Minutes – CuS project meeting

Date: Tuesday and Wednesday November 24th and 25th, 2015
Time: 09:00 – 17:00 (18:00?) and 9:00 – 16:00
Place: Energint.dk, Erritsø, Denmark
Present: Christian, DK
Emma, SE
Gerrit, NL
Joachim, DE
Kees, NL
Ove, NO
Preben, DK
Appendix A CuS Work plan
Appendix B Change of MP attributes
Attachments: **None**

1 Approval of agenda

The agenda was approved.

2 Approval of minutes from previous meeting

The minutes from previous meeting were approved.

3 Resolve matters from ebIX® Forum meeting October 13th

Eva Lepperhoff got an action item at the ebIX® forum meeting to look into the CuS working plan, item G) to Q) and propose at the next ebIX® forum meeting which items that can be taken over by EMD. The task includes making a survey of European initiatives, national usage and interests related to Smart grid developments. Christian stressed that the CuS related items should be kept in the CuS group. EMD should concentrate on items related to measure.

It was also noted that the gas project has finalised its work. It was stressed that it is important to get gas expertise into the CuS WG and Vlatka proposed that the members of the ebIX® Gas alignment project should be asked to join CuS, to ensure that the gas requirements are taken care of. As a first step, it was proposed to send the BRS for alignment of MP characteristics and the BRS for alignment of meter characteristics to the members of the former gas group, asking for comments regarding gas specific content.

Action:

- 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/AAAz5Rcdir6JWIghCrdtX9Gaa?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, in four weeks time.

- 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.

4 Status for publication of CuS BRSs and BIMs

The published CuS BRSs are all versions from February 2014, except for change of Transport Capacity Responsible, which is from December 2014 (corrected cardinality for TCR). Four BIMs have been published in November based on the ebIX® model 2014.A:

- BIM for Change of Supplier
- BIM for Change of BRP
- BIM for End of supply
- BIM for notify MP characteristics

ETC will make BIMs from the rest of the CuS BRSs when the ebIX® model version 2016.A is ready (summer 2016 (?)).

Joachim had sent some comments to the BRS for cancellations. This BRS is currently on circulation for comments within ebIX® Forum until December 9th 2015. The BRS was reviewed and updated, and the changed document will be published after December 9th, unless there are blocking comments.

5 BRS for alignment of Meter Characteristics

The BRS was reviewed based on comments from Gerrit and ETC, among others the following changes were done:

- "Metered …" was renamed to "Measured …" for most occurrences, except when used in roles, based on a question from ETC.
- The following elements were added to Meter characteristics:
    - Temperature correction (done in the meter or not);
    - Altitude correction (done in the meter or not).

***Actions**:*

- 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

6 BRS for alignment of Metering Point Characteristics

ETC had asked if Metered Data Collection Method should be moved from MP Administrative Characteristics to MP Physical Characteristics. It represents physical characteristics of a Meter, hence this physical characteristics should be sent in master data for Meter. However, in this case it expresses an administrative way of handling the meters for the MP, so the proposal was not taken into account.

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.

Some questions from the ebIX® and IEC mapping project was discussed:

- Should we move the ARS from administrative to physical characteristics of MP?

Answer: No

- Is the definition of the Capacity consistent (we need three attributes)?

Capacity of a Metering point	Capacity of a Metering point is the maximum physical capacity of the Metering Point. For electricity the maximum capacity for the Metering Point is given by the **nominal voltage level, number of phases and current limitations**. For gas the maximum capacity for the Metering Point is given by the physical constraints of the (nozzles in the) Meter.

Answer: The definition was rephrased to:

> Capacity of a Metering point is the maximum physical capacity of the Metering Point.
>
> 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.
>
> For gas the maximum capacity for the Metering Point is given in m^3/hour, usually determined by the physical constraints of the (nozzles in the) Meter.

In addition, to be able to send Capacity of a Metering point as number of phases and current limitations, ETC will be asked to add an attribute "number of phases" to the BDT MeasureType:

- In the request and confirm documents (e.g. request change of supplier) we link the MP parties to the request class and not to the MP class. However, in the MP characteristics we link the MP parties to the MP and not the "Notify class". This makes an inconsistency when we map from the ebIX® model to the CIM – And is also in conflict with the way we model in the BIM.
  Answer: The comment was added to item L) in the CuS Work plan in Appendix A.

