Minutes EBG meeting	European forum for energy Business Information eXchange
October 4th, 2022	EBG (ebIX® Business Group)

Date: Monday, October 3rd, 2022
Time: 14:00 –15:30
Place: GoToMeeting

Present: Bartosz, PSE
Gerrit, EDSN
Jan, Svenska kraftnät
Ove, Edisys

Appendix A: EBG comments to the Harmonised Electricity Market Role Model (HEMRM)
Appendix B: Status for update of BRSs to HEMRM 2022-01 and other updates
Appendix C: EBG project and survey list
Appendix D: Mapping from ebIX® class diagrams for Validated measured data for continuous metered AP to CIM

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 Status for "Alignment of master data for areas project" (follow up item)

Currently we have the following confirmed participants in the common European energy market "Alignment of master data for areas" project:

Name	Company	Representing	
Bartosz Kwiatkowski	PSE	ebIX®	
Douglas Hill	ENTSOG	ENTSOG (observer)	
Gerrit Fokkema (Convenor)	EDSN	ebIX®	
Jon Egil Nordvik	Statnett	ENTSO-E/CIM EG	
Kees Sparreboom	TenneT	ebIX® or ENTSO-E	
Ove Nesvik (Secretary)	EdiSys	ebIX®	
?	?	EU DSO Entity	

At the meeting between ebIX® and the EU DSO Entity last Friday, Vlatka got as homework to try finding candidate(s) from the "EU DSO Entity Data Interoperability Working Group" for participation in the common area project.

4 Sub APs and production-/consumption APs

Ove had as action sent the survey for how to link APs to EBG, asking for response before this meeting. Responses have been received from Belgium, Germany, the Netherlands, Norway, Poland, Slovenia and Sweden.

Not all expected contributors are on the EBG distribution list, hence Ove sent the survey to Kalle (EE) and Lukas (AT) this morning.

Further, David had sent some good comments to the survey:

> We shall clarify first that from the perspective of normative framework in Slovenia we have not introduced the split-supply model by means of explicitly defining the master AP and slave APs (clustering etc.). There will always be at least one AP per connection, but it is a question if this first one is truly a "master".
>
> The connectivity/dependency models between APs may be established in order to support various processes. The dependency models are needed always when there is a computation of quantities allocated to particular AP using quantities from several others APs. But the use case where we have totally equivalent APs is real and exist for very long time in the system in the domain of business/industrial customers – for example the customer with split-supply at the connection point with several closed contracts and one open supply contract (it results in several AP-s for intake). The question here is if the AP for network charge (accounting the total quantities of intake) is master AP – I would say not or at least not from the scope of supplier switch process which affects only AP-s related to split-supply. Looking at the relationship diagram in the Role model I also don't find any such master-slave relations between the MP domains.
>
> I agree that there are dependencies, but they depend on the process in focus. From the perspective of HRM the terminology like "main Accounting Point" (used in survey) should be avoided or at least should not be generalized or if used, it should be always directly mapped with appropriate process. Potential introduction of "main AP" into HRM requires further debate.
>
> Accordingly, I would suggest that the survey asks for introduction of linkage per particular process, otherwise the provided answers will lead to "loose", generalized answers.
>
> I haven't been able to participate in discussion in EBG, nor in preparation of answers on this survey. We are overwhelmed with urgent unplanned tasks mostly related to energy crisis. So take this as minor input from my side. I'd be grateful if EBG members share their thoughts on this.

Action:

- Ove will answer David and invite him to participate in the EBG discussions.
- At the next EBG we will start reviewing the survey and thereafter discuss how to structure several APs

5 Update of BRSs to HEMRM 2022-01

Ove has gone through the BRSs and updated the roles to be in line with HEMRM 2022-01. In addition, also other updates have been done, such as removal of attributes in the root class in "Appendix A Header and Context information for the class diagrams" and alignment of attribute order within classes.

The list of updates in Appendix B were gone through. Most of the updates are so small that the BRS will be published directly. The only exception is the BRS for administration of consent, which was reviewed and among others updated with:

- Introduction of the role Data Provider as the party who needs to check consent before he can distribute data to a Specific Party.
- The role Data Provider replaces the Entitled Role for Checking Consent, which was a generalisation of the Metered Data Responsible, the Metering Point Administrator and the Specific Party.
- The Entitled Role for Checking Consent and the Metered Data Responsible were removed from the BRS.

