May 11th, 2017

ETC – ebIX® Technical Committee

Minutes ETC meeting, April 25th and 26th, 2017

Date: Tuesday and Wednesday April 25th and 26th, 2017

Time: 09:00 –18:00 and 09:00 – 16:00

Place: TenneT's offices in Arnhem, the Netherlands

Present: Gerrit, NL (first day)

Jan, NL (first day) Jan (Convenor), SE

Kees, NL

Ove (Secretary), NO

Pawel, PL Thibaut, BE

Appendixes: Error! Reference source not found., **Error! Reference source not found.**

Appendix A, Agreed additions to the ebIX® Business Information Model 2016.A

Appendix B, MDS (CuS) proposals to ETC for update of the ebIX® Business Information Model



HRM_MR_Gateway operator & Gateway

Attachment: 0

See item 5.3, HRM MR from MDS (CuS) for addition of Gateway Operator, Gateway Administrator and Gateway



CLC_TC57_Paris_Lam bert_2.pdf

See item 16.1, My Energy Data



re-activation UN CEFACT Utilities proj

See item 13, Status for UN/CEFACT project for Alignment of Master Data for Metering Point and of Measured Data



data-sheet-enterpri se-architect-schema-

See item 16.2, Migration from MagicDraw (MD) to Enterprise Architect (EA) in Belgium

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1 Approval of agenda

The agenda was approved with the following additions:

 Ove asked on behalf of MDS to give item "7.2 MDS (CuS) requests for new and updated enumerations" priority

- MDS (CuS) BIMs, see item 7.11
- UN/CEFACT and OASIS project to align standard business document header (SBDH), see item 8.1
- My Energy Data, see item 16.1
- Migration from MagicDraw (MD) to Enterprise Architect (EA) in Belgium see item 16.2 under AOB

2 Minutes from previous meetings

The minutes from previous meeting were approved.

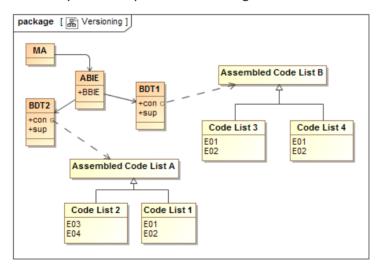
3 Versioning of ebIX® model and related XML schemas – main item the first day

From discussion:

 We should differentiate between "ebIX® versioning" and "implementation versioning on a national level", and between versioning of documentation (BRSs, BIMs etc.), models, xml-schemas and implementations:

"Level"	Requirements	UML model	Technical specification	Technical implementation
ebIX®	BRS	BIM	xml schema	
National	(BRS)	BIM	xml schema	Implementation

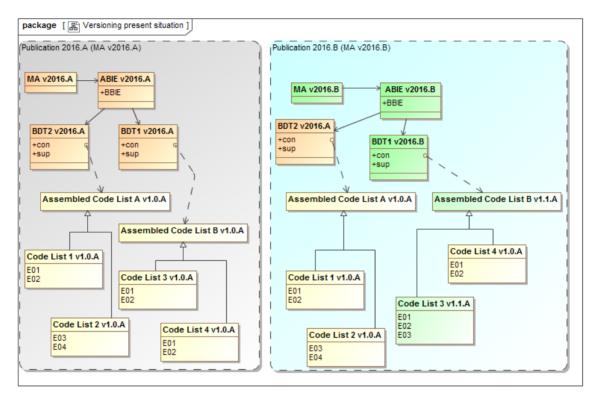
- For limiting the number of major versions, a rule could be that every object can have its own version (minor version), independent from other objects in a "package";
- We will use the terms "major version", "minor version" and an optional "revision";
- Elements that may have independent versioning:



• The present situation:

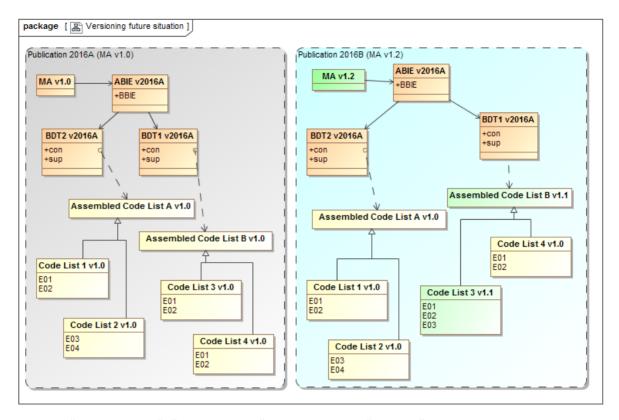
- The versioning of enumerations, ABIEs, BDTs etc. are interdependent from each other. This means that a change in the version of an "dependent object" also will require changes in the "overlaying object", e.g. a change in an enumeration will require a change in the BTDs using the enumeration. Note that there may be several versions of an enumeration at one time and it is only the "overlaying objects" that use a changed enumeration that must get a new version;
- Presently a Message Assembly (MA) has a publication number instead of a version number, however, ebiX® will use the same numbering as for MAs, ABIEs, etc.;

- The three levels of versions for enumerations consist of two numeric positions and one alphabetic, e.g. "1.0.A", while the two levels of versions for MAs, ABIEs, BDTs etc. use one numeric positions (published year) and one alphabetic, e.g. "2016.A";
- Example of present situation:



• The future situation:

- Publication numbers are migrated to version numbers;
- Version numbers are only updated when they (really) change;
- For ABIEs, BDTs etc. there is only one level of versioning (publication number), i.e. a major version (tagged value "Version Identifier" in the package of the ABIE, BDT etc.);
- Minor version number is only valid for enumerations and MAs. A change shall be backward compatible;
- There is no versioning of constraints (OCL);
- There is no specific versioning of the MBIEs and MDTs, these elements inherit the version from their MA;
- The "revision level" will not be used, neither for MAs nor enumerations;
- Example of future situation:



- BRSs will use "major version", "minor version" and an optional "revision";
- BIMs will follow the ebIX® model, hence only the major version is applicable;
- For national customisation, eblX® offers "re-customisation" of OCL statements. However, it is assumed that national implementations also will need national ABIEs, BDTs etc.:
 - For national customisation, a new «eDocLibrary», with a national version number that may be independent of the eblX® version, and a new MA, must be created;
 - The «eDocLibrary» and the MA may use ebIX® naming conventions for customisation (to be determined);
 - o Both the ebIX® and the national MA may map to the same «InformationEnvelope».

4 Resolve matters after ebIX® Forum meeting March 23rd 2017

Noting to resolve.

5 Resolve matters from latest ebIX®, EFET and ENTSO-E Harmonised Role Model (HRM)

5.1 Addition of stereotypes for roles and domains

Proposed stereotypes for addition to the HRM document:

«harmonised Role» Essential harmonised business responsibility. A role cannot be split over

several market participants;

«harmonised Resource» A grid asset, a consumption resource or a production resource;

«harmonised Domain» A composition of one or more Metering Points;

«from CIM» An object defined in IEC/CIM;

«???» A stereotype for Balance Group must be added.

Action from earlier meeting:

• The proposal for usage of stereotypes will be discussed in WG-EDI and ebIX®.

The proposals for stereotypes was briefly reviewed with a question if the Balance Group could be stereotyped as «harmonised Domain»?

Conclusion:

• The proposal is OK

5.2 Smart-grid roles

The item was postponed.

5.3 HRM MR from MDS (CuS) for addition of Gateway Operator, Gateway Administrator and Gateway

A MR for Gateway Operator, Gateway Administrator and Communication Gateway was reviewed and slightly updated. See attached MR.

Conclusions:

- The MR will be shown to the HG at the coming meeting May 19th, after verification with Vlatka
- The MR will be sent back to MDS, asking for a UseCase or other documentation for the usage of the Gateway Administrator (currently not used anywhere in the MDS requirements).

