Minutes - CuS project meeting

Date: Wednesday and Thursday, September 7th and 8th, 2016

Time: 09:00 – 17:30 and 9:00 – 16:00

Place: Gdansk, Poland Present: Christian, DK

> Gerrit, NL Grazyna, PL Joachim, DE Kees, NL Minna, FI Ove, NO Preben, DK Stefan, BE Torleif, NO Waldemar, PL

Appendix A CuS Work plan

Appendix B Class diagram for MGA Master Data, based on Nordic needs

Attachments: None

1 Approval of agenda

The agenda was approved with the following additions:

- Meeting place for the December meeting, see 12, Meeting schedule;
- Maintenance Request (MR) to HRM for Gateway Operator and Gateway, see 13.1 under AOB;
- Update of ebIX® web site, see 13.2 under AOB;
- Lessons learned, see item 13.3 under AOB.

2 Approval of minutes from previous meeting

The minutes from previous meeting were approved after some textual correction.

3 How to model the Metering Point, Parties and Validity Date in the CuS documents?

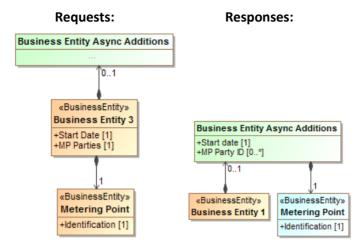
The linking of Metering Point, Parties and Validity Date are modelled differently in different BRSs. The question has turned up during mapping of the CuS model to CIM. See also CuS Work plan item L) under Appendix A.

Ove had as action from previous meeting made a memo, detailing the differences between the CuS documents, which was reviewed.

Conclusions:

- For request/response processes, we use:
 - "Concept 3" for the request and;
 - "Concept 1" for the response.

I.e. as we already do in the BRSs.



For the Master Data BRS, we will discuss the concept to be used when we come to these items.

Action:

• Ove will add Start Date in Confirm Change of BRP in the "Async addition".

4 BRS for Alignment of Metering Configuration Characteristics

Gerrit had as action item from previous meeting verified the usage of the added code "E06 Measurement". The code is used to indicate a factor for the measurement of the meter, i.e. you will multiply the reading with the factor to get the real value.

Ove had as action item from previous meeting updated the BRS. The BRS was reviewed and among others, the cardinalities for the attributes was updated and dependencies were added where applicable.

ETC had asked if we need the code "**E07** calorific correction factor". However, this is an attribute connected to the Calorific Value Area, hence the topic will be discussed under item 11, BRS for master data for Areas, such as Metering Grid Area.

Actions:

- Kees will check with gas members if separate Products are needed for "city gas", "bio gas" etc.;
- Ove will update the definitions in the ebIX® model with the definitions in the BRS;
- Ove will send the BRS on circulation for comments to CuS for 14 days before publishing the BRS at www.ebix.org.

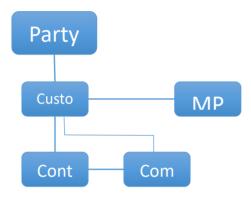
5 BRS for Alignment of Metering Point Characteristics

Ove had as actions from previous meeting cleaned up the document, such as verify that the diagrams are in line with the model. Thereafter, Ove had sent the BRS on circulation for comments to CuS for 14 days before publishing the BRS at www.ebix.org. The BRS was published August 30th 2016.

6 BRS for Alignment of Customer Master Data

Conclusion:

- We assume that there will be a "Party register", independent of the MPs;
- Currently there are no Party administrators anywhere, but we keep the concept in the model;
- It was made a "Party model" and a "Customer model", where the Customer inherits from the Party;
- In the Customer model, the Customer Characteristic is linked to the MP and contains the data to be exchanged in the market;
- The Customer maps to the Party Connected to Grid;
- As understood by Gerrit:



Action:

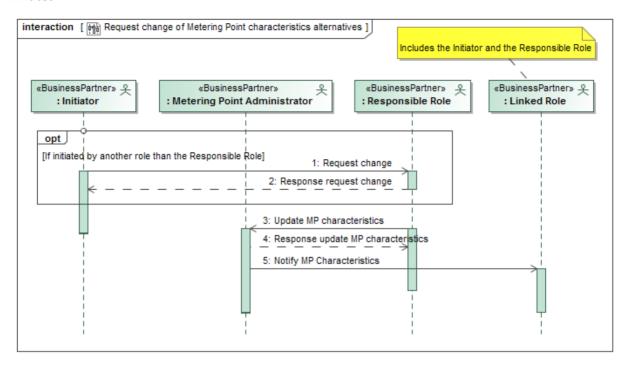
• Ove will update the BRS based on the conclusions above and the related class diagrams.