Action:

- Ove will update the BRS for administration of consent and send it to EBG and ebIX® Forum for approval.
- Ove will update and publish the following BRSs directly:
    - BRS for Alignment of Area characteristics
    - BRS for Alignment of characteristics of a Customer at an AP
    - BRS for Alignment of metering configuration characteristics
    - BRS for Bulk change of Shipper
    - BRS for Change of BRP
    - BRS for Change of Metered Data Responsible
    - BRS for Change of Shipper
    - BRS for Change of supplier
    - BRS for Combined grid and supply billing
    - BRS for Customer move
    - BRS for End of Metered Data Responsible
    - BRS for End of supply
    - BRS for Manage APs
    - BRS for Rearrange MPs between grids
    - BRS for Measure for Billing
    - BRS for Measure for Determine and exchange validated meter read
    - BRS for Measure for renewable energy certificates
    - BRS for Validate and notify measured data

Item closed.

6 Review of HEMRM definitions

With focus on harmonising the definitions between gas and electricity.

Including review of presentation for the working group comparing HGRM and HEMRM, ref action item below.

Jan/Ove had as action for HGRM/HEMRM meeting September 28th asked the working group to review the extension of the Energy Supplier in BRS for Customer move:

> "Definition based on the Harmonised Electricity Market Role Model, however updated to also fit the gas market.
>
> An Energy Supplier supplies ~~electricity~~ energy to or takes ~~electricity~~ energy from a Party Connected to the Grid at an Accounting Point."

This was supported by the HGRM/HEMRM working group in their meeting of September 28th.

Continued action:

- All are asked to start on the commenting of HEMRM role definition, see Appendix A.

Except for the information from the HGRM/HEMRM meeting September 28th, the item was postponed.

7 Review of CIM definitions for classes and attributes based on mapping from ebIX® class diagrams for Validated measured data for continuous metered AP to CIM

See Appendix D.

The item was postponed.

8 Review of BRS for Settle for Reconciliation

The item was postponed.

9 Review of ebIX domain model (low priority item)

The item was postponed.

10 Meeting schedule

GoToMeetings:

- Every Monday from August 29th until December 19th, 2022, except for holydays.

Physical meeting:

- Tuesday and Wednesday December 6th and 7th, 2022, in Hamburg.

11 AOB

No items.

Appendix A EBG comments to the Harmonised Electricity Market Role Model (HEMRM)

ROLES			
TYPE	**ROLE NAME**	**DESCRIPTION**	**EBG COMMENTS**
Role	Balance Responsible Party	A Balance Responsible Party is responsible for its imbalances, meaning the difference between the energy volume physically injected to or withdrawn from the system and the final nominated energy volume, including any imbalance adjustment within a given imbalance settlement period. Note: Based on Electricity Balancing - Art.2 Definitions. Additional information: Responsibility for imbalances (Balance responsibility) requires a contract proving financial security with the Imbalance Settlement Responsible of the Scheduling Area entitling the party to operate in the market.	
Role	Balancing Service Provider	A party with reserve-providing units or reserve-providing groups able to provide balancing services to one or more LFC Operators. Additional information: Based on Electricity Balancing - Art.2 Definitions.	
Role	Billing Agent	The party responsible for invoicing a concerned party.	
Role	Capacity Trader	A party that has a contract to participate in the Capacity Market to acquire capacity through a Transmission Capacity Allocator. Note: The capacity may be acquired on behalf of an Interconnection Trade Responsible or for sale on secondary capacity markets.	
Role	Consumer	A party that consumes energy. Additional information: This is a Type of Party Connected to the Grid.	

ROLES			
TYPE	**ROLE NAME**	**DESCRIPTION**	**EBG COMMENTS**
Role	Consumption Responsible Party	A Consumption Responsible Party is responsible for its imbalances, meaning the difference between the energy volume physically withdrawn from the system and the final nominated energy volume, including any imbalance adjustment within a given imbalance settlement period. Additional information: This is a type of Balance Responsible Party.	
Role	Consent Administrator	A party responsible for administrating a register of consents for a domain. The Consent Administrator makes this information available on request for entitled parties in the sector.	
Role	Coordinated Capacity Calculator	Coordinated Capacity Calculator is the entity or entities with the task of calculating transmission capacity, at regional level or above. Source: Commission Regulation (EU) 2015/1222 (CACM).	
Role	Coordination Centre Operator	A party responsible for the coordination of its Coordination Centre Zone in respect of scheduling, load frequency control, time deviation and compensation of unintentional deviation.	
Role	Data Provider	A party that has a mandate to provide information to other parties in the energy market. Note: For example, due to Article 2 of the European Commission Regulation 543/2013 of the 14th of June 2013, a data provider may be a Transmission System Operator or a third party agreed by a TSO.	
Role	Energy Service Company	A party offering energy-related services to the Party Connected to Grid, but not directly active in the energy value chain or the physical infrastructure itself. The Energy Service Company (ESCO) may provide insight services as well as energy management services.	