5.4 Which tool to use for the HRM, MagicDraw (MD) or Enterprise Architect (EA)

Kees had as action from previous meeting investigated the possibility of exporting the HRM to XMI format from EA and reload it in MD. However, he had not found a way to do it without losing needed information, such as stereotypes.

Conclusion:

- Kees will continue trying to find a way of importing EA models to MD
- The conclusion (that no automatic way of importing EA files to MD has yet been found) will be reported to the HG.

5.5 HRM responsibilities

Jan will go through the HRM and propose ebIX®, ENTSO-E and dual responsibilities before next HG meeting May 19th. The proposal for update of the HRM will be sent to ETC beforehand for comments.

Action:

- Jan will go through the HRM and propose ebIX®, ENTSO-E and dual responsibilities before next HG meeting May 19th;
- Jan will send the proposal for update of the HRM to ETC beforehand for comments.

6 ebIX® web site

Kees had as action from previous ETC meeting:

Upload the latest EMD BRSs and BIMs to the Documents page;

- Upload the latest xml schemas to the Documents page;
- Added a date to the latest 2014.A version of the MD model.

The item was closed.

7 ebIX® Business Information Model 2016.A

7.1 Continue review and update of version 2016.A

The list of agreed updates in Appendix A was updated during the items below.

7.2 MDS (CuS) requests for new and updated enumerations

See requests in Appendix B.

Continued action from earlier ETC meeting:

- Kees will make a DMR for a new code for "3139 Contact function code":
 - a) Meter access contact (Department/person to contact for matters regarding meter reading, including access to the Meter);
 - b) Customer contact (The main department/person to contact at the customer).
- Kees will add the codes in bold in "Appendix B/B.2/item f)" to a new code list "Contact Function Code" in the ebIX® model (new BDT, assembled code list, ebIX® subset).

Status for MDS requests:

BRS	Request	Status	
	Add a new code "m ³ to Energy" to the Conversion Factor Type Code	Ove will bring the request back to MDS, asking if the request still is valid.	
BRS for Alignment of	Add a new enumeration Meter Type with the following literals; "Electronic", "Analog" and "Advanced (smart)"	Added to the ebIX® model	
Metering Configuration Characteristics	Add a new enumeration Incrementation Type Code with the following literals; "Cumulative" and "Non-cumulative	Added to the ebIX® model	
	Add new enumerations for Communication Protocol and Communication Carrier, when there is a proposal from MDS	Awaiting MDS	

7.3 How to represent the exchange of calorific value in ABIEs

The item was postponed.

7.4 How to extend the possibilities for national customisation?

The item was closed after the discussion regarding versioning (see above).

7.5 OA of the ebIX® model

The item was postponed.

7.6 Code lists

The item was postponed.

7.7 Alignment of external content the ebIX® model

The item was postponed.

7.8 Use of XOR in combination with cardinalities

The item was postponed.

7.9 Magic Draw version 18.2, ebIX® model 2016.A, ebIX® "standard messages", etc.

The item was postponed. The item concerns usage of stereotype "Message Assembly" in relation to the TT.

7.10 "Time of Use" vs "Meter Time Frame"

Postponed until after the coming EMD meeting

7.11 MDS (CuS) BIMs

Ove had made BIMs for Customer Move and Change of Metered Data Responsible (MDR), however not distributed because of a missing association and review of document types to use:

- The association from Response Event to Metered Data Responsible is missing
- Confusion regarding which Document Type to use:

Document	Document type	Comment
Request change of Supplier	392	Used in current ebIX® model, Elhub and in Belgium
Confirm change of Supplier	414	Used in current ebIX® model, Elhub and in Belgium
Reject change of Supplier	414	Used in current ebIX® model, Elhub and in Belgium
Notify change of Supplier to New BRP/TCR	E44	Process not used in Belgium nor Elhub
Notify change of Supplier to Old BS, BRP/TCR	E44	406 used in current ebIX® model and Elhub, however marked for deletion in ebIX® 407 used in Belgium
Request Customer move in	392	
Confirm Customer move in	414	
Reject Customer move in	414	

