Minutes ETC meeting, April 14  $^{\rm th}$  and 15  $^{\rm th}$ , 2015



European forum for energy Business Information eXchange

April 21st, 2015

ETC – ebIX<sup>®</sup> Technical Committee

# MinutesETC meeting, April 14th and 15th, 2015

| Date:       | Tuesday and Wednesday, April 14th and 15th, 2015   |
|-------------|--|
| Time:       | 09:00 – 17:30 and 09:00 – 16:00  |
| Place:      | Stockholm  |
| Present:    | Fedder Skovgaard, DK, Energinet.dk, <u>fsd@energinet.dk</u>  |
|             | Jan Owe (Convenor), SE, Svenska kraftnät, <u>Jan.Owe@svk.se</u>                                    |
|             | Kees Sparreboom, NL, TenneT, <u>kees.sparreboom@capgemini.com</u>                                  |
|             | Ove Nesvik (Secretary), NO, EdiSys, <a href="mailto:ove.nesvik@edisys.no">ove.nesvik@edisys.no</a> |
|             | Thibaut Helin, BE, Atrias, <u>thibaut.hellin@atrias.be</u>   |
| Appendixes: | Appendix A, Pending list   |
|             | Appendix B, The tasks of ETC   |
|             | Appendix C, Participants in ETC  |
|             | Appendix D, Belgian-German homework following last ebIX <sup>®</sup> gas group                     |
|             | Appendix E, ebIX <sup>®</sup> Rules for addressing (routing)                                       |
|             | Appendix F, ebIX <sup>®</sup> and IEC trial project  |
| Attachment: | None   |

#### 1 Approval of agenda

The agenda was approved with the following additions:

• How to specify language for addresses? see 19.1 under AOB

#### 2 Minutes from previous meetings

The minutes from previous meeting were approved.

#### **3** Resolve matters arising from previous ebIX<sup>®</sup> Forum meeting

Policy for (maintaining) the TT (Translation Tool) - *Decisions:* 

- We do planned updates of the TT, as required by ebIX<sup>®</sup> and agreed in ETC, among others needed in Belgium.
- We continue maintenance for the near future and put the topic on the next ebIX<sup>®</sup> Forum agenda.

#### Status:

 Kees informed that the maintenance will be done by a Polish company In4mates. He expect the next version of the TT ready by the beginning of June, however dependent on Gerrit's signing of the agreement between ebIX<sup>®</sup> and In4mate.

Policy for making (and maintaining) ebIX® xml-schemas - Decisions:

 Version 2014.A of the ebIX<sup>®</sup> model will be finalised and thereafter frozen until ETC has finished the Technical Report within the ebIX<sup>®</sup>/IEC trial project. Further steps will be agreed by ebIX<sup>®</sup> Forum, if needed by arranging a telephone conference.

Status:

• Taken "ad notam"

Settle the budget for the rest of 2015:

- It was added a new budget item "ebIX<sup>®</sup>/IEC trial project" that will be administrated by ETC;
- The ETC work plan will be adjusted according to the agreed budget.

#### Status:

• Taken "ad notam"

# 4 ebIX<sup>®</sup>, EFET and ENTSO-E Harmonised Role Model

# 4.1 New HG project: Harmonisation of implementation of European network codes within Harmonised Role Model (HRM), the role of HG and tWG

Fedder had as action from previous meeting to ask ENTSO-E/WG-EDI to investigate the differences between the Harmonised Role Model (HRM) and the definitions in the new network codes, and if needed: propose necessary changes to the HRM.

#### Conclusion:

• Postponed

# 4.2 New role "Metering Point Identification Allocator"

ebIX<sup>®</sup> has as homework from the latest HG meeting making a better justification (requirements) for adding a new role "Metering Point Identification Allocator" to the Harmonised Role Model (HRM).

#### Conclusion:

• Postponed

# 4.3 New role "ESCO (Energy Service Company)"

ebIX<sup>®</sup> has as homework from the latest HG meeting making a document discussing the need for an Energy Service Company (ESCO) or similar role(s) (Demand Response Aggregator, Balancing and/or Congestion Services) and how such a role or roles can be integrated (add, update...) to the HRM.

From earlier discussions:

- There is a need for communication with "ESCOs" (Energy Service Companies) and there is currently no role that will fit. The ESCO is:
  - Mainly receiving metered data from the MDR or for a number of metering points. He is using these data for delivering energy services to the client who contracted him.
  - $\circ$   $\;$  The ESCO is seen as a third party, maybe in a smart-grid situation
  - It may act as a Resource Provider on a DSO level, e.g. be able to turn up and down consumption and production in a MP
  - It may be a role acting on behalf of a Balance Suppliers (BS), a Party Connected to Grid, but also a party acting on its own
  - Seen from a Role Model point of view, The ESCO will need to receive metered data from a MP, maybe (in the future) as real-time data
- In a way, it is partly the role of the Market Information Aggregator, although the current definition is more as being an aggregator of information on the level of the whole market and not so much for a particular customer. The aim is to produce statistics on the level of the market.

Also in the role model, the "Market Information Aggregator" is only getting information from the system operator.

#### Action:

• Thibaut will check in the Belgium market which roles are discussed related to Smart-Grid and flexibility, such as Demand Response Aggregator, Balancing and/or Congestion Services etc.