ROLES			
TYPE	**ROLE NAME**	**DESCRIPTION**	**EBG COMMENTS**
Role	Energy Supplier	An Energy Supplier supplies electricity to or takes electricity from a Party Connected to the Grid at an Accounting Point. Additional information: An Accounting Point can only have one Energy Supplier. When additional suppliers are needed the Energy Supplier delivers/takes the difference between established (e.g. measured or calculated) production/consumption and the (accumulated) contracts with other suppliers.	
Role	Energy Trader	A party that is selling or buying energy.	
Role	Grid Access Provider	A party responsible for providing access to the grid through an Accounting Point for energy consumption or production by the Party Connected to the Grid. The Grid Access Provider is also responsible for creating and terminating Accounting Points.	
Role	Imbalance Settlement Responsible	A party that is responsible for settlement of the difference between the contracted quantities with physical delivery and the established quantities of energy products for the Balance Responsible Parties in a Scheduling Area. Note: The Imbalance Settlement Responsible may delegate the invoicing responsibility to a more generic role such as a Billing Agent.	
Role	Interconnection Trade Responsible	Is a Balance Responsible Party or depends on one. He is recognised by the Nomination Validator for the nomination of already allocated capacity. Additional information: This is a type of Balance Responsible Party.	
Role	LFC Operator	Responsible for the load frequency control for its LFC Area or LFC Block. Additional information: This role is typically performed by a TSO.	

ROLES			
TYPE	**ROLE NAME**	**DESCRIPTION**	**EBG COMMENTS**
Role	Market Information Aggregator	A party that provides market related information that has been compiled from the figures supplied by different actors in the market. This information may also be published or distributed for general use. Note: The Market Information Aggregator may receive information from any market participant that is relevant for publication or distribution.	
Role	Market Operator	A party that provides a service whereby the offers to sell electricity are matched with bids to buy electricity. Additional Information: The definition above is based on Regulation on the internal market for electricity (EU) 2019/943: A more detailed description: A party that provides a service of collecting offers to sell and bids to buy electricity, and matching these offers and bids in order to determine a market price at the clearing point. This activity can be conducted in the forward, days-ahead and/or intraday timeframes, and can be combined with transmission capacity allocation in the context of market coupling. This is usually an energy/power exchange or platform.	
Role	Merit Order List Responsible	Responsible for the management of the available tenders for all Acquiring LFC Operators to establish the order of the reserve capacity that can be activated.	
Role	Meter Administrator	A party responsible for keeping a database of meters.	
Role	Meter Operator	A party responsible for installing, maintaining, testing, certifying and decommissioning physical meters.	
Role	Metered Data Administrator	A party responsible for storing and distributing validated measured data.	

ROLES			
TYPE	**ROLE NAME**	**DESCRIPTION**	**EBG COMMENTS**
Role	Metered Data Aggregator	A party responsible for the establishment and qualification of measured data from the Metered Data Responsible. This data is aggregated according to a defined set of market rules.	
Role	Metered Data Collector	A party responsible for meter reading and quality control of the reading.	
Role	Metered Data Responsible	A party responsible for the establishment and validation of measured data based on the collected data received from the Metered Data Collector. The party is responsible for the history of metered data for a Metering Point.	
Role	Metering Point Administrator	A party responsible for administrating and making available the Metering Point characteristics, including registering the parties linked to the Metering Point.	
Role	Model Merging Agent	A party responsible for establishing a merged model and ensuring its completeness, consistency and quality. Additional information: The definition is based on CGM BP IG.	
Role	Modelling Authority	A party accountable for the sourcing, consistency and quality of one or more model datasets.	
Role	Nominated Electricity Market Operator	An entity designated by the competent authority to perform tasks related to single day-ahead or single intraday coupling. Source: Commission Regulation (EU) 2015/1222 (CACM). Additional Information: A NEMO performs MCO (Market Coupling Operator) and CCP (Central Counter Party) functions. A NEMO runs a power exchange related to day-ahead or intraday market. A NEMO is a type of Market Operator.	

