

European forum for energy Business Information eXchange

January 5th, 2017

CuS, Structuring of the energy market, phase V

Minutes – CuS project meeting

Date:	Wednesday and Thursday December 7 th and 8 th
Time:	09:00 – 17:30 and 9:00 – 16:00
Place:	Mechelen (Belgium)
Present:	Gerrit, NL
	Grazyna, PL
	Joachim, DE
	Minna, Fl
	Ove, NO
	Preben, DK
	Stefan, BE
	Thibaut, BE
	Torleif, NO
Appendix A	CuS work plan
Appendix B	One or two IDs for Metering points?, see also item 14.2 under AOB
	List of possibilities
	for a move in past -

Attachments:

nts: for a move in past - see item 14.1, National rules for move back in time under AOB

1 Approval of agenda

The agenda was approved with the following additions:

- National rules for move back in time, see14.1 under AOB;
- One or two IDs for Metering points?, see 14.2 under AOB;
- Change of BRP in Metering Grid Area, see 14.3 under AOB;
- CuS work plan, see 14.4 under AOB.

2 Approval of minutes from previous meeting

The minutes from previous meeting were approved.

3 Resolve matters arising from ebIX[®] Forum meeting November 24th 2016

Action Item 2016b-03 from latest ebIX[®] Forum meeting:

• CuS is asked to find a better name of the WG, i.e. a name showing what the CuS WG is working with (Structuring?).

After a discussion the following proposal will be forwarded to ebIX[®] Forum:

CuS: *ebIX*[®] *working group for Customer faced processes for Structuring and harmonisation of the European energy market.*

4 Status for publication of BRS for Alignment of Metering Configuration Characteristics

Ove had published the BRS for Alignment of Metering Configuration Characteristics.

Gerrit informed that Kees had checked with gas members if separate products are needed for "city gas", "bio gas" etc. The conclusion was that there is no need for separate products for the time being.

Ove had noticed that the "Alignment BRSs" are missing an overall Business process UseCase, i.e. an overview with both the Notify and Request process, i.e.:

- Alignment of metering configuration characteristics;
- Alignment of MP characteristics;
- Alignment of Customer characteristics.

It was agreed to add an overall Business process UseCase to the "Alignment BRSs".

Thibault informed that Belgium has a need for an element connected to the Register, showing if the Register provides cumulative readings or volumes between two points in time. It will be added an enumeration "Incrementation Type" with two literals; "Cumulative" and "non-cumulative".

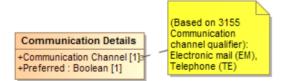
Action:

- Ove will add an overall Business process UseCase to the "Alignment BRSs";
- Ove will add an enumeration "Incrementation Type" with two literals; "Cumulative" and "noncumulative";
- Send the updated BRS on circulation for comments to CuS for 14 days and thereafter to ebIX[®] Forum for four weeks.

5 BRS for Alignment of Customer Characteristics

Ove had as action from previous meeting updated the BRS. The class diagram for Customer Characteristics was reviewed and updated. The following requests will be forwarded to ETC:

- Rename Document Name Code "E21 Master Data Consumer" to "E21 Master Data Customer"
- Rename Business Reason Code "E34 Update master data consumer" to "E21 Update master data Customer"
- Addition of an ID Scheme Type, see item 12
- Addition of a Communication Channel Type:



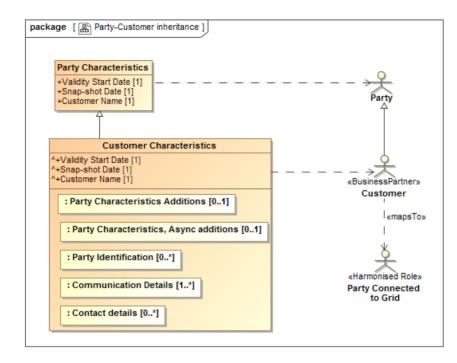
• Addition of an Address Type, based on UN/CEFACT 3131 Communication Channel Code:

PhysicalAddress +AddressType +PostOfficeBox [0..1] +Street Name [0..1] +Building Number [0..1] +Room Identification [0..1] +Floor Identification [0..1] +Postcode [0..1] +City Name [0..1] +City Sub Division Name [0..*] (Based on "3131 Communication channel code"):1 Postal address (The address is representing a postal +Municipality [0..1] address), 3 Physical address (The address +Address Language [0..1] represents an actual physical location)

• CuS wants addition of a new enumeration "Contact function code" based on "3139 Contact function code". The proposal originates from ETC, however with the following comments from CuS:

CuS	3139 Contact function				
requirements	code	name	definition	CuS comments	
Main contact	AY AZ	Electricity supply contact Gas supply	Department/person to contact for matters regarding electricity supply Department/person to contact for	CuS wants a combined code	
Neighbour	WI	contact Alternate contact	matters regarding gas supply Alternate department or person to contact		
House keeper	AV	Maintenance contact	Department/person to contact for matters regarding maintenance		
Invoice contact	PE	Payee contact	Department/employee to be contacted at the payee		
Technical	AT	Technical contact	Department/person to contact for matters regarding technical issues.		
Meter reading	AQ	Quantity surveyor contact	Department/person to contact for matters regarding quantity surveying Question: Should we ask UN/CEFACT for a new code?	Yes, we want to ask UN/CEFACT for a new code	
Contract contact	AE	Contract contact	Department/person to contact for matters regarding contracts	NEW	

A review of the modelling related to Customer Characteristics being a generalisation of the Party Characteristics was postponed until next meeting.



Action:

- ETC is asked to add the "Contact function code" to the ebIX[®] model.
- Ove will clean up the BRS

6 BRS for Request Change of MP Characteristics

Ove had as action from previous meeting simplified the BRS by merging all request and request update documents to two generic processes.

The request update was agreed to be a generic process, i.e. almost all attributes from the Notify MP characteristics can be updated, except:

- MP parties
- Administrative status
- snap-shot date

ETC had come up with a proposal for codes to use for Business Reason and Document Type:

- Business reason for change of MP Characteristics
 Conclusion: Use "EOS, Change of MP Characteristics" (new code)
- Document Type codes for
 - Request Change
 Conclusion: Use "E79, Indirect request to change" (new code)
 - Response Change
 Conclusion: Use "E80, Response indirect request to change" (new code)
 - Request Update
 Conclusion: Use 392
 - Response Update
 Conclusion: Use 414

However, CuS did not fully agree with the proposal from ETC:

- CuS proposes to remove "indirect" and add "MP Characteristics" to the Document Type code **E79**, i.e. Request change of MP characteristics";
- CuS proposes to add a new Document Type code for update, e.g. "E81, Request update of MP characteristics";
- CuS does not like to use **392** and **414** as Document Type codes for Request/Response Update.

Action:

- ETC is asked to:
 - Remove "indirect" and add "MP Characteristics" to the Document Type codes **E79**, e.g.

"E79, Request change of MP characteristics";

or rename "**E58**, Request to change metering point attributes" (Responsible role should be GAP (DDM))

• Remove "indirect" and add "MP Characteristics" to the Document Type codes **E80**, e.g.

"E80, Response request change of MP characteristics";

or rename "E59, Confirmation/rejection of change metering point attributes" (Responsible role should be GAP (DDM))

o Add a new Document Name code for Request update MP Characteristics, e.g.

"E81, Request update of MP characteristics";

o Add a new Document Name code for Response update MP Characteristics, e.g.

"E82, Response request update of MP characteristics";

- In general, verify Document Name codes and Business Reason codes for Request change of MP characteristics.
- Ove will clean up the BRS before next CuS meeting.

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

EMD will have its first meeting since 2014 next week, hence the item was postponed until next meeting.