#### 5 ebIX<sup>®</sup> technical documents

The item was postponed.

#### 6 Status ebIX<sup>®</sup>/IEC trial project

The ebIX<sup>®</sup>/IEC project is making progress. There has been four project meetings. The outcome of this first trial project will be an IEC Technical Report (TR). The TR is expected presented at a coming IEC/TC57/WG16 meeting mid-May. The trial project has made proposals for additions to the CIM to handle requirements from:

- EMD BRS Measure for Settle for Reconciliation
- EMD BRS Measure for Collected Data
- CuS BRS Change of Balance Responsible Party,

During the meeting, ETC sent a mail to the CIM model manger for 61968, Margaret Goodrich, explaining the proposed extensions, see Appendix F.

Further on, the first content of the TR was drafted.

#### 7 Smart grid

The following homework from earlier meetings was moved to EMD at the previous ebIX<sup>®</sup> Forum meeting, hence removed from the ETC agenda:

- Kees will ask M490 to come up with requirements for charging poles for vehicles
- Kees will ask M490 to come up with requirements for smart part of the smart meter

#### 8 ebIX<sup>®</sup> Business Information Model 2014.A

#### 8.1 Status

The ebIX<sup>®</sup> profile 2014.A is now frozen. The new MD model was distributed to the ETC participants by the end of the meeting. After addition of BIMs, the MD model 2014.A will be published at <u>www.ebix.org</u> together with updated BIMs from CuS (the four prioritised) and EMD.

Kees had verified with EDIG@s and they made a decision to use the term "Calorific" and not "Caloric".

#### Conclusions:

• In the ebIX<sup>®</sup> model we will use **Calorific** and NOT Caloric.

#### Homework:

- Ove (Erik) will give priority to finalising the following BIMs, including taking into account the comments from Kees to the BIM for CuS (see previous minutes). The BIMs should be ready before next ETC at the end of June. Thereafter send them on circulation for comments to ETC (three weeks) before publication:
  - Change of Supplier (updated after review on previous ETC)
  - End of Supply
  - Change of Balance Responsible Party
  - Alignment of MP Characteristics
- Do the rest of the BIMs as, a second priority, i.e. within end of 2015, for review by ETC:
  - Change of Metered Data Responsible
  - Change of Transport Capacity Responsible Party
  - o Customer Move
  - End of Metered Data Responsible
  - Query MP Characteristics
- Kees will finalise the EMD BIMs. The BIMs should be ready before next ETC in the end of June. Thereafter send them on circulation for comments to ETC (three weeks) before publication.

#### 9 ebIX<sup>®</sup> Model 2015.A

#### 9.1 Agreed additions to the ebIX<sup>®</sup> Business Information Model 2015.A

The following changes are agreed for ebIX<sup>®</sup> Model 2015.A (see justifications below):

- 1) The cardinality for the association from "MP Event" to "MP Address" will be made repeatable [0..\*]
- 2) A language attribute will be added to "MP Address"
- 3) Addition of ISO Language codes (ISO 639-1988)
- 4) Addition of Aggregated Reception Station (ARS), as an ASBIE, with a XOR between the ARS and CVA
- 5) Addition of Calorific Value Area (CVA), as an ASBIE, with a XOR between the ARS and CVA
- 6) Rename of MP Characteristics class to MP Administrative Characteristics
- 7) Addition of MP Physical Characteristics, containing:
  - a. Connection Status (Moved from MP Administrative Characteristics)
  - b. Disconnection Method
  - c. Capacity of Metering point (Moved from MP Administrative Characteristics)
  - d. Voltage Level (Moved from MP Administrative Characteristics)
  - e. Pressure Level (Moved from MP Administrative Characteristics)
- 8) Addition of Capacity of a Metering point
  - a. Definition:
    - Capacity of a Metering point is the maximum 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 Meter.

- 9) Addition of MP Administrative Characteristics / Sustainable Energy
- 10) Addition of MP Administrative Characteristics / Disconnection Contract (Boolean)

#### 9.2 Code questions from the ebIX<sup>®</sup> Gas project

Kees had verified with EDIG@s and found that "D90 = Net Cubic Meter" not should be used, hence new code requests have been submitted to UN/CEFACT, see already distributed DMRs.

Kees and Thibaut informed that there are no gas production code list available, however EDIG@s has promised to come up with a list after their next meeting (shortly).

#### 9.3 ebIX<sup>®</sup> project for alignment with the gas sector

The Belgian-German homework following last ebIX<sup>®</sup> gas group, see Appendix D, was reviewed. The appendix shows a set of additions to the Meter characteristics and will be forwarded to CuS.

#### **Conclusion:**

• The Belgian-German homework following last ebIX<sup>®</sup> gas group in Appendix D will be forwarded to CuS.