ROLES			
TYPE	**ROLE NAME**	**DESCRIPTION**	**EBG COMMENTS**
Role	Nomination Validator	Has the responsibility of ensuring that all capacity nominated is within the allowed limits and confirming all valid nominations to all involved parties. He informs the Interconnection Trade Responsible of the maximum nominated capacity allowed. Depending on market rules for a given interconnection the corresponding System Operators may appoint one Nomination Validator.	
Role	Party Administrator	A party responsible for maintaining party characteristics for the energy sector.	
Role	Party Connected to the Grid	A party that has a contract~~s~~ for the right to take out or feed in energy at an Accounting Point.	**20221003:** • Proposal for update.
Role	Producer	A party that generates electricity. Additional information: This is a type of Party Connected to the Grid. The definition is based on Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU, Article 2 (Definitions).	
Role	Production Responsible Party	A Production Responsible Party is responsible for its imbalances, meaning the difference between the energy volume physically injected to the system and the final nominated energy volume, including any imbalance adjustment within a given imbalance settlement period. Additional information: This is a type of Balance Responsible Party.	
Role	Reconciliation Accountable	A party that is financially accountable for the reconciled volume of energy products for a profiled Accounting Point.	

ROLES			
TYPE	**ROLE NAME**	**DESCRIPTION**	**EBG COMMENTS**
Role	Reconciliation Responsible	A party that is responsible for reconciling, within a Metering Grid Area, the volumes used in the imbalance settlement process for profiled Accounting Points and the actual measured quantities. Note: The Reconciliation Responsible may delegate the invoicing responsibility to a more generic role such as a Billing Agent.	
Role	Reserve Allocator	Informs the market of reserve requirements, receives bids against the requirements and in compliance with the prequalification criteria, determines which bids meet requirements and assigns bids.	
Role	Resource Aggregator	A party that aggregates resources for usage by a service provider for energy market services. Note: In the current version, the only service provider in HRM is the Balancing Service Provider.	
Role	Resource Capacity Mechanism Operator	A party responsible to operate the resource capacity mechanism in a member state. Additional information: It can either be the TSO or an independent party. A Resource Capacity Mechanism Operator can contract one or several Resource capacity market units, and a resource capacity market unit can only be contracted by one Resource Capacity Mechanism Operator.	
Role	Resource Provider	A role that manages a resource and provides production/consumption schedules for it, if required.	
Role	Scheduling Agent	The entity or entities with the task of providing schedules. Source: System Operation Guideline, Commission Regulation (EU) 2017/1485. Additional information: A party that is responsible for the schedule information and its exchange on behalf of a Balance Responsible Party.	

ROLES			
TYPE	**ROLE NAME**	**DESCRIPTION**	**EBG COMMENTS**
Role	Scheduling Area Responsible	A party responsible for the coordination of nominated volumes within a scheduling area. Additional information: This role is typically performed by a TSO.	
Role	System Operator	A party responsible for operating, ensuring the maintenance of and, if necessary, developing the system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the distribution or transmission of electricity. Additional information: The definition is based on DIRECTIVE 2009/72/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, Article 2 (Definitions).	
Role	Trade Responsible Party	A party who can be brought to rights, legally and financially, for any imbalance between energy nominated and consumed for all associated Accounting Points. Note: A power exchange without any privileged responsibilities acts as a Trade Responsible Party. Additional information: This is a type of Balance Responsible Party.	Upstream role – second priority.
Role	Transmission Capacity Allocator	The Transmission Capacity Allocator manages, on behalf of the System Operators, the allocation of available transmission capacity for a Bidding Zone Border. He offers the available transmission capacity to the market, allocates the available transmission capacity to individual Capacity Traders and calculates the billing amount of already allocated capacities to the Capacity Traders. Additional Information: The single allocation platform established by all TSOs for Forward Capacity Allocation performs the role of a Transmission Capacity Allocator.	Upstream role – second priority.

