smart meter Supplier may ask to go from meter regime 1 (non continu) to meter regime 3 (continu)

MP characteristics attributes	Question 1: Which role(s) is responsible for an element?								Question 2: Do we see a need for a new ebIX® update process covering the change in the MP administration, initiated by the responsible role?							
	BE	DE	DK	NL	NO	PL	SE	SI	BE	DE	DK	NL	NO	PL	SE	SI
Sustainable Energy	GAP	GAP/BS	na	GAP/BS	GAP	GAP			Yes	Yes	No	Yes	No	Yes		
Disconnection Contract	na		?	na	GAP	GAP			Yes			na		Yes		
Physical Characteristics																
Capacity of a Metering point	GAP		GAP	GAP	GAP	GAP			Yes			Yes		Yes		
Disconnection Method	Na		GAP	GAP	GAP	GAP			na			Yes		Yes		
Volume information																
Product Type	GAP		GAP	GAP	GAP	GAP			Yes			Yes		Yes		
Measure Unit	GAP		GAP	GAP	GAP	GAP			Yes			Yes		Yes		
Standard Load Profile	GAP		?	GAP	MDA	GAP			Yes			Yes		Yes		
Direction	GAP		Exchange	GAP	?	GAP			Yes			Yes		Yes		
Estimated annual volume																
Quantity	GAP	BS/MDA	MDA	MDA	MDA	GAP			Yes			No		No		
Meter Time Frame Type	BS/GAP	BS/MDA	na	MDA	na	GAP			Yes			No		No		



MP characteristics attributes	Question 1 (same as in previous table) Which role(s) is responsible for an element?								Question 3: Do we see a need for a new ebIX® update process covering the change in the MP administration, initiated by non-responsible roles and if yes which role?							
	BE	DE	DK	NL	NO	PL	SE	SI	BE	DE	DK	NL	NO	PL	SE	SI
«Business entity» Metering Point																
Identification <sup>12</sup>	GAP	BS	na	na	na	na										
«Business entity» Metering Grid Area																
Identification	GAP	GAP	GAP	GAP	GAP	GAP							no			
«Business entity» Aggregated Reception Station																
Identification	GAP	GAP	na	GAP	na	na							no			
Metering Point Address																
City Name	GAP	GAP	GAP	GAP	GAP	GAP							BS/MDR			
Street Name	GAP	GAP	GAP	GAP	GAP	GAP							BS/MDR			
Building Number	GAP	GAP	GAP	GAP	GAP	GAP							BS/MDR			
Postcode	GAP	GAP	GAP	GAP	GAP	GAP							BS/MDR			
Room Identification	GAP	GAP	GAP	GAP	GAP	GAP							BS/MDR			
Floor Identification	GAP	GAP	GAP	GAP	GAP	GAP							BS/MDR			
Country	GAP	GAP	GAP	GAP	GAP	GAP							BS/MDR			
Geographical Coordinate																
Latitude	na	na	na	GAP	GAP	GAP							BS/MDR			
Longitude	na	na	na	GAP	GAP	GAP							BS/MDR			
Altitude <sup>13</sup>	na	na	na	GAP	GAP	GAP							BS/MDR			
System	na	na	na	GAP	GAP	GAP							BS/MDR			
Metering Point Party																

<sup>12</sup> There is a need for a process for creation and ending of MPs

<sup>13</sup> The altitude of the meter may be used in the gas sector for correction purposes.

MP characteristics attributes	Question 1 (same as in previous table) Which role(s) is responsible for an element?								Question 3: Do we see a need for a new ebIX® update process covering the change in the MP administration, initiated by non-responsible roles and if yes which role?							
	BE	DE	DK	NL	NO	PL	SE	SI	BE	DE	DK	NL	NO	PL	SE	SI
Balance Supplier ID	BS	BS	BS	BS	BS	BS						No				
Metered Data Responsible ID	na	MD R	na	MDR	na	na						No				
Balance Responsible Party ID	BS	BS/GAP	BS	BS/BRP	BS	BS/BRP						No				
Transport Capacity Responsible Party ID	na	BS/GAP	BS14	BS/TCR	na	na						No				
Grid Access Provider ID	GAP	GAP	GAP	GAP	GAP	GAP						No				
Supply Customer																
Name	BS	BS	BS	BS	BS	BS						No				
ID	BS	BS	BS	na	BS	BS						No				
Grid Customer																
Name	GAP	GAP	na	GAP	na	GAP						No				
ID	na	na	na	na	na	GAP						No				
Metering Point characteristics																
Balance Group ID	na	BS	na	na	na	na										
Type Of Metering Point	BS/GAP	GAP	GAP	GAP	GAP	GAP						No				
Metering Method	BS <sup>15</sup> /GAP	GAP	na	GAP	GAP	GAP						?			BS	
Settlement Method	GAP	GAP	GAP	GAP	GAP	GAP						Yes				
Scheduled Meter Reading Date	BS/GAP	GAP	GAP	MDR	GAP	GAP						yes				

<sup>14</sup> In Denmark the BS is covered by the Shipper together with the TCR

<sup>15</sup> for smart meter Supplier may ask to go from meter regime 1 (non continu) to meter regime 3 (continu)

MP characteristics attributes	Question 1 (same as in previous table) Which role(s) is responsible for an element?								Question 3: Do we see a need for a new ebIX® update process covering the change in the MP administration, initiated by non-responsible roles and if yes which role?							
	BE	DE	DK	NL	NO	PL	SE	SI	BE	DE	DK	NL	NO	PL	SE	SI
Grid Agreement Type		GAP	na	na/BS	BS	BS/ GAP						no				
Meter Reading Periodicity	BS/ GAP	BS	na	MDR	GAP	GAP						yes		GAP/ BS		
Metering Point Electricity Voltage Level	GAP	GAP / Cust	na	GAP	na	GAP						no				
Administrative Status Of Metering Point	BS	na	na	na	na	na										
Physical Status Of Metering Point	BS/ GAP	BS/ GAP	GAP	GAP	BS/ GAP	BS/ GAP						(yes)				
Contracted Connection Capacity	BS	BS	GAP	GAP	na	BS/ GAP						no		BS		
Contracted Connection Capacity Measure Unit	Na	GAP	GAP	GAP	na	GAP						no				
Gas pressure level	GAP	na	na	GAP	na	na						no				
Metered data collection method	GAP	GAP / BS	GAP	GAP/ MDR	GAP	GAP						yes				
Sustainable Energy	GAP	GAP / BS	na	GAP/ BS	na	GAP						no				
Disconnection Contract	na			na		GAP						na				
Physical Characteristics																
Capacity of a Metering point	GAP			GAP		GAP						no				

MP characteristics attributes	Question 1 (same as in previous table) Which role(s) is responsible for an element?								Question 3: Do we see a need for a new ebIX® update process covering the change in the MP administration, initiated by non-responsible roles and if yes which role?							
	BE	DE	DK	NL	NO	PL	SE	SI	BE	DE	DK	NL	NO	PL	SE	SI
Disconnection Method	Na			GAP		GAP						no				
Volume information																
Product Type	GAP			GAP		GAP						no				
Measure Unit	GAP			GAP		GAP						no				
Standard Load Profile	GAP			GAP		GAP						no				
Direction	GAP			GAP		GAP						no				
Estimated annual volume																
Quantity	GAP	BS/ MD A	MDA	MDA	MDA	GAP						yes				
Meter Time Frame Type	BS/ GAP	BS/ MD A	na	MDA	na	GAP						yes				