#### 9.4 National code lists in the ebIX<sup>®</sup> model

Since the ebIX<sup>®</sup> Model 2014.A has not been available the actions from previous meetings were postponed:

- Belgium will verify that the national Belgium code lists will work with the latest ebIX<sup>®</sup> model (2014.A)
- If OK, Belgium will send the Belgian codes to Kees, who will try to add the codes to the ebIX<sup>®</sup> model
  - Only external code lists (IANA), subsets (UN/CEFACT) and national Belgian code lists that can be added to existing Assembled code lists, will be added to the ebIX<sup>®</sup> model
- The model will be reviewed at the next ETC meeting

# 9.5 codeListAgencyIdentifier usage in ebIX model

From Thibaut:

We would like to bring the point to next ETC meeting about the use of codeListAgencyIdentifier as it doesn't seem to be correctly applied for the moment.

The example hereunder shows the codelist DocumentNameCode. This code list has actually 260 as codeListAgencyldentifer and 6 as originalCodeListAgencylD. The value 260 seems us incorrect as ebIX<sup>®</sup> is not responsible of the codes (creation, maintaining,...), their documentation,... this part remains under the responsibility of UN/ECE. We mean: if we now find a documentation error for a code, it is not ebIX<sup>®</sup> that would be able to change it but only UN/ECE.

I know that the idea of ebIX<sup>®</sup> is that as we don't use the complete list from UN/ECE we are responsible of the adding/removing of the code we will use. But, in fact, you already specify this particularity by using the stereotype <<Subset>> in place of <<Original>> (if we use the stereotype <<Subset>> it means that we don't use the whole list of possibilities). So, following our idea codeListAgencyResponsible as always to be the real responsible of the code list and the stereotype usage (original/subset) will inform us if the maintaining of this code list (which code will be used) in energy sector is done by ebIX or not.

It would be easier for implementation as an implementer will not to check every time if the code is in an ebIX<sup>®</sup> subset (260) or in the real responsible (in this case 6). There is also less risk of inconsistencies (if a code is present in two code lists, one original and one subset with different responsible)

The topic has been discussed within ETC many times during the years. The main reason for using 260 as "scheme Agency Identifier" is that we often combine external code lists with ebIX<sup>®</sup> codes and possibly national code lists, the latter with a "scheme Identifier" identifying the country responsible for the national code list.

However, the current way of doing it may seem a bit complex and difficult, hence it was proposed to see if we can find an easier way of specifying the code list used.

#### Proposals:

- The "list Agency Identifier" should always be the body from where the code originates in the ebIX<sup>®</sup> model
- The "list Agency Identifier" and the "list Identifier" might not be needed in the xml files, however probably needed in the xml code list schemas, e.g. as a parameter in the code list file name

#### Homework:

• Thibaut will make one or more proposal(s) for how to simplify the ebIX<sup>®</sup> rules for usage of "list Agency Identifier" and "list Identifier".

# 9.6 Request from CuS

• Add the classes Aggregated Reception Station (ARS) and Calorific Value Area (CVA) with a XOR between the associations.

# Conclusion:

- The Aggregated Reception Station (ARS) will be added, as an ASBIE in version 2015.A of the ebIX<sup>®</sup> model, with a XOR between the ARS and CVA
- The Calorific Value Area (CVA) will be added, as an ASBIE in version 2015. A of the ebIX<sup>®</sup> model, with a XOR between the ARS and CVA
- Add Metering Point, Physical Characteristics, (Physical Capacity) Renamed to: Capacity of a Metering point
  - New ABIE: Physical Characteristics
  - Need Measure Units A, MW, kW, M<sup>3</sup>/h
  - Definition:
    - Capacity of a Metering point is the maximum 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 Meter.

#### Conclusion:

- The Capacity of a Metering point will be added to version 2015. A of the ebIX<sup>®</sup> model
- The unit code AMP (Ampere) was added to ebIX<sup>®</sup> Model 2014.A
- Add Metering Point / Physical MP Characteristics / Disconnection Method:
  - o New ABIE: Physical Characteristics
  - Codes for Disconnection Method:
    - Remote
    - Manual
    - Manual outside
    - Manual inside
  - $\circ$  Definition:
    - The Disconnection Method is an indication of how the Metring Point is physically connected or disconnected.

#### **Conclusion:**

- The MP Characteristics class will be renamed to MP Administrative Characteristics in version 2015.A
- The MP Physical Characteristics (renamed from Physical MP Characteristics) will be added to the ebIX<sup>®</sup> model version 2015.A, containing:
  - Connection Status (Moved from MP Administrative Characteristics)
  - Disconnection Method
  - Capacity of Metering point (Moved from MP Administrative Characteristics)
  - Voltage Level (Moved from MP Administrative Characteristics)
  - Pressure Level (Moved from MP Administrative Characteristics)
- Add Metering Point, MP Characteristics, Sustainable Energy
  - Existing ABIE: MP Characteristics
  - Codes (ref CEN/CENELEC EN 16325:2013 rev)
    - T01 Solar
    - T02 Wind
  - $\circ$  Definition:
    - An indication that the production, or part of the production, at this Metering point is acknowledged as being sustainable.