Appendix B Status for update of BRSs to HEMRM 2022-01 and other updates

B.1 Structure BRSs

#	BRS	Status	Comments
1.	BRS for administration of consent	Updated the definition of the role Consumer. Updated Appendix A.	a) Shall we add Flexibility Register Administrator to the UC "Check consent"? If yes, we should probably send it to ebIX Forum for approval. b) There were mismatch between some of the class diagrams and the related element definitions, which has been corrected. **20221003:** • To be sent to EBG and ebIX® Forum for approval.
2.	BRS for Alignment of AP characteristics	Roles are updated to be in line with HEMRM 2022-01. Updated Appendix A.	***20220919:*** • Sent it to EBG and ebIX® Forum for approval.
3.	BRS for Alignment of Area characteristics	Updated the definition of the role Market Operator. Updated Appendix A.	Shall we publish it directly? **20221003:** • Ove will update directly.
4.	BRS for Alignment of characteristics of a Customer at an AP	No changes to roles needed. Updated Appendix A.	Shall we publish it directly? **20221003:** Ove will update directly.
5.	BRS for Alignment of metering configuration characteristics	No changes to needed. Updated Appendix A.	Shall we publish it directly? **20221003:** Ove will update directly.
6.	BRS for bulk change of BRP	No changes to roles needed	
7.	BRS for Bulk change of Shipper	Updated Balance Supplier to Energy Supplier, incl. update of the definition.	Shall we publish it directly? **20221003:** Ove will update directly.
8.	BRS for Change of BRP	Updated roles, such as Balance Supplier to Energy Supplier, incl. update of the definitions.	Shall we publish it directly? **20221003:** Ove will update directly.

#	BRS	Status	Comments
9.	BRS for Change of Metered Data Responsible	Updated definitions of Metered Data Responsible and Metering Point Administrator incl. update of the definition.	Shall we publish it directly? **20221003:** Ove will update directly.
10.	BRS for Change of Shipper	Updated roles, such as Balance Supplier to Energy Supplier, incl. update of the definitions.	Shall we publish it directly? **20221003:** Ove will update directly.
11.	BRS for Change of supplier	Updated role definitions incl. update of Energy Supplier to fit gas.	The definition of the Energy Supplier in the Business Partner View is updated to fit gas. Shall we present it to the group harmonising HGRM and HEMRM[1]? **20221003:** Ove will update directly.
12.	BRS for Combined grid and supply billing	No changes to roles needed, however there are from earlier some corrections of spelling and grammatical errors.	Shall we publish it directly? **20221003:** Ove will update directly.
13.	BRS for Consented request for Accounting Point characteristics	No changes to roles or other updates needed.	
14.	BRS for Customer move	No changes to roles needed. Updated attribute sequence in class diagrams.	Shall we publish it directly? **20221003:** Ove will update directly.
15.	BRS for End of Metered Data Responsible	Updated definitions of Metered Data Responsible and Metering Point Administrator incl. update of the definition. Updated attribute sequence in class diagrams.	Shall we publish it directly? **20221003:** Ove will update directly.
16.	BRS for End of supply	Updated definitions of BRP, Balance Supplier (to Energy Supplier) and Metering Point Administrator incl. update of the definition. Updated attribute sequence in class diagrams.	Shall we publish it directly? **20221003:** Ove will update directly.
17.	BRS for Manage APs	No changes to roles or other updates needed. Updated attribute sequence in class diagrams.	Shall we publish it directly? **20221003:**

[1] Action item 2022a-02 from ebIX® Forum: EBG/RtR will verify extensions to the definitions of roles with the group harmonising the electricity and gas markets role models before adding the extension to the role definitions in a BRS to include gas.

#	BRS	Status	Comments
			Ove will update directly.
18.	BRS for Rearrange MPs between grids	Updated definitions of BRP, Balance Supplier (to Energy Supplier) and Metering Point Administrator incl. update of the definition.	Shall we publish it directly? **20221003:** Ove will update directly.

B.2 Measure BRSs

#	BRS	Status	Comments
1.	BRS for Measure for Billing	No changes to roles needed to roles.	However, the sequence of attributes in "Series characteristics" in "Validated measured data for billing" has been updated (Moved Resolution to the Product, unit cluster) and the layout in Appendix A have been updated. Exchange UCs has been renamed to Notify. Updated Appendix A. Shall we publish it directly? **20221003:** Ove will update directly.
2.	BRS for Measure for Collected Data	Update of roles to be in line with the ebIX®, EFET and ENTSO-E Harmonised Electricity Market Role Model version 2022-01.	***20220919:*** • Sent it to EBG and ebIX® Forum for approval.
3.	BRS for Measure for Determine and exchange validated meter read	No changes to roles needed to roles.	Exchange UCs and documents has been renamed to Notify. Shall we publish it directly? **20221003:** Ove will update directly.
4.	BRS for Measure for Imbalance Settlement	No changes to roles needed to roles.	
5.	BRS for Measure for Reconciliation	No changes to roles needed to roles.	

#	BRS	Status	Comments
6.	BRS for Measure for renewable energy certificates		Moved Resolution to the Product, unit cluster in all class diagrams. Updated Appendix A. **20221003:** Ove will update directly.
7.	BRS for Validate and ~~exchange~~ notify measured data	No changes to roles needed to roles.	Moved Resolution to the Product, unit cluster in all class diagrams. Exchange UCs and documents has been renamed to Notify. **20221003:** Ove will update directly.