8 Interfering processes

The document "CuS interfering processes" was reviewed and updated for all participating countries until and including "Move out" in "Scenario 2".

Action:

 All are asked to fill in their national rules for missing processes in the document "CuS interfering processes". The document can be downloaded from <u>CuS documents for review</u> (in the Intersecting processes directory).

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

Discussion:

• There was a longer discussion regarding the name of the process, such as "Request change of MP ownership". The discussion ended up with "Request change grid responsibility";

- The process might be used in Netherlands for clean-up of grid structure. Some DSOs have islands with only few MPs in different parts of the country, hence they want to trade these MPs with others that are connected to the main grid they operate;
- In the Belgium and the Netherlands, the notification of MP characteristics is never sent before a change has taken place. E.g., when changing supplier, a notification is sent to the old and the new BS (Document Type **406** and **414**) upfront, but the MP characteristics (Document Type **E07**) is sent after the switch (the update of the MP admin). In the Nordic countries the **E07** is also sent upfront;
- ARS and CVA was added to the request;
- Billing information should be added when the combined billing BRS is done.

Conclusion:

• The intention is to approve the BRS at next meeting and thereafter publish it.

Action:

- Ove will update the BRS, including:
 - Rename to "Request change grid responsibility";
 - \circ $\,$ Add ARS and CVA.
- ETC is asked to find Document Name codes and Business Reason codes for "Request change grid responsibility".

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

Conclusions:

- We do not need the code "E07 calorific correction factor" as an attribute connected to the Calorific Value Area (CVA) The question originates from ETC;
- We do the electricity before adding gas to the BRS.

Action:

- Ove will make a first draft of a BRS for Alignment of area characteristics. The BRS will be split in three different processes;
 - MBA-MGA relations;
 - MGA-MGA relations;
 - Border connection characteristics.

11 Lessons learned

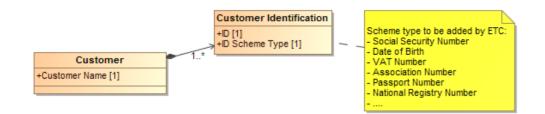
The item was postponed.

12 How to handle national code lists?

Sweden is using the following codes to tell the type of a "Customer id":

- SE1 Swedish company registration number
- **SE2** Swedish personal identity number

CuS proposes to add the following attribute: ID Scheme Type:



Action:

• ETC is asked to add the attribute "Scheme Type" to the ebIX[®] model.

13 Meeting schedule

- Wednesday and Thursday February 1st and 2nd, Sweden:
 - Agenda topic: Maintenance Request (MR) to HRM for Gateway Operator and Gateway.
- Tuesday and Wednesday March 21st and 22nd, Ljubljana (Slovenia) preceding the next ebIX[®] Forum meeting;
- Tuesday and Wednesday May 30th and 31st, Austria or Netherlands.

14 AOB

14.1 National rules for move back in time

Joachim had initiated a request for information regarding national rules for move back in time. The document was reviewed and updated. The document is attached.

14.2 One or two IDs for Metering points?

Jan Owe from Sweden has send a mail to the CuS group asking for national views for how to handle combined MPs, such as MPs with both consumption and production. See answers in Appendix B.

Status for prosumer structure in each country:

- Gerrit informed that the Customer can choose if it wants a "Sub-MP". However, the normal configuration is having one MP;
- In Belgium there will normally be one MP if there is both production and consumption. If the production is more than 10 kW (5 kW in Brussels) there will be different MPs for production and consumption;
- In Germany there is a "traditional Measurement Point" and in addition one or more "Market Locations":
 - How to identify the "Market Locations" is under discussion;
 - If there are both production and consumption there will be two "Market Locations".
- A Prosumer in Denmark can be settled netted or not:
 - If not netted the prosumer has two "Market MPs", one for production and one for consumption;
 - If netted, each of the "Market MPs" are linked to two "Technical MPs" in addition to the two "Market MPs".
- In Finland there is two separate MPs for production and consumption. There may be different BSs for production and consumption;
- In Poland a prosumer has one MP and always the same BS for production and consumption;
- In Norway (post-Elhub) a prosumer (up to 100 kW per hour) has one MP and always the same BS for production and consumption. In cooperatives, in common small scale production, the production can be split over the households in the cooperative.