#### **Conclusion:**

- The MP Administrative Characteristics / Sustainable Energy will be added to version 2015.A of the ebIX<sup>®</sup> model
- $\circ$   $\,$  The codes T01 to T05 have already been added during the CuS meeting previous week.

| EnergyGenerationTechnologyTypeCode  |
|---|
| T01{codeName = "Solar"}<br>T02{codeName = "Wind"}<br>T03{codeName = "Hydro"}<br>T04{codeName = "Marine"}<br>T05{codeName = "Thermal"} |

- Add a new element Disconnection Contract in the MP Characteristics class
  - o Boolean
  - o Optional
  - Used for both gas and electricity

#### **Conclusion:**

- The MP Administrative Characteristics / Disconnection Contract will be added to version 2015.A of the ebIX<sup>®</sup> model
- Can we approve the "draft codes:



#### **Conclusion:**

• The Draft status was removed from the ebIX<sup>®</sup> Model 2014.A for EOH and EOK

#### 9.7 Cardinality of payload

NEG has noted that the payload in CuS documents in the BIMs has a cardinality of one. However, according to the "Belgian revolution" the ebIX<sup>®</sup> business requirements should specify a cardinality of one, while the implementation (BIM) should specify a cardinality of "many".

At the previous ETC meeting, the MP Event and Response Event were updated to having a cardinality of [1..\*]. The rest of the ABIEs was reviewed and it was found that all standard documents have a cardinality of [1..\*], except the MeasuredData\_Request that has a cardinality of [1]. The reason being that the latter document also has an Energy\_TimeSeries class with a cardinality of [0..1], meant to contain proposals for updated data. It was proposed to link the Energy\_TimeSeries class to the MeasuredData\_Request «ABIE» instead of the MeasuredData\_Request «MA» with a cardinality of [0..1].

#### Action:

• EMD is asked to see if the «ASBIE» for the Energy\_TimeSeries class could be moved to the MeasuredData\_Request «ABIE» instead of the MeasuredData\_Request «MA», still with a cardinality of [0..1]. And, in addition change the cardinality of the Payload to [1..\*].

#### 10 Code lists from MD model in Word format

The ebIX<sup>®</sup> code lists in pdf format from November 2014 was reviewed. It was agreed to remove the columns; origin, UNCL and "original CodeList Agency ID". Instead we will add UID for the enumeration and version, hence these can be used to find the related xml code list schemas. In addition grid lines will be added.

#### Action:

- Kees will create a new code list table:
  - Remove the columns; origin, UNCL and "original CodeList Agency ID"
  - Add UID for the enumeration and version
  - o Add grid lines

#### **11 TT (Transformation Tool)**

Kees had distributed the final version of the updated specs for the ebIX TT to ETC and the Polish software company that is working on the update. As additional information, Kees had attached the xbt schema file to be used as basis for the patterns that will have to be included in the ebIX<sup>®</sup> schemas. Kees had added the one missing xbt:datatype as a preliminary ebIX<sup>®</sup> solution (till we received an UN/CEFACT update because of our request that we will have to submit).

See also item 3 above.

#### **12** Specifying conditions in State diagrams

CuS asks ETC to find a common way of specifying conditions in State diagrams (use of Signals - similar to usage of Guards in activity diagrams).

#### Conclusion:

• We will in the future use guards. To add a guard, click at the transition and add the guard-text between square brackets, e.g. [Yes].

#### **13** Header and Context information in the Business Requirements View

CuS asks ETC to:

- Discuss the content and usage of "Header and Context information" in the BRSs
  - Can we model only for XML, i.e. skip the Document Name Code?
- When to use the Business Document Name Code "ERR", if still relevant

The Document Name Code could fundamentally be removed, however it was decided to keep it for the time being, among others because it maintain the link to previous implementations and implicitly gives a link to the responsible role.

#### Conclusion:

- For the time being we keep the Document Name Code
- We continue using **ERR** for negative responses, i.e. when rejecting a request for metered data and master data

#### 14 Creation of an ebIX<sup>®</sup> technical presentation

Continued homework from previous meetings:

• Jan will review the technical ebIX<sup>®</sup> PowerPoint presentation shown in Warsaw last November and thereafter distribute it to the rest of ETC before the next meeting

#### 15 Review of ETC tasks in Appendix B

The ETC tasks in Appendix B was reviewed and updated.

#### **16** Information from tWG (if any)

The next tWG meeting will take place in Brussels Wednesday April 22<sup>nd</sup>. Fedder informed that there are no news since previous ETC.

# **17** Status for UN/CEFACT project for Alignment of Master Data for Metering Point and of Measured Data

There is a UN/CEFACT Forum in Geneva the next week. The DMRs for new codes are expected approved at the Forum. Kees will participate the first part of the week.

Kees also informed that he has asked Christian Huemer to come up with the latest CCBDA and UPCC documents.

Nothing new regarding UN/CEFACT project for Alignment of Master Data for Metering Point and of Measured Data.

#### 18 Next meeting(s), including start and end time.

- Tuesday June 30<sup>th</sup> and Wednesday July 1<sup>st</sup>, Arnhem in the Netherlands
- Monday October 12<sup>th</sup> in Finland, with a following ebIX<sup>®</sup> Forum meeting Tuesday October 13<sup>th</sup>.

#### 19 AOB

#### 19.1 How to specify language for addresses?

Thibaut asked for an advice on how to specify language in the "MP addresses" ABIE. In the current model the only possibility is using the language attribute connected to the text BDT. However, this contradicts with the UN/CEFACT NDR and the requirement for having a valid xpath, i.e. you cannot specify [language=xx] when the language is defined as a property to an attribute (but possible if the language is defined as an attribute by itself). Three alternatives were reviewed, i.e. using the existing optional language property, adding a language attribute to the "MP Address" ABIE or adding separate associations between "MP event" and "MP Address" for each relevant language.