B.3 Distributed Flexibility BRSs

#	BRS	Status	Comments
1.	BRS for Flexibility register administration	No changes to roles or other updates needed.	See comments in the memo: "usage of attributes in confirm and reject documents in ebIX BRSs"
2.	BRS for Prepare and aggregate Resources for flexibility services	No changes to roles or other updates needed.	

B.4 Settlement and reconciliation BRSs

#	BRS	Status	Comments
1.	BRS for Settle for Reconciliation	TBD	TBD

Appendix C EBG project and survey list

C.1 Potential projects

#	Project description	Priority	Start
A)	Review what attributes to send in a confirmation (e.g. all from the request, only approve/disapprove or some core attributes, such as AP)	High	After finalising RtR
B)	Review and propose update to the HEMRM, based on new procedures from ETC and EBG, ref minutes from ebIX® Forum meeting March 24th, 2020, including: • Update definition of Accounting Point in the HRM based on the flex project. • Make a preproposal for update of the definition of the «Harmonised Role» Resource Provider. Among others we think it is the BRP that sends schedules and not the Resource Provider and we think the term "manages" could be clarified.	High	After finalising RtR
C)	Efficient data alignment, including the possibility to request historical and/or future master data. See "very general" data act from EU: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13045-Data-Act-amended-rules-on-the-legal-protection-of-databases_en	Not prioritised	EBG must do a survey for the need of such a project
D)	Discuss differentiation of data sets per Entitled Role when aligning master data (e.g. when referencing notification of AP master data in a BRS) based on GDPR	High	After A) and B)
E)	Making a BRS for alignment of Exchange Point characteristics	High	Hopefully a part of the common energy market area project
F)	Making an introduction to the ebIX® BRSs, including an overview of the BRSs and a short description.	In finalising RtR	TBD
G)	Review of MR NMEG 2021/3 – Addition of a Reporting resolution and Reporting Interval to the AP Administrative Characteristics class. in Alignment of AP characteristics BRS	Medium	After finalising RtR
H)	It is assumed that the EC will decide to use IEC basic CIM as the reference Information Model, hence we should bring our definitions in line with IEC CIM. This can be done by changing our definitions, or by submitting maintenance requests to IEC TC57/wg16 (eventually to be forwarded by wg16 to wg14).	Medium	After A), B) and G)
I)	Update of Gas Role Model with addition of Aggregated Reception Station, Calorific Value Area and Temperature Area for gas.	Low	When the Gas Role Model starts adding domains.
J)	Investigate if services, such as flex-services should be added to BRS for Measure for billing. If so, we need to add a Resource ID to the class diagram(s) and extend the Basic assumption chapter.	This is a to-remember item	When the flex project is finalised

#	Project description	Priority	Start
K)	Verify extensions to the definitions of roles with the group harmonising the electricity and gas markets role models before adding the extension to the role definitions in a BRS to include gas.	Continuous	When updating role definitions in BRSs