Action:

• Gerrit and Ove will draft a document "Recommendations for handling several Balance Suppliers in one or more Metering Point(s)"

14.3 Change of BRP in Metering Grid Area (bulk change of BRP)

The process originates from Denmark and relates to change of BRP in a Metering Grid Area, a "Price Area" or a country, not necessarily at MP level. The process is also called "bulk change of BRP"

Current status:

- In the Netherlands there is a process where the BS sends a list of involved MPS, switch date and new BRP. A notification of the intended change must be sent at least one month ahead;
- The Belgian process is similar to the Dutch. A change can only apply the 1st of a month, however not 1st of January;
- In Germany the process is similar to the Dutch process;
- In Denmark there can only be one BRP for consumption, for a BS, in a MGA, i.e. the change will take place for all MPs where the BS is the supplier. For production the BS can chose to change for all MPs or he can upload a CSV file with the relevant MPs;
- In Finland the process is similar to the Danish, i.e. there can only be one BRP per BS, in a MGA;
- The Polish process is also similar to the Dutch, but since there only can be one BRP for a BS in a MGA, the change will take place for all MPs where the BS is the supplier;
- The Norwegian process is similar to the Finnish and Danish process, i.e. there can only be one BRP per BS, in a MGA;

Action:

- Ove will make a first draft of a BRS:
 - Old and new BRP;
 - MGA (optional);
 - A list of MPs where the change will take place.

14.4 CuS work plan

The work plan in Appendix A was reviewed and updated.

Appendix A CuS work plan

#	Activity	Priority	Start	End
A)	Master data for Customer parties, including how to handle the different attributes related to the Consumer, such as consumer contact information (e.g. address and invoice address).	1 st	Q4/2014	Q1/2017
B)	Master data for energy industry parties, such as BRPs and BSs	2 nd	Q4/2014	Q4/2017
C)	Request change of attributes connected to a MP, such as Closing and Reopening MPs, Change of Metering Method and Change of time frames	3 rd	Q1/2015	Q1/2017
D)	Combined grid and supply billing (invoicing), including MD for products, such as; grid fees, grid subscriptions,	4 th	Q2/2015	Q2/2018
E)	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.	5 th	Q2/2015	Q2/2017
F)	"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	6 th	Q3/2015	Q2/2017
G)	MPs having multiple parties with similar roles, e.g. a MP with different BRPs for production and consumption	7 th	Q4/2015	Q4/2017
H)	Master data for domains, such as which MGAs that belongs to a MBA and related characteristics of these domains (can be changed after harmonisation of HRM and new domains from the network codes from ENTSO-E)	8 th	Q4/2016	Q3/2017
I)	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?)"	9 th	Q4/2016	Q4/2017
J)	"Life cycle of a MP", including how technical events interact with administrative processes and responsibilities	10 th	Q1/2017	Q2/2017
K)	Efficient data alignment, including the possibility to request historical and/or future master data.	11 th	Q1/2017	TBD
L)	 The possible role of a datahub in the processes (Proposed by 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 includes processes between the GAP and the MPA. 	12 th	Q3/2017	TBD
M)	Request for services. The item concerns chargeable requests from the BS to the DSO for changes to a MP or a Meter, such as: • Request for metered data	13 th	Q4/2017	TBD
N)	QA of the CuS model and consistency of the CuS and EMD models	Awaiting EMD part of the	TBD	TBD

		combined billing process		
O)	New processes for "demand/response", which may add new tasks for the MDA	Awaiting EMD survey and ebIX [®] Forum decision	TBD	TBD
P)	 Review of published BRSs: The MP parties should be linked to the MP instead of the "document", to be in line with BIM and CIM The discussion must include bulk switch, where we will have one party with multiple MPs 	TBD	TBD	TBD
Q)	Handling of "Installation Metering Points" and/or fields (may be related to the item above)	TBD	TBD	TBD
R)	New (enhanced) processes for labelling	TBD	TBD	TBD

Appendix B One or two IDs for Metering points?