#### Conclusion:

• The cardinality for the association from "MP Event" to "MP Address" will be made repeatable [0..\*] and a language attribute will be added to "MP Address". The changes will be valid from version 2015.A.

# Appendix A Pending list

#### A. ebIX<sup>®</sup> recommended identification scheme

Chapter 7 from the «ebIX<sup>®</sup> common rules and recommendations» should be a basis for a new chapter in the ebIX<sup>®</sup> recommended identification scheme document, see Appendix E.

#### B. ebIX<sup>®</sup> Modelling Methodology

Homework from earlier meetings:

• Those who have time are asked to read the ebIX<sup>®</sup> Modelling Methodology (see <u>www.ebix.org</u>) and see if there are parts of it that have to be moved to the *ebIX<sup>®</sup> Rules for the use of UMM2* or *Introduction to ebIX<sup>®</sup> Models* documents.

#### C. ebIX<sup>®</sup> header:

a) Do we want the following rule?

The requestor id and the requestor role (Business process role) for the actor (role) that asks for changed, added or deleted information of another role shall be stated in the document header.

- b) Do we need at test indicator?
- c) The content of the Energy Document and Energy Context ABIEs needs a review

# Appendix B The tasks of ETC

| Task  | Group    | Priority     | Planned  |
|---|----------|--------------|----------|
| Lindate of Introduction to Business Requirements and                        | Group    | High         | Every O1 |
| Information Models  |          | ingn         | LVEIYQI  |
| Making ehlX® Recommendations for usage of WEB services                      |          | Medium       | 2016     |
| including recommendations for acknowledgement and error                     |          | Wiedidini    | 2010     |
| handling  |          |              |          |
| Review of "Rules for status and consequences for ehIX®                      |          | Medium       | Every O1 |
| documents"  |          | Weddulli     | LVEIYQI  |
| Maintain the ehIX® technical documents:                                     |          | Medium       |          |
| • ably® Pules for the use of LIMM_2.0                                       |          | Weddulli     | LVEIYQZ  |
| • cblx rules for the use of owner-2.0                                       |          |              |          |
| • ebix <sup>®</sup> common fulles and recommendations (VIIID)               |          |              |          |
| ebix * Recommendations for asynchronous                                     |          |              |          |
| Cthestecker   |          |              |          |
| Other tasks:  |          | N A a aliana | 2016     |
| • 2 <sup>th</sup> generation Harmonized Role Model for Electricity and      | HG       | Medium       | 2016     |
| Gas   |          |              | 2016     |
| ebIX <sup>®</sup> Header  |          | High         | 2016     |
| Maintain ebIX <sup>®</sup> profile for MagicDraw, including:                |          | Continuous   |          |
| Core Components   |          |              |          |
| Code lists  |          |              |          |
| Templates, etc.   |          |              |          |
| Participation/representation in the ENTSO-E and ebIX <sup>®</sup> technical | Together | Continuous   |          |
| WGs   | with     |              |          |
| <ul> <li>Maintaining harmonised role model</li> </ul>                       | ENTSO-E  |              |          |
| Core Components   |          |              |          |
| <ul> <li>Information exchange between participation</li> </ul>              |          |              |          |
| organisations   |          |              |          |
| Participation in UN/CEFACT  |          | Continuous   |          |
| Cooperation with IEC/TC57/WG16  |          | Continuous   |          |
| Organise implementation support, such as:                                   |          | Continuous   |          |
| eblX <sup>®</sup> course  |          |              |          |
| • Implementation support for participating countries, such                  |          |              |          |
| as inserting/updating codes.  |          |              |          |
| Supporting ebIX <sup>®</sup> projects, i.e.:                                |          | Continuous   |          |
| • Develop and maintain the UMM Business Choreography                        |          |              |          |
| View and Business Information View from the CuS and                         |          |              |          |
| EMD working groups.   |          |              |          |
| Develop and maintain XML schemas based on the                               |          |              |          |
| Business Information View from the CuS and EMD                              |          |              |          |
| working groups  |          |              |          |