C.2 Approved (and running) projects

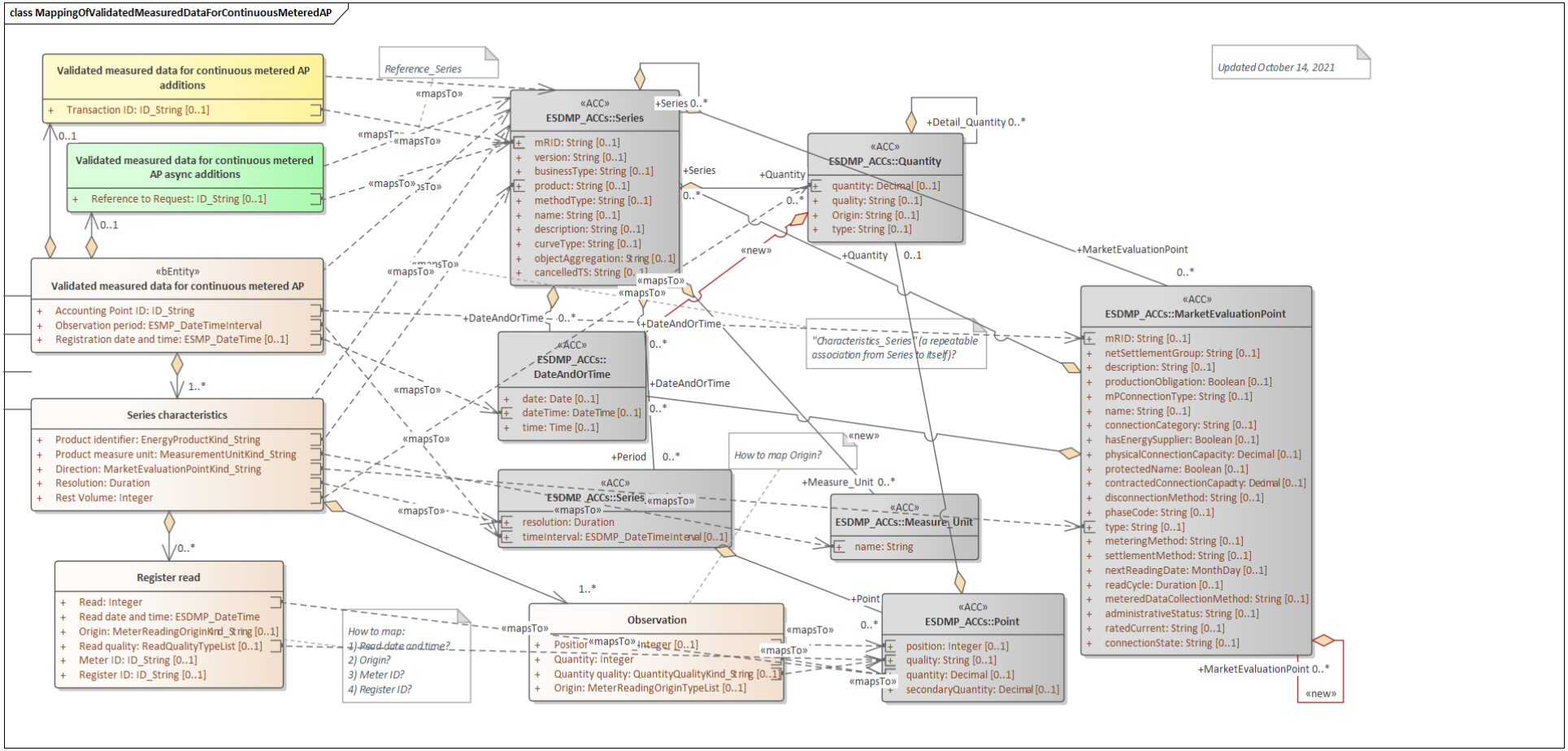
#	Project	Members	Status	Start	End
A)	RtR, Role-to-Role (hub)	All EBG	Start October 2018	Q4 2018	Q4 2021
B)	Common energy market area project	**EBG:** Bartosz, Boštjan (?), Gerrit, Kees and Ove. **"External":** Douglas (ENTSOG), Jon-Egil (ENTSO-E/CIM EG) and ? from EU DSO Entity	Hopefully start October 2022	October 2022?	?

C.3 Surveys

#	Survey	Status
A)	Datahub	20220609: Third version sent to ebIX® members for update

Appendix D Mapping from ebIX® class diagrams for Validated measured data for continuous metered AP to CIM

The mapping will be reviewed by ETC, while EBG will look into the definitions of classes and attributes to see if we need to update the ebIX® definitions or if we should send maintenance requests to IEC for update of the CIM definitions.



BRS attribute	BRS definition	CIM attribute	CIM definition
«Business entity» Validated measured data for continuous metered AP	The information set sent by a Metered Data Responsible to the Metered Data Administrator when exchanging validated measured data for continuous metered AP	Series	A set of similar physical or conceptual objects defined for the same period or point of time.
Accounting Point ID	The unique identification of the Accounting Point to which the validated measured data are attributed.	MarketEvaluationPoint / mRID	Master resource identifier issued by a model authority. The mRID is unique within an exchange context. Global uniqueness is easily achieved by using a UUID, as specified in RFC 4122, for the mRID. The use of UUID is strongly recommended. For CIMXML data files in RDF syntax conforming to IEC 61970-552, the mRID is mapped to rdf:ID or rdf:about attributes that identify CIM object elements.
Observation period	The specific period of time the validated measured data have been measured, calculated or estimated for.	Series_Period / timeInterval	The start and end date and time for a given interval.
Registration date and time	The date and time of the validation (and storage in the database) of this set of validated measured data.	DateAndOrTime / dateTime	Date and time as per ISO 8601 YYYY-MM-DDThh:mm:ss.sssZ.
Series characteristics	The characteristics of this set of validated measured data, i.e., the product and flow direction.	Series	A set of similar physical or conceptual objects defined for the same period or point of time.
Product identifier	A code specifying the energy product for the quantities in this set of validated measured data.	Series / product	The type of the product such as Power, energy, reactive power, transport capacity that is the subject of the time series.
Product measure unit	The unit of measure used for the quantities in this set of validated measured data.	Measure_Unit / name	The coded representation of the unit.
Direction	A code specifying the direction of the energy flow that was measured with this validated measured data. A flow from the Accounting Point into the Metering Grid Area is defined as production and a flow from the Metering Grid Area into the Accounting Point is defined as consumption.	MarketEvaluationPoint / type	Specifies if the Market Evaluation Point is an Exchange Point or an Accounting Point.