Notify Customer move in to new Affected Role	E44	
Notify Customer move in to old Affected Role	E44	
Request Customer move out	392	
Confirm Customer move out	414	
Reject Customer move out	414	
Notify Customer move out to old Affected Role	E44	
Request change of BRP	392	434 used in Belgium
Confirm change of BRP	414	
Reject change of BRP	414	
Notify change of BRP to New BRP	E44	
Notify change of BRP to Old BRP	E44	
Request change of MDR	392	
Confirm change of MDR	414	
Reject change of MDR	414	
Notify change of MDR to Old MDR	E44	
Request End of Supply	392	432 used in Belgium and Elhub
Confirm End of Supply	414	
Reject End of Supply	414	
Notify End of Supply	E44	
Notify MP Characteristics	E07	

Action:

- Kees will add the tagged values to the association (ASBIE) from Response Event to Metered Data Responsible
- Ove will update the BIMs according to the table above.

8 Update of ebIX® position related to addressing in business documents

The item was postponed.

8.1 UN/CEFACT and OASIS project to align standard business document header (SBDH)

UN/CEFACT has launched a project together with OASIS to align the CEFACT standard business document header (SBDH) and the OASIS business document envelope (BDE). Kees has joined this start and when ebIX® has an interest in this development, he intends to stay in the project group. Kees joined mainly because this is the first time he knows of, that standard organisations initiate alignment (instead of fighting each other). And, because we wait for such a document for years already. The first telco was April 20th and will continue subsequently every second week.

Conclusion:

• Kees is asked to continue the participation in the project (telco)

9 Code lists from Magic Draw model in Word format

The item was postponed.

10 Planning for support for new countries that want to use the ebIX® model

The item was postponed.

11 Status for update of the TT (Transformation Tool)

The item was postponed.

12 Creation of an ebIX® technical presentation

The item was postponed.

13 Status for UN/CEFACT project for Alignment of Master Data for Metering Point and of Measured Data

See attached mail from Kees. The work from ebIX® side will be to resubmit ACCs to UN/CEFACT. However, before we can resubmit the ACCs, we need to update the names of some elements in the ebIX® model, to fit the UN/CEFACT requirements.

At a later stage, after update of the ebIX® model with the latest additions from MDS and EMD, we can submit new request to UN/CEFACT.

Current members of the project group:

- Christian, DK
- Gerrit, NL
- Jan. SE
- Kees, NL
- Ove, NO
- Vlatka, DE

Action:

• Kees will make a proposal for an updated submission to the UN/CEFACT project, send it to the project group and ETC for comments for 14 days, before submitting it to UN/CEFACT.

14 Status and continuation of ebIX®/IEC project

Jan presented some changes to the TR, which was reviewed and agreed. The changes originate from comments to the TR after circulation for comments to the national IEC/TC57 committees.

Thereafter the content of the response to ebIX® Forum action Item 2016b-02: "ETC is asked to evaluate the cooperation with IEC before the ebIX® autumn forum meeting 2017" was discussed:

- Jan will prepare a response to ebIX® Forum action Item 2016b-02: "ETC is asked to evaluate the cooperation with IEC before the ebIX® autumn forum meeting 2017":
 - O How to use the results from the work so far?

- O How to link ebIX® to CIM?
- A proposal for how to continue, incl. the option of having common input to WG16 together with WG-EDI;
- o In general, what is the ebIX® position in international standardisation? What to expect from IEC, UN/CEFACT, OASIS, ISO, CEN/CENELEC and others?
 - These standards are the basis for ebIX[®] work;
 - International standards should be tailored by ebIX® (and ENTSO-E) to fit specific European processes.