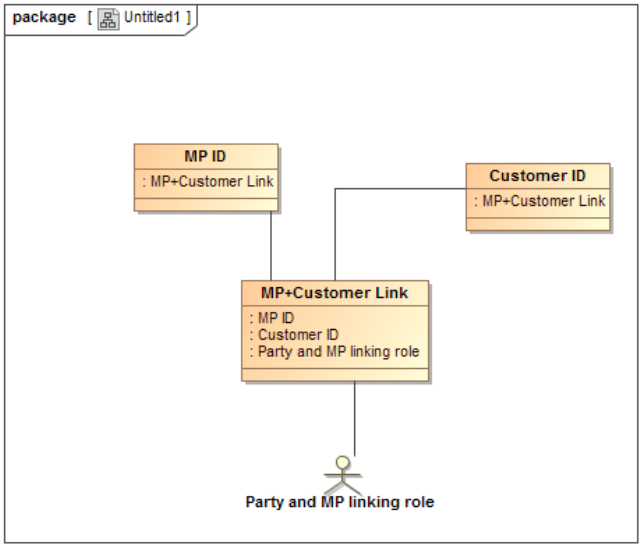
Action:

- Gerrit will find extra information (use, definition, examples) for next meeting (for next version of the BRS) related to:
  - Max consumption (for large users);
  - Type of connection (normal, special, etc.).
- Ove will rename Business Entity View to Business Data View and remove text, only referencing the Introduction to ebIX® Models for all BRSs;
- 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.

7 BRS for alignment of Customer master data

Kees had as action from previous meeting to contact the Dutch chamber of commerce to see if they have a suitable code for Legal Entity Identifier (LEI). Kees reported that there is no such qualifier. According to the body responsible for the LEI, there is no need for this qualifier.

The BRS for Customer characteristics was reviewed and updated. There was a question on how to link the Customer characteristics and the MP characteristics. Ove will make a small document trying to make a process for linking the Customer characteristics and the MP characteristics based on the following:



Action:

- Ove will clean up the BRS, including the attributes and related definitions.
- Ove will make a small discussion document on how to link the Customer characteristics and the MP characteristics.

8 Request change of attributes connected to a MP

Action:

- Ove will make a first draft BRS for change of MP characteristics, based on the result in Appendix B. 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.

9 Combined grid and supply billing

Action:

- Kees will make a first skeleton for an Aggregated Billing Information exchange from the DSO to the Balance Supplier for Combined grid and supply billing. A precondition is that the tariffs, fees and subscriptions are available on web or similar.

10 Preparations for start of "interfering processes"

Gerrit told that EDSN has a matrix explaining what to do when two processes interferes with each other. Similar matrixes is available from Denmark and the Norwegian Elhub.

Action:

- Gerrit ad Christian will send input to Ove;
- Emma will try to make an extract with relevant information from the "Swedish handbook";
- Ove will make a document comparing the different sources for description of interfering processes.

11 Preparations for start of "Switch of grid"

For instance a part of a Metering Grid Area (MGA), such as a village, that is transferred from one Grid Access Provider (GAP) and MGA to another.

Gerrit reported that there is an ongoing process in the Netherlands, where a set of MPs are being moved from one MGA to another. This process also includes changes to other attributes than the MGA ID, such as changes to fees and tariffs.

Emma informed that Sweden has a CSV (coma separated) format for such changes, see https://www.ediel.se/Portal/Document/2693.

Action:

- Gerrit will prepare an abstract or presentation explaining the consequences found after the move of MPs between MGAs.

12 Meeting schedule

- Tuesday February 2nd and Wednesday February 3rd in Helsinki.
- Wednesday June 1st and Thursday June 2nd in Berlin.
- Wednesday September 7th and Thursday September 8th in Poland, Belgium or Slovenia.
- Tuesday November 22nd and Wednesday November 23rd Belgium, Poland or Slovenia.

From Grazyna (for information):

> Unfortunately I can't participate in the forth-coming CuS meeting. Waldek said that he can't replace me, since reaching the location of the meeting is very much time consuming for him. He has to use 4 days for 2 days meeting ;)) For me the same. It would be good to arrange our future meetings in the places that are easier to reach ;))

13 AOB

Emma mentioned that first preparations for a data-hub are starting in Sweden. She asks if discussion items from this process can be brought to our agenda. That is no problem.