From Jan Owe

Hi folks!

We are in Sweden discussing how our information model should look like in our future datahub.

One idea was that for an installation you can have one or more metering points. And for one metering point you can have one or two accounting points.

I.e. the latter case would be one accounting point with production, and another one with consumption. (Or, as we called them, "Settlement objects" – that also could be related to exchange metering points, one for each direction).

But this would not correspond with the Harmonised role model where an accounting point is a type of metering point, i.e. a metering point and an accounting point would not be that separated.

Another idea was then that for a metering point you just have an "installation address" (not the separate object "installation"), and for this metering point you link information about different contracts – one with the contract between one supplier and the customer for the consumption. And for some metering points also a contract between (perhaps another) supplier and the customer for the production.

For both contracts it would be the same metering point id. The values for production comes from one part of the register (in the meter) and the values for consumption comes from another part of the register. The metered values for production are sent to the supplier that buys the production, the metered values for consumption are sent to the supplier selling energy to the customer.

But this would not correspond with the ebIX[®] model where you – I would say – have one identification for the accounting point for consumption and another identification for the accounting point for production.

The reason for having two different identifications would be that you can have two different suppliers.

However, this complicates it for the customer. He has one house, one meter, consumption and if also production also perhaps two contracts. But only one metering point (and in most cases probably just one supplier and one contract both for his consumption and production).

So, as we currently are discussing, it is the contract that is essential here. The contract is linked to the customer, the metering point and the supplier – with information if it is for both consumption and production in the metering point or for one of them.

I.e. the datahub would then store two records, one with the relation between Contract(Production) + Customer + Metering Point + Balance Supplier. And another record with Contract(Consumption) + Customer + Metering Point + Balance Supplier.

(The Metering Point Type would in this case be "Combined", since it has both production and consumption.)

The questions are:

Are you handling something like this in your countries?

For a metering point with both consumption and production (for which you might have different suppliers), are you having two metering point id:s. And two accounting point id:s? Or can't you have two different suppliers for the metering point with both consumption and production?

Our current idea is trying to have a, hopefully, simple solution (especially in the information exchange with the customer). I.e. just one metering point, but perhaps two different contracts with perhaps two different suppliers.

And not to have two metering point id:s (and/or two accounting point id:s).

How the outcome of our discussion in Sweden will be, we will know in about two weeks' time. So, if you have any input, please send it soon.

Best regards Jan Owe Svenska kraftnät

Answer from Norway (Ove):

First, the Norway way of doing it, after introduction of the datahub, is as follows:

- The regulator has introduced the concept of "Plus Customers", which are small combined prosumers.
 - $\circ\,$ To be a Plus Customer, the production cannot exceed 100 kW, at any time.
 - The production and consumption are by default netted, However, there will always be two time series, one with net production and one with net consumption.
 - $\circ~$ A Plus Customer has one combined Metering Point.
 - A Plus Customer can only have one BS for the combined Metering Point. I.e. he cannot have different suppliers for production and consumption.
- If the production in a MP exceeds 100 kW, at any time, there has to be two MPs, one for the production and one for the consumption.

I am sceptical to having two different suppliers in one Accounting Point, even with different contracts. I think it will create a lot of trouble related to billing, change of supplier processes, moves etc. if you open for this.