The latest working draft can be found at: CuS documents for review.

7 BRS for Request Change of MP Characteristics

Ove had as actions from previous meeting updated the document:

- Added Request change of Physical Status of Metering Point to the BRS;
- Added text to the introduction that the BRS only should be used for changes that not triggers other
 processes, such as change of name for the customer, which should be a Customer Move;
- Split the first part of the BRS into a generic part and a specific part:
 - The generic part has one UseCase, including all possible roles and one generic activity diagram with one Request change of MP characteristics business entity;
 - The specific part has one UseCase per changeable attribute, each with relevant roles and one activity diagram;
 - The BRS is based on alternative B from the previous meeting, which is shown in the sequence diagram below.



Gerrit opened a discussion, asking if we should go back to the first version of the BRS, i.e. simplifying the model by merging the Responsible Role and the Metering Point Administrator (MPA). The latest BRS is based on alternative B, while Gerrit proposed to go back to alternative C with the MPA as the Responsible Role. It was however agreed to keep alternative B, but simplify the BRS by merging all request documents to one generic Request Change of MP Characteristics, making the "update-classes" optional. Similar, all update documents will be merged to a generic Update of MP Characteristics class diagram, also here making the "update-classes" optional.

Action:

- Ove will simplify the BRS by merging all request documents to one generic Request Change of MP Characteristics:
 - Making the "update-classes" optional;
 - All update documents will be merged to a generic Update of MP Characteristics class diagram;
 - Remove all special requests and updates in the processes keep the generic;
 - Add the sequence diagram to the BRS;
 - Use the following terms:
 - Request Change MP Characteristics
 - Response Change MP Characteristics
 - Request Update MP Characteristics
 - Response Update MP Characteristics

8 BRS for master data for Combined Grid and Supply Billing (if input from EMD is received)

Eva had informed that the EMD group will start after the Summer Holiday. However, no date is agreed yet, hence the item was postponed.

9 Preparations for start of "interfering processes"

Minna started a discussion by informing that many of the decisions made in the Netherland will NOT be applicable in Finland. This was supported by Preben. An example:



In the figure above, A is a supplier switch and B is a move-in. This will be OK in Finland and Denmark, but rejected in Belgium and the Netherlands.

Denmark informed that they may have moves in the past, which is not possible in the Netherlands. This means that new scenarios must be added.

The first part (Switch of Supplier) of the first scenario (Scenario 1: Second request with earlier effectuation date) was reviewed and the participants added their national rules. The rest of the document will be filled in as homework.

Actions:

- Ove will add coloured rows for all "process rows" in the Dutch document and upload it to the CuS Dropbox folder;
- All are asked to fill in their national rules in the document: "CuS interfering processes v0r1 20161012.docx" at: CuS documents for review (in the Intersecting processes directory).

10 BRS for change of Metering Grid Area for Metering Points (Switch of grid)

Discussion:

- Gerrit asked if the process should be change of Grid Access Provider (GAP) or Grid Operator (GO) instead
 of change of Metering Grid Area (MGA)?
- The BRS should be renamed to Change of Grid Access Provider;
- This process will probably trigger other processes, such as change of:
 - Metered Data Aggregator;
 - Metered Data Responsible (however, we already have a BRS for this);
 - Metering Point Administrator;
 - Tariffs.

Action:

 All are asked to come up with events that has happened or can happen, related to "change of grid" or change of DSO, such as merger or split of DSOs.

11 BRS for master data for Areas, such as Metering Grid Area

ETC has asked if we need the code "**E07** calorific correction factor", an attribute connected to the Calorific Value Area.

Ove had as action from previous meeting made a first draft class diagram for the MGA based on Nordic area discussions, see Appendix B.

Continued action from previous meeting:

• All are asked to come up with ideas of the content of the MGA Master Data.

12 Meeting schedule

- Wednesday and Thursday December 7th and 8th, Mechelen, Belgium
- Wednesday and Thursday February 1st and 2nd, Sweden, Austria or Netherlands
 - o Agenda topic: Maintenance Request (MR) to HRM for Gateway Operator and Gateway
- Tuesday and Wednesday March 21st and 22nd, Sweden, Austria or Netherlands
- Tuesday and Wednesday May 30th and 31st, Sweden, Austria or Netherlands

13 AOB

13.1 Maintenance Request (MR) to HRM for Gateway Operator and Gateway

The MR discussion was postponed to the meeting February 2017.