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

Tuesday and Wednesday August 22nd and 23rd, Brussels Tuesday and Wednesday October 17th and 18th, Denmark (before ebIX[®] Forum) Tuesday and Wednesday December 12th and 13th, Stockholm

16 AOB

16.1 My Energy Data

Eric Lambert has made a document "CLC_TC57_Paris_Lambert_2.pdf" (attached) that provides a data format based on international standards to support "My Energy Data" download use case. "My Energy Data" (MED) is the term adopted as a generic description of services to offer customers the possibility of downloading their energy consumption information and granting access to third parties to that information to enable service providers to offer analytical and other services to customers (residential, municipalities, ...).

No actions were agreed.

16.2 Migration from MagicDraw (MD) to Enterprise Architect (EA) in Belgium

Thibaut informed that Atrias has decided to migrate all MD models to EA.

Thibaut also showed how a NDR compliant xml schema can be generated from EA, using the "Vienna Plugin".

Information from after the meeting: Thibaut checked with their consultant for some of the remarks he still had on the use of Schema Composer to build the messages in EA Sparx and apparently, there is a working solution. Information about the schema composer feature is attached.

Appendix A Agreed additions to the ebIX® Business Information Model 2016.A

A.1 BIE changes, e.g. cardinalities

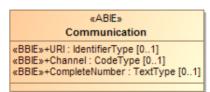
- 1) Change the cardinality of the association from "MP Event" to "MP Address" to [0..*]
- 2) Add a language attribute to "MP Address"
- 3) Add Aggregated Reception Station (ARS), as an ASBIE, with XOR between the ARS and Calorific Value Area (CVA)
- 4) Add CVA, as an ASBIE, with XOR between the ARS and CVA
- 5) Rename MP Characteristics class to MP Administrative Characteristics
- 6) Add 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)
- 7) Add Capacity of Metering point
 - a. Definition:

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 and calculated from the nominal voltage level, number of phases and current limitations.

For gas the maximum capacity for the Metering Point is given in m3/hour, usually determined by the physical constraints of the (nozzles in the) Meter.

- 8) Add a new ABIE Energy Label, with two BBIEs; Technology Type and Fuel Type
- 9) Add an attribute "Disconnection Contract" (Boolean) in MP Administrative Characteristics
- 10) Change the Country Name (text) in the MP Address class to Country (coded)
- 11) Add BDT for Energy Label Fuel
- 12) Rename BDT Energy Generation technology Type to Energy Label Technology Type
- 13) Add an BBIE "number of phases" to MP Physical Characteristics
- 14) Add a new ABIE; Communication:



15) Rename the BBIE Unit Type in the ABIE Product Characteristics to Quantity Unit Type and add a BBIE Price Unit Type to the ABIE Product Characteristics

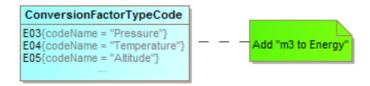
A.2 New enumerations and/or DT

- 1) Add an enumeration for ISO Language codes, based on ISO 639-1988
- 2) Add an enumeration for Energy Label Fuel type, based on CENELEC standard, imported from Atrias implementation
- 3) Add an enumeration for Energy Label Technology type, based on CENELEC standard, imported from Atrias implementation
- 4) Add enumeration "Communication channel", ebIX® subset with the following literals, based on 3155:
 - AL Cellular phone
 - EM Electronic mail
 - FX Telefax
 - TE Telephone
- 5) Add an enumeration "Communication channel", ebIX® subset, based on 3131 Address type, code with the following literals:
 - 1 Postal address: The address is representing a postal address
 - 3 Physical address; The address represents an actual physical location.
- 6) Remove all predefined facets, such as maxLength
- 7) All code lists should be checked for codes without a code name. These should be given a name or deleted.
- 8) Add a new enumeration Meter Type with the following literals; "Electronic", "Analog" and "Advanced (smart)"
- 9) Add a new enumeration Incrementation Type Code with the following literals; "Cumulative" and "Non-cumulative