# Appendix C Participants in ETC

| Name                   | Company         | Telephone        | Mobile           | E-mail                        |
|------------------------|-----------------|------------------|------------------|-------------------------------|
| Andrej Bregar          | Informatika     |                  |                  | andrej.bregar@informatika.si  |
| Christian Odgaard      | Energinet.dk    | +45 76 22 44 63  | +45 23 33 85 55  | cco@energinet.dk              |
| Fedder Skovgaard       | Energinet.dk    |                  | +45 233 38 521   | fsd@energinet.dk              |
| Jan Owe (Convenor)     | Svenska         | +46 10 475 82 85 | +46 705 396 930  | Jan.Owe@svk.se                |
|                        | kraftnät        |                  |                  |                               |
| Jari Hirvonen          | Fingrid         |                  | +358 403 551 720 | Jari.Hirvonen@fingrid.fi      |
| Kees Sparreboom        | TenneT          |                  | +31 622 66 7911  | kees.sparreboom@capgemini.com |
| Ove Nesvik (Secretary) | EdiSys          | +47 22 42 13 80  | +47 928 22 908   | ove.nesvik@edisys.no          |
| Pawel Borkowski        | RWE IT Poland   |                  |                  | Pawel.Borkowski@rwe.pl        |
|                        | Sp. z o.o.      |                  |                  |                               |
| Thibaut Helin          | Atrias          |                  |                  | thibaut.hellin@atrias.be      |
|                        |                 |                  |                  |                               |
| For information:       |                 |                  |                  |                               |
| Alexander Pisters      | E WIE EINFACH   | +49 234 515-2442 | +49 162 257 5428 | Alexander.Pisters@rwe.com     |
|                        | Strom & Gas     |                  |                  |                               |
|                        | GmbH            |                  |                  |                               |
| Cédric Dufour, Atrias  | Atrias          |                  |                  | Cedric.Dufour@Atrias.be       |
| Chris de Jonge         | Atrias          |                  |                  | chris.dejonge@atrias.be       |
| David Batič            | Energy Agency   |                  |                  |                               |
|                        | of the Republic |                  |                  |                               |
|                        | of Slovenia     |                  |                  |                               |
| Gerrit Fokkema         | EDSN            | +31 355 480 180  | +31 622907787    | gerrit.fokkema@edsn.nl        |
| Jon-Egil Nordvik       | Statnett        | +47 22 52 70 00  | +47 975 36 303   | jon-egil.nordvik@statnett.no  |
| Joerg Wiemann          | RWE             |                  |                  | Joerg.wiemann@rwe.com         |
| Lucy Sarkisian         | TenneT          |                  | +31 613 643 092  | <u>l.sarkisian@tennet.org</u> |
| Stefan De Schouwer     | Atrias          |                  |                  | Stefan.DeSchouwer@atrias.be   |
| Tomaž Lah              | Energy Agency   |                  |                  | Tomaz.Lah@agen-rs.si          |
|                        | of the Republic |                  |                  |                               |
|                        | of Slovenia     |                  |                  |                               |
| Vlatka Cordes          | RWE             |                  |                  | Vlatka.Cordes@rwe.com         |
|                        |                 |                  |                  |                               |
| Observers:             |                 |                  |                  |                               |
| Carsten Brass          | EDNA            | +49 241/9671 194 |                  | Carsten.Brass@kisters.de      |

# Appendix D Belgian-German homework following last ebIX<sup>®</sup> gas group

You will find hereunder the result of the Belgian-German homework following last ebIX<sup>®</sup> gas group. We succeeded to find a common list of attributes used by both countries (transmitted to the market) and in addition of this we have some German attributes more.

|   |  | BE   | DE |
|---|--|--|----|
| Meter Type (= Meter Cl  | naracteristics)  |  |    |
| Name  | Description  |  |    |
| Meter Display<br>Technology   | Technology used to display the information for the user: mechanical, electronic, multi-line display  | v  | v  |
| Meter Installed<br>Functionality  | Functionality activated on meter, i.e. budget or metering  | v  | v  |
| Meter Purpose   | Purpose of the meter in a meter installation, i.e. main / check  | v  | v  |
| Metered Data<br>Collection Method<br>(earlier Meter Reading<br>Characteristics) | A code used for the type of communication between<br>a meter and the Metered data collector, i.e.<br>automatic meter reading, manual, 2-way, 1-way                                       | v  | v  |
| Meter Type  | Type of meter, i.e. Budget, Usual, Smart, PPM  | v  | v  |
| Type of the Meter   | Germany values:<br>Diaphragm/bellows meters<br>Rotary meters<br>Turbine meters<br>Orifice meters<br>Ultrasonic flow meters<br>Coriolis meters<br>Vortex Flow Meter<br>Individual Setting | Found in the Meter<br>Administrator's DB,<br>but not exchanged.  | >  |
| Dimension of the<br>meter   | Indicate which dimension (for gas) the meter has (e.g.<br>G10, G25, G4,)   | in Belgium we<br>preferred to put the<br>maximal debit in the<br>"installed power"<br>e.g. G4 = 6m <sup>3</sup> /h | V  |
| Attribute of the meter  | For definition ask to Germany<br>Possible values:<br><i>Z01 EDL40<br/>Z02 EDL21<br/>Z03 sonstiger EHZ</i>  |  | v  |