13.2 Update of ebIX® web site

Ove informed that he had updated the CuS member page at www.ebIX.org.

13.3 Lessons learned

Kees asked if we should make a list over lessons learned nationally, such as what should be done differently, why do it differently etc. The intention is to promote ebIX®, to existing members, new members and other EU-bodies.

Examples:

- There is a need for national customisation
- Compare the situation after introducing a HUB with the situation before

Action:

- Kees will prepare a template
- All are asked to fill in the template and come up with proposals for items to the list of lessons learned within next CuS meeting

13.4 "Prosumers"

Grazyna introduced the item by asking how the Prosumers are handled in different countries?

| NL | Start to have multiple MPs on request from Customers, not necessarily for production and consumption | | | |
|----|--|--|--|--|
| | Can have smart-meter allocation on request (15 minutes metering) | | | |
| FI | Consumption and production must have different MPs | | | |
| | There can be different Balance Suppliers for production and consumption | | | |
| | The same processes are used for production and consumption | | | |
| NO | Called "Plus customers" | | | |
| | MPs must be hourly metered and infeed to the grid must be below 100 kW | | | |
| | There is one MP common for consumption and production | | | |
| | The production and consumption is netted | | | |
| | The production is exempt for fees, except for the infeed fee to the grid | | | |
| | If the Customer invest in a separate meter for the production, he may receive El-certificates | | | |
| BE | Depends on installed production, below 10kVA only one MP and one BS | | | |

| | • | Use netted metering per time frame | | | | |
|--|--|--|--|--|--|--|
| | _ | | | | | |
| | • | All MPs below 10kVA are profiled metered | | | | |
| | Above 10kVA there must be two MPs and may be different BS for production and | | | | | |
| | consumption | | | | | |
| | • | When the HUB goes live there will be offered new services for the Prosumers from the DSOs | | | | |
| DK | Consumption and production must have different MPs | | | | | |
| | There can be different BSs for production and consumption | | | | | |
| | The same processes are used for production and consumption | | | | | |
| | To get a higher price for the renewable production Energinet.dk must be the BS | | | | | |
| | If hourly settled Consumer the production and consumption can be netted and you have to | | | | | |
| | pay grid fee for the full consumption obtained from the grid | | | | | |
| There is a special closed group for profiled settled prosumers (85.000) that are nette | | | | | | |
| annual basis, and only pay the grid fee for the consumption (and not for production | | | | | | |
| DE | • | Currently no special rules for Prosumers, MPs with combined production and consumption are | | | | |
| | | treated according to the normal rules for production and consumption | | | | |
| PL | • | There can only be one Balance Supplier | | | | |
| | • | The consumption and production are netted | | | | |
| | • | A Prosumer can produce up to 40 kW | | | | |
| | • | A DSO must connect a Prosumer within 30 days | | | | |
| | • | There are special requirements for the Meter | | | | |

During this item, Joachim informed of the new regulations in Germany:

- There is a requirement for an economic split of the Metering function from the rest of the DSO functions;
- The Metering Company will act as a separate actor in the energy industry;
- The Metering Company will send its own invoice to the Customer and the Customer can choose the Metring company.