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).	1st	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	2nd	Q1/2015	Q4/2015
C)	Combined grid and supply billing (invoicing), including MD for products, such as; grid fees, grid subscriptions, …	3rd	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.	4th	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	**5th**	Q3/2015	Q2/2016
F)	MPs having multiple parties with similar roles, e.g. a MP with different BRPs for production and consumption	**6th**	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?)"	7th	TBD	TBD
H)	Efficient data alignment, including the possibility to request historical and/or future master data.	8th	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 BRSs: • The MP parties will be linked to the MP instead of the "document", to be in line with BIM and CIM	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 requests from the BS to the DSO for changes to a MP or a Meter, such as: • Request for metered data	TBD	TBD	TBD
P)	The possible role of a datahub in the processes (Proposed by DK) • Seen from the supplier side	TBD	TBD	TBD

	• 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: • Reason for cancellation attribute • Cancelation of master- and measured data	TBD	TBD	TBD

Appendix B 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[1]	GAP	BS	GAP	na	GAP	na			No	Yes[2]	No	No	No	No		
«Business entity» Metering Grid Area																
Identification	GAP	GAP	GAP	GAP	ISR	GAP			No	Yes[3]	No	No	Yes[4]	No		
«Business entity» Aggregated Reception Station																
Identification	GAP	GAP	na	GAP	na	na			No	No	na	No	na	na		
Metering Point Address																
City Name	GAP	GAP	GAP	GAP	GAP	GAP			Yes[BE1]	No	No	No	No	No		
Street Name	GAP	GAP	GAP	GAP	GAP	GAP			Yes[BE1]	No	No	No	No	No		
Building Number	GAP	GAP	GAP	GAP	GAP	GAP			Yes[BE1]	No	No	No	No	No		
Postcode	GAP	GAP	GAP	GAP	GAP	GAP			Yes[BE1]	No	No	No	No	No		
Room Identification	GAP	GAP	GAP	GAP	GAP	GAP			Yes[BE1]	No	No	No	No	No		
Floor Identification	GAP	GAP	GAP	GAP	GAP	GAP			Yes[BE1]	No	No	No	No	No		
Country	GAP	GAP	GAP	GAP	GAP	GAP			Yes[BE1]	No	No	No	No	No		
Geographical Coordinate																
Latitude	na	na	na	GAP	GAP	GAP			na	No	No	No	No	No		

[1] There is a need for a process for creation and ending of MPs

[2] Yes, because there already is a process in place in Germany where the BS can correct mistakes in the MP ID

[3] 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)

[4] 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[5]	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[6]	Yes[7]	No	Yes[8]		
Transport Capacity Responsible Party ID	na	BS/ GAP	BS[9]	BS/ TCR	na	na			na	No	No	Yes[10]	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																

[5] The altitude of the meter may be used in the gas sector for correction purposes.
[6] Denmark want a process for bulk change of BRP
[7] Netherlands want to open the process so that also the BRP can request the change – A bulk change process is already in place
[8] Poland want to open the process so that also the BRP can request the change and a bulk change process is already defined
[9] In Denmark the BS is cowered by the Shipper together with the TCR
[10] 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[11]/ 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		

[11] 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**		**Exc han ge**	**GAP**	**?**	**GAP**			**Yes**			**Yes**		Yes		
Estimated annual volume																
Quantity	**GAP**	**BS/ MDA**	**MD A**	**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[12]	**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/MR				
Street Name	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**						BS/MR				
Building Number	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**						BS/MR				
Postcode	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**						BS/MR				
Room Identification	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**						BS/MR				
Floor Identification	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**						BS/MR				
Country	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**						BS/MR				
Geographical Coordinate																
Latitude	**na**	**na**	**na**	**GAP**	**GAP**	**GAP**						BS/MR				
Longitude	**na**	**na**	**na**	**GAP**	**GAP**	**GAP**						BS/MR				
Altitude[13]	**na**	**na**	**na**	**GAP**	**GAP**	**GAP**						BS/MR				
System	**na**	**na**	**na**	**GAP**	**GAP**	**GAP**						BS/MR				
Metering Point Party																

[12] There is a need for a process for creation and ending of MPs

[13] 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**	**MDR**	**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[15]/ GAP**	**GAP**	**na**	**GAP**	**GAP**	**GAP**						**?**				
Settlement Method	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**	**GAP**						**Yes**				
Scheduled Meter Reading Date	**BS/ GAP**	**GAP**	**GAP**	**MDR**	**GAP**	**GAP**						**yes**				

[14] In Denmark the BS is cowered by the Shipper together with the TCR

[15] 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				
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				
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/ MDA**	**MDA**	**MDA**	**MDA**	**GAP**						**yes**				
Meter Time Frame Type	**BS/ GAP**	**BS/ MDA**	**na**	**MDA**	**na**	**GAP**						**yes**				