#### **Business Entities classes:**

| Type of fixation      | For definition ask to Germany<br>Possible values:<br>BKE Stecktechnik (Befestigungs- und |   | v |
|-----------------------|--|---|---|
|                       | Kontaktierungseinrichtung) =Connector  |   |   |
|                       | DPA 3-Dreipunktaufhängung = Three-Point  |   |   |
|                       | Conntection  |   |   |
|                       | HUT Hutschiene = top hat rail  |   |   |
|                       | 231 Einstutzen-Zahler = Single-Pipe Meter  |   |   |
|                       | 232 Zweistutzen-Zahler = Double - Pipe Meter   |   |   |
| Corrector             | For definition ask to Germany  |   | v |
|                       | Possible values:   |   |   |
|                       | DNU Dichtemengenumwerter = density corrector   |   |   |
|                       | INO Temperaturmengenumwerter = temperature   |   |   |
|                       | COFFECTOR  |   |   |
| Pogistor              |  |   |   |
| Characteristics       |  |   |   |
| Name                  | Description  |   |   |
| Calculation Type      | Type of calculation performed on volumes. Types are                                      | v | v |
|                       | compensation, valorization. Only needed in case of                                       |   |   |
|                       | decentralized production.  |   |   |
| Direction             | The direction of the energy being measured in  | v | v |
|                       | relation to the network it is connected to, i.e.   |   |   |
|                       | consumption, production  |   |   |
| Load Profile          | A code defining the standard load profile.   | v | v |
| Measuring Method      | Method used to store the measures, cumulative /  | v | v |
| -                     | non-cumulative   |   |   |
| Multiplication Factor | A factor with which the registered value needs to be                                     | v | v |
|                       | multiplied with  |   |   |
| Number of Digits      | The number of digits configured on the register.   | v | v |
|                       | Specified as a combination of total and after the  |   |   |
|                       | decimal point, or the number before and after the  |   |   |
|                       | decimal point.   |   |   |
| Reporting_Base        | An indication to inform about the source of the  | v | v |
|                       | reported values.   |   |   |
|                       | Two values are foreseen: virtual and measured.   |   |   |
| Time of Use           | The Time of Use / Timeframe during which a value is                                      | v | v |
|                       | registered   |   |   |
| Register Type         |  |   |   |
| Name                  | Description  |   |   |
| Incrementation Type   | Way of cumulating registered values, i.e. cumulative,                                    | v | v |
|                       | non-cumulative   |   |   |
| Measured Energy Type  | The identification / type of energy being measured,                                      | v | v |
|                       | i.e. active energy, active power,  |   |   |
| Metering Method       | The method used for metering, such as continuous,  | v | v |
|                       | non-continuous or not metered.   |   |   |

| Unit of Measure | A unit of measure defining the accumulated reactive | v | v |
|-----------------|---|---|---|
|                 | energy equal to one kilovolt ampere of reactive     |   |   |
|                 | power per hour (CEFACT rec20_rev4E_2006.xls)        |   |   |

# Belgian reference:

https://model.atrias.be/umig6/?refid= 17 0 2 2 b9402f1 1358765004378 48258 68382

# Appendix E ebIX<sup>®</sup> Rules for addressing (routing)

# A.1 Definitions

| Juridical party:      | In this chapter the term juridical party will be used for the party juridical responsible for sending or receiving information.  |
|-----------------------|--|
| Business process id:  | The key element in routing and addressing is the Business process that will be identified by a code called the Business Process Identification (BPI). BPI also serves as the key element to indicate the business process capabilities of a party. The user group, government agency, or national ebIX <sup>®</sup> group making a Business information model assigns this code.   |
| Party id:             | The identification of a party, i.e. the party's EAN location number or the party's EIC (ETSO Identification Code).   |
| Third party:          | A party acting on behalf of the juridical party (as an intermediate) in a message<br>exchange scenario. In between the juridical parties there may be several third<br>parties. These intermediates can have different responsibilities, such as routing of<br>documents, conversions to/from EDIFACT/XML and/or handling of the document<br>content on behalf of the juridical party. Intermediates only doing routing of<br>messages will not be a part of the addressing principles discussed below. The third<br>parties may be split into the following two subtypes: |
| Application service n | rovider (ASP): A third party that takes care of the database (application) for a   |

Application service provider (ASP):A third party that takes care of the database (application) for ajuridical party. The ASP is responsible for returning application acknowledgements,<br/>such as APERAK.

**EDI Service Provider (ESP):** A third party that is responsible for the document exchange on behalf of the juridical party, including conversion of documents. The ESP is responsible for returning syntax related acknowledgements, such as EDIFACT CONTRL.



EDI service provider (ESPA) pplication service provider (A:

Relationship between roles in document exchange

A juridical party can choose whether or not to use one or more third parties in his document exchange. It is also possible to combine usage of third parties for one or more business areas and handle the document exchange himself for other business areas.

# A.2 Principles for addresses and identifications

1. The juridical party may choose whether to use one or more third parties as intermediates in a document exchange scenario.

- 2. A juridical party can only have one party id for each BPI.
- 3. Routing of documents, including acknowledgements, shall use the same principles even if third parties are used.
- 4. In case of additional routing information a BPI shall be used for routing of documents to the right business process through its identification.
- 5. The main use of the addresses in the envelope (for EDIFACT in UNB) is routing purposes. The routing information includes information related to the BPI.
- A recipient id combined with the related BPI in the envelope (for EDIFACT in UNB) can only be linked to one communication address, but a communication address may be linked to several combinations of party ids and/or BPIs.
- 7. It shall always be the juridical party, the party legally responsible for sending or receiving the information, that is identified in the document header level (for EDIFACT in the NAD segment).
- 8. Either EAN or EIC (ETSO Identification Code) identification scheme shall be used as party id.
- 9. The BPI concerned shall be stated in the envelope.



10. Acknowledgements of acceptance, such as EDIFACT/APERAK, shall be treated as any other document regarding the addresses. I.e. the sender address, including BPI (sub address) in the original document, shall be

sent as receiver address in the application acknowledgement. And the receiver address, including BPI (sub address) in the original document, shall be sent as sender address in the application acknowledgement.