Appendix A CuS Work plan

| # | Activity | Priority | Start | End |
|-----|--|------------------------------------|---------|---------|
| A) | Master data for parties, both for the actors in the energy | 1 st | Q4/2014 | Q4/2015 |
| | 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). | | | |
| B) | Request change of attributes connected to a MP, such as | 2 nd | Q1/2015 | Q4/2015 |
| | Closing and Reopening MPs, Change of Metering Method | | | |
| | and Change of time frames | | | |
| C) | Combined grid and supply billing (invoicing), including MD | 3 rd | Q2/2015 | Q2/2016 |
| | for products, such as; grid fees, grid subscriptions, | a+b | | / |
| D) | Interfering processes – a matrix of processes with priorities, | 4 th | Q2/2015 | Q3/2016 |
| | when a given process is interfered by another, such as when | | | |
| | a customer move comes in the middle of a change of supplier process. | | | |
| E) | "Switch of grid", for instance a part of a Metering Grid Area | 5 th | Q3/2015 | Q2/2016 |
| L) | (MGA), such as a village, that is transferred from one GAP | | Q3/2013 | Q2/2010 |
| | and MGA to another | | | |
| F) | MPs having multiple parties with similar roles, e.g. a MP with | 6 th | Q4/2015 | Q4/2016 |
| ' | different BRPs for production and consumption | | 4,7=0=0 | 3,7==== |
| G) | Change of BRP in Metering Grid Area, "Price Area" or | 7 th | TBD | TBD |
| | country (not at MP level) (Proposed by DK), i.e. a "bulk | | | |
| | change of BRP (and/or BS?)" | | | |
| H) | Efficient data alignment, including the possibility to request | 8 th | TBD | TBD |
| | historical and/or future master data. | | | |
| I) | Master data for domains, such as which MGAs that belongs | Awaiting network | TBD | TBD |
| | to a MBA and related characteristics of these domains | codes from | | |
| | | ENTSO-E | | |
| J) | New processes for "demand/response", which may add new | Awaiting EMD | TBD | TBD |
| | tasks for the MDA | survey and ebIX® | | |
| 14) | Complete and excitate decomposite and related excitations or manager | Forum decision | TDD | TDD |
| K) | Combined switch documents and related customer master data | Awaiting "Master data for parties" | TBD | TBD |
| L) | Review of published BRSs: | TBD | TBD | TBD |
| ۲) | The MP parties will be linked to the MP instead of the | 100 | 160 | 100 |
| | "document", to be in line with BIM and CIM | | | |
| M) | Handling of "Installation Metering Points" and/or fields (may | TBD | TBD | TBD |
| , | be related to the item above) | | | |
| N) | "Life cycle of a MP", including how technical events interact | TBD | TBD | TBD |
| | with administrative processes and responsibilities | | | |
| 0) | Request for services. The item concerns chargeable requests | TBD | TBD | TBD |
| | from the BS to the DSO for changes to a MP or a Meter, such | | | |
| | as: | | | |
| | Request for metered data | | | |
| P) | The possible role of a datahub in the processes (Proposed by | TBD | TBD | TBD |
| | DK) | | | |
| | Seen from the supplier side | | | |

| | Seen from the DSO side Seen from the metering side 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. | | | |
|----|---|-----|-----|-----|
| 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) | Review the need for extension of the BRS for cancellation with: | TBD | TBD | TBD |
| | Reason for cancellation attribute | | | |
| | Cancelation of master- and measured data | | | |
| T) | Linking of MPs, such as | TBD | TBD | TBD |
| | Introduction of a hierarchy of MPs | | | |
| | Linking MPs on the same location | | | |
| | Linking production and consumption MPs | | | |

Appendix B Class diagram for MGA Master Data, based on Nordic needs

CuS has started the process of defining Master Data for MGAs. This is a first draft of a class diagram for MGA Master Data, based on information exchanged in the Nordic countries.

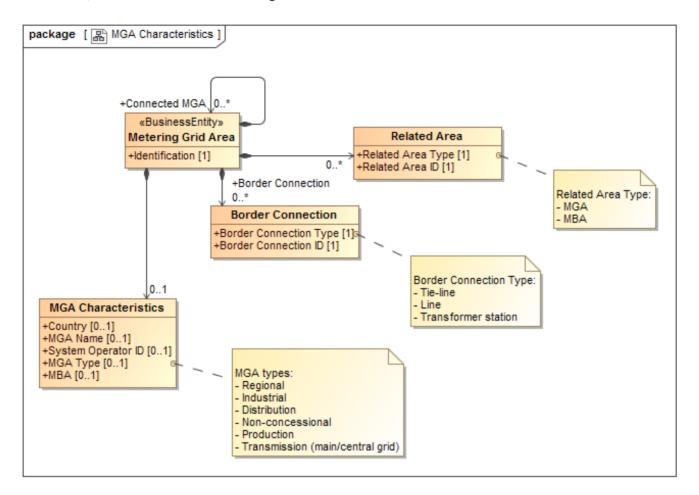


Figure 1: MGA Characteristics

Comments to the class diagram:

- Connected MGAs can be shown using at least two concepts:
 - A) "Self-associations" from Metering Grid Area to Metering Grid Area or
 - B) Association to the Related Area class, using a Related Area Type of "MGA"
- The related MBA may also be identified using different concepts, i.e.
 - A) Association to the Related Area class, using a Related Area Type of "MBA"
 - B) Adding a MBA attribute to the MGA Characteristics class