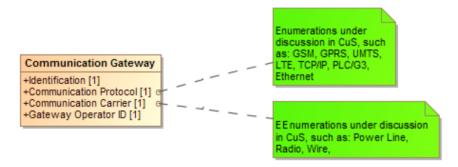
Appendix B MDS (CuS) proposals to ETC for update of the ebIX® Business Information Model

B.1 BRS for Alignment of Metering Configuration Characteristics

a) Add a new code "m³ to Energy" to the Conversion Factor Type Code;

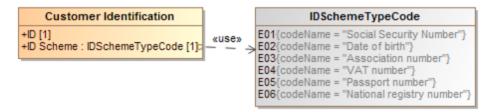


b) Add new enumerations for Communication Protocol and Communication Carrier, when there is a proposal from MDS - Awaiting MDS.



B.2 BRS for Alignment of Customer Characteristics

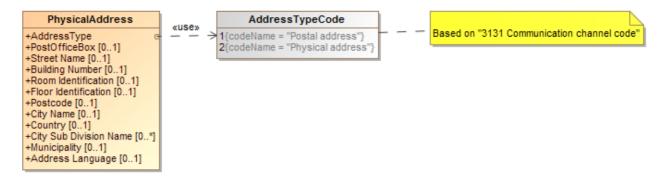
a) Add the attribute "ID Scheme Type" to the ebIX® model:



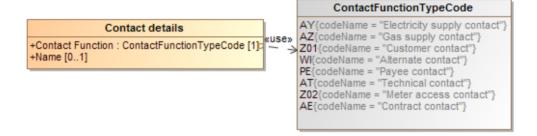
- b) Rename Document Name Code "E21 Master Data Consumer" to "E21 Master Data Customer";
- c) Rename Business Reason Code "**E34** Update master data consumer" to "**E21** Update master data Customer";
- d) Add a Communication Channel Type:



e) Add an Address Type, based on UN/CEFACT 3131 Communication Channel Code:



f) Add a new enumeration "Contact function code" based on "3139 Contact function code":



MDS	3139 Contact function						
requirements	code	name	definition	MDS comments	ETC comments		
Main contact	AY	Electricity supply contact	Department/person to contact for matters regarding electricity supply				
	AZ	Gas supply contact	Department/person to contact for matters regarding gas supply				
	BF	Service contact	Department/person to be contacted in service matters.		possible alternatives for		
	₩	Information contact	Department/person to contact for questions regarding transactions.		"Main contact"		
	Z01	Customer contact	The main department/person to contact at the customer		UN/CEFACT will be asked for a new code		
Neighbour, House keeper (caretaker)	wı	Alternate contact	Alternate department or person to contact	MDS want one			
	AV	Maintenance contact	Department/person to contact for matters regarding maintenance	combined code			
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	MDS wants a new UN/ CEFACT code (see below)			
	Z02	Meter access contact	Department/person to contact for matters regarding meter reading, including access to the Meter		UN/CEFACT will be asked for a new code		
Contract contact	AE	Contract contact	Department/person to contact for matters regarding contracts	NEW			

B.3 BRS for Request Change of MP Characteristics

- a) Can we remove the Document Name Code from the ebIX® models?
- b) Add a new Document Name Code for "Request update MP characteristics";
- c) Rename Business Reason Code E32 to "Change MP characteristics" or add a new Business Reason Code;
- d) Add a new Business Reason Code for "Response Update MP characteristics";
- e) Make Response Reason Code E17 more generic (remove "switch" Replace with "change"(?));
- f) Add a new Response Reason Code "Invalid requested value(s)".

B.4 BRS for Request Change grid responsibility

- a) ETC is asked to find Document Name codes for:
 - o Request change grid responsibility;
 - Response change grid responsibility;
 - Notify change grid responsibility;
- b) And Business Reason codes for Change grid responsibility.