BRS attribute	BRS definition	CIM attribute	CIM definition
Resolution	The resolution is the time between two observations, leading to the number of observations in this timeseries (calculated from the Observation Period divided by the Resolution). The Observation Period must contain a whole number of observations as derived from the resolution. The resolution is expressed in compliance with ISO 8601 in the following format: PnYnMnDTnHnMnS. For example **PT15M** for 15 minutes resolution.	Series / resolution	The number of units of time that compose an individual step within a period.
Rest Volume	The Rest Volume is used for a volume that cannot be related to the 'normal' measured time series observations, i.e., the difference, for the Observation Period, between the start- and end meter read and the aggregated volume from the exchanged time series.	Quantity / quantity	The quantity value. The association role provides the information about what is expressed.
Register read	A read from the register of the Meter linked to the Accounting Point and characteristics of the read. This read is at the basis of the validated measured data in the Observation.	N/A	
Read[2]	The value as read from or calculated for the register, for this Read date and time in the Observation period.	Point / quantity	Principal quantity identified for a point.
Read date and time	The timestamp of the moment in time when the value was registered in the Register of the Meter or the value was calculated for.	N/A	
Origin	A code specifying the role of the party that has retrieved or calculated the read.	N/A	
Read quality	The quality of this read, such as estimated, remotely read or physically read.	Point / quality	The quality of the information being provided. This quality may be estimated, not available, as provided, etc.
Meter ID	The unique identification of the Meter linked to the Accounting Point, which contains the register that has been read.	N/A	

[2] If the Register read is missing, the Meter Reading Origin Code shall be "**E28** From Metered Data Responsible" and the Quantity Quality Code shall be "**56** Estimated".

BRS attribute	BRS definition	CIM attribute	CIM definition
Register ID	The unique identification of the Register within the Meter, where this data has been read from or is estimated for.	N/A	
Observation	One validated measured value within a timeseries.	N/A	
Position	The ordinal position of this Observation in this Observation Period for this set of validated measured data.	Point / position	A sequential value representing the relative position within a given time interval.
Quantity	The validated quantity of energy for this Observation.	Point / quantity	Principal quantity identified for a point.
Quantity quality	The quality of this quantity (volume), such as validated (default value, hence not sent), estimated, or temporary.	Point / quality	The quality of the information being provided. This quality may be estimated, not available, as provided, etc.
Origin	A code specifying the role of the party delivering the Quantity.	N/A	
Validated measured data for continuous metered AP additions	Additional information, related to validated measured data, the use of which may be agreed on a national level.	Series	A set of similar physical or conceptual objects defined for the same period or point of time.
Transaction ID	The unique identification of this set of information as given by the Metered Data Responsible.	Series / mRID	Master resource identifier issued by a model authority. The mRID is unique within an exchange context. Global uniqueness is easily achieved by using a UUID, as specified in RFC 4122, for the mRID. The use of UUID is strongly recommended. For CIMXML data files in RDF syntax conforming to IEC 61970-552, the mRID is mapped to rdf:ID or rdf:about attributes that identify CIM object elements.
Validated measured data for continuous metered AP async additions	Additional information related to validated measured data needed when using asynchronous communication.	Series	A set of similar physical or conceptual objects defined for the same period or point of time.
Reference to request	Information about the request for this set of validated measured data for continuous metered AP which uniquely identifies it.	Series / mRID	Master resource identifier issued by a model authority. The mRID is unique within an exchange context. Global uniqueness is easily achieved by using a UUID, as specified in RFC 4122, for the mRID. The use of UUID is strongly recommended. For CIMXML data files in RDF syntax conforming to IEC 61970-552, the mRID is mapped to rdf:ID or rdf:about attributes that identify CIM object elements.

class MappingOfValidatedMeasuredDataForContinuousMeteredAP