11. Acknowledgements of receipt, such as EDIFACT/CONTRL documents, shall be returned with opposite addresses. I.e. the sender address, including BPI (sub address) in the original document, shall be sent as receiver address in the syntax acknowledgement. And the receiver address, including BPI (sub address) in the original document, shall be sent as sender address in the syntax acknowledgement.

# Appendix F ebIX<sup>®</sup> and IEC trial project

Dear Margaret and all,

First of all, please bear in mind that these proposals should be considered as proof of concept rather than asserted solutions. So we are not asking for accepting these changes, but rather for your opinion on the concept.

First of all we identified a need for adding relations between entities across the 61970, 61968 and 62325 packages.



In order to show additions to the existing CIM model, new classes and associations are stereotyped <<eblX>>.

ebIX is modeling the market –or administrative processes similar to the 62325, which do not refer to physical entities in the grid, but rather logical objects. Hence we propose the introduction of "logical" meters and registers to the model.

Looking at specific classes, we propose a new class, MarketActivityRecord associated to existing classes, as outlined in the diagram below (extensions shown in blue).

We believe it is best to elaborate on the background for the additions during the meeting.





Further information about our considerations can be obtained from the minutes of meetings, which are available at the IEC collaboration site:

# http://collaboration.iec.ch/lotusquickr/iec\_tc57/PageLibraryC12573B500204022.nsf/h\_Toc/624E305D0B 70401FC1257E1A002990F3/?OpenDocument

Best regards,

Fedder Skovgaard IT Stab +4523338521 FSD@energinet.dk From: Margaret Goodrich <<u>margaret@sisconet.com</u>> [mailto:Margaret@sisconet.com] Sent: 1. april 2015 15:26 To: WG16@iectc57.org Cc: Kees Sparreboom (kees.sparreboom@capgemini.com); vlatka.cordes@westnetz.de; Jan Owe; ove.nesvik@edisys.no; jean-luc.sanson@noos.fr Subject: RE: WG-16 Meeting May 19-21, 2015 Draft Agenda

Hi Fedder,

Since I am now the Model Manager for WG14, I will need to see what changes you are proposing. In addition, we need to determine who else from WG14 would need to be present since I don't believe you would need everyone. What area of the model do the changes impact. If we can determine that, I may be able to assist in determining who should be there.

Since this meeting is in Europe, an afternoon call is probably not going to work for any WG14 members that are in North America and that would include me.

Regards, Margaret Goodrich Director, Systems Engineering Cell: 903-477-7176 Hm Off: 903-489-1494

From: Fedder Skovgaard [mailto:FSD@energinet.dk]
Sent: Wednesday, April 01, 2015 5:19 AM
To: WG16@iectc57.org
Cc: Kees Sparreboom (kees.sparreboom@capgemini.com); vlatka.cordes@westnetz.de; Jan Owe; ove.nesvik@edisys.no; jean-luc.sanson@noos.fr
Subject: RE: WG-16 Meeting May 19-21, 2015 Draft Agenda

Dear Jim et. al.,

As you know a joint working group of people from ebIX and IEC are working on a technical report, "IEC 62325-103: Framework for energy market communications – Part 103, Review of information exchanges within the downstream European energy market from a CIM perspective".

We made some good progress and are ready to discuss our findings with WG16 at the upcoming meeting in Paris. However our study have resulted in proposed changes not only to the 62325 CIM package, but also to certain elements in the 61968 package. Hence, we would like to propose that a call is setup with

members from WG14, so we can get their initial position to our proposal during the meeting. This call could ideally be placed Wednesday afternoon (April 20<sup>th</sup>), after discussing this within WG16.

We expect to share a draft version of the technical report in advance of the meeting.

Best regards,

Fedder Skovgaard IT Staff +4523338521 FSD@energinet.dk From: Waight, James [mailto:jim.waight@omnetric.com] Sent: 7. marts 2015 06:29 To: WG16@iectc57.org Cc: yasuro.shobatake@toshiba.co.jp; Ferstl, Peter Subject: WG-16 Meeting May 19-21, 2015 Draft Agenda

#### WG-16

As previously announced our next meeting of WG-16 will be in Paris France, on May 19-21, 2015. RTE has graciously agreed to be our host.

Please find attached the draft agenda. Could you please look it over and let me know if you have any comments. Also, please remember to complete the registration form and return it to Maurizio Monti.

Sincerely,

Jim Waight Senior Manager Mobile: 612-991-3943 Office: 952-607-2142 Jim.Waight@omnetric.com



A Stomens & Accenture Company Integrated smart grid solutions for the digital era

This message and any attachments are solely for the use of intended recipients. The information contained herein may include trade secrets, protected health or personal information, privileged or otherwise confidential information. Unauthorized review, forwarding, printing, copying, distributing, or using such information is strictly prohibited and may be unlawful. If you are not an intended recipient, you are hereby notified that you received this email in error, and that any review, dissemination, distribution or copying of this email and any attachment is strictly prohibited. If you have received this email in error, please contact the sender and delete the message and any attachment from your system. Thank you for your cooperation