Answer from Denmark (Karsten Feddersen)

We do not handle this situation in the Danish DataHub currently. Every metering point is considered an individual metering point. This means if we have prosumers they will have two separate metering points. One for consumption and one for production. Unfortunately those two meteringpoints in some cases have to be switched by the same balance supplier and that can cause issues if they forget to do it.

We do have the parent-/child structure on metering points but the children cannot be switched. They always belong to the parent. Only parents can be switched and only the consumption/production on parents are a part of the balance market.

We have spoken about having "sister-relations" where a consumption and a production metering point are related and have to be switched together.

However if we should rethink the situation I am sure we would end up in a situation where we would have a customer entity. A customer would be the legal administrator of the metering point. That customer could have contracts (also new entity) as we know it from Finland and Sweden and contact information (another new entity) like we know it from Denmark. One customer could have many metering points and then a switch could either happen on an individual metering point (if allowed by local rules) or a the customer level in order to switch all metering points in one go.

The last would also solve an issue we have in Denmark where companies with many metering points would like to do a mass switch and make sure they didn't forget any metering points.

I am in favor of a common data model where our differences are controlled by validation rules rather than a restricted data model suited explicitly for each country.

Answer from Finland (Esa Pietarinen):

My name is Esa Pietarinen and I've been discussing this issue with our industry working groups here in our Finnish datahub project. I would like to inform you what is the situation here regarding this matter.

We had also a discussion that should we have one accounting point (we use this accounting point term for metering points where you can notify contracts) to which we could link both contract for consumption and

production. As the current policy here is, that you always have separate accounting points for consumption and production, our industry specialists were not in favour of this combined typed of accounting point. Of course as found in the discussion below, all current market processes and IT systems are designed based on the idea that you always notify a contract to a certain accounting point with an unique accounting point ID. If one should be able to have separate suppliers for consumption and production in the same accounting point and we would have only one accounting point ID, we would have to change the processes and current systems in some extent for example by including the contract type (supply/purchase) in the notifications.

Of course we have identified the same problem that you should be able to somehow link accounting points with each other if they belong to the same physical location or even are based on the same measurement. Nowadays there are some systems that have a field for metering point where you can give the metering point ID of the "parallel" metering point. That is, you give the consumption metering point id for production metering point and vice versa. This is what we now have specified for our datahub that you are able to do. We also will have an automatic notification to the supplier of the production accounting point if there is a move-out in the consumption AP if this "parallel" AP is notified by the DSO.

However, I've heard that there is or will be for example EU directive saying that one should be able to have separate supplier for charging electric car. If you also should be able to sell the power/charge from your car to yet separate supplier we could end up with 4 accounting points and 4 suppliers. I guess you could have even more accounting points per one house if you have Tesla power wall, micro-generation, etc and multiple measurements in relation to these. I've tried to ask the DSOs that how they're are prepared for this but it seems that they have no plans so far or then they for some reason don't want to share their thoughts. Please correct me, if you don't see this kind of development and this will not be an issue in the future.

We have been also thinking some kind of hierarchical parent-child structure to solve this issue. The fact however is, that we are not introducing any kind of solution that is not (or will not be) supported by suppliers' and DSOs' systems. So for now where are closely following the public discussion and development of the markets regarding this topic. All in all, I think that this is a common problem for all of us and the best thing would be that we all would have the same solution. If there will only be two, not more, APs that should be linked together I guess we could manage with our current specifications.

Answer from Netherlands (Gerrit):

Jan and all,

In short the Dutch situation.

There can be multiple connections (the physical wiring) from the grid to a connection point of an object (house or factory, etc.).there can be multiple connection points on an object. Uptil recently the connectionpoint mapped well on a metering point, where we could have consumption or production or both.

Lately we introduced the concept of multiple allocationpoints on a connection point, where the allocation point maps (1:1) to a metering point. All allocation points are metered and can be parallel or serial. Consumption on the allocation point is determined by the metering responsible party for all allocation points at one conection point (1 for all) (by reading the meters and doing some subtraction in case of parallel).