

Minutes EBG meeting	 European forum for energy Business Information eXchange
September 5 th , 2022	EBG (ebIX® Business Group)

Date: Monday, August 29th, 2022

Time: 10:00 –11:30

Place: GoToMeeting

Present: Bartosz, PSE
Gerrit, EDSN
Joachim, Westnetz
Ove, Edisys

Appendix A: Status for BRS review

Appendix B: EBG project and survey list

Appendix C: 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 with the following additions:

- Participants at EBG face-to-face meeting in December, see item 9.1.
- EU DSO / ebIX® next steps, see item 10.1 under AOB.
- Update of BRSs to HEMRM 2022-01. See item 10.2.

2 Approval of minutes from previous meeting

The minutes 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

We are still awaiting a response from the EU DSO Entity regarding their participation.

4 Status for datahub survey (follow up item)

Sylvia and Joachim have sent a request for update of the original “datahub survey” drafted summer 2019. The request is based on a question from the German regulator who wants to know the overall status for other European datahubs.

Action:

- Ove will ask Sylvia if she agrees to publish it and if yes, publish it with an ebIX® layout.

5 Continue review of items with red background in the “Comment column” in Appendix A (Status for BRS review)

- A) Discuss if we shall add the Flexibility Register Administrator to the Notify Accounting Point characteristics UseCase in BRS for Notify Accounting Point Characteristics, ref chapter “2.7 Notify Accounting Point characteristics” in BRS for Customer move:

In order for all (new) Linked Parties to operate properly **they will be notified with Accounting Point characteristics**. Notify Accounting Point Characteristics is documented in a separate BRS, see [7]. In this BRS (BRS for alignment of Accounting Point characteristics), the Linked Parties are specified.

Conclusion:

- a. The Flexibility Register Administrator will be added to the Notify Accounting Point characteristics UseCase in BRS for Notify Accounting Point Characteristics.
 - b. Issue closed
- B) Discuss if we shall update the BRS for Alignment of Accounting Point characteristics according to Appendix A, row 2:
- a. Review of MR NMEG 2021/3 – Addition of a **Reporting resolution** and **Reporting Interval** to the AP Administrative Characteristics class.

We need to discuss (when Jan is present):

- We think the current attribute Meter Reading Periodicity (Proposed renamed to “Meter Reading Resolution” using the ISO 8601 format) is the same as the Reporting Interval – we need to discuss the naming.
 - The Reporting Resolution is probably a new attribute.
 - It is proposed adding a new class “Measurement reporting information” where we add Meter Reading Periodicity (Reporting Resolution), Metering Method, Scheduled Meter Reading Date and Reporting Interval.
- b. Sub Accounting Points have been introduced in the BRS for Prepare and aggregate Resources, hence EBG should introduce references to parent and child APs, or another way of handling Sub Accounting Points, in the BRS for Alignment of AP characteristics BRS (parent and child APs are for instance used in Denmark)? Sub Accounting Points.

To be discussed together with the item above.

- C) Discuss if the “Exchange.... UseCases” in “BRS for Billing” and “BRS for Measure for determine and exchange validated meter read” should be renamed to “Notify...” and eventually moved under a “Distribute... UseCase”?

Conclusion:

- a. We rename Exchange to Notify, but skip adding a “Distribute UC”.
- b. We publish together with changes ref item 10.2
- c. Issue closed

At a NMEG meeting the week before Jan (SE) and Ove was asked to go back to EBG regarding NMEG/2020-01 and ask if it is better to rename “Business Type Detail” to PSRType (Power System resource Type), which may match the term Direction (with datatype Metering Point Type) as used in BRS for Imbalance Settlement.

Conclusion:

- a. We suggest adding the PSRType to AP administrative characteristics, however we must discuss the attribute name.
- b. How to handle the Losses must be discussed by NMEG – will, for the time being, not be added to any ebIX® code list.
- c. Ove will ask Jan to join us at the next meeting to discuss this.

NMEG (Jan and Ove) had as action asked NMEG to find a better justification of the proposed addition of a “Supply start date” to the AP Administrative Characteristics class in Alignment of AP characteristics BRS, with the conclusion that NMEG withdraws this MR.

Conclusion:

- a. Withdrawn – issue closed.

Ove had as actions from an earlier meeting update the BRS for Measure for Collected Data and the BRS for Customer Move and distributed these to EBG July 6th. So far, no comments received. However, in the BRS for Customer move, Ove had as part of another action to update the BRS according to HEMRM 2022-01 and in this relation, the attribute sequence in class diagrams had been updated – See also item “10.2 Update of BRSs to HEMRM 2022-01”. We publish these BRSs together with other changes, ref item “10.2 Update of BRSs to HEMRM 2022-01”.

6 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 C.

The item was postponed.

7 Review of BRS for Settle for Reconciliation

At the EBG meeting June 8th and 9th, it was started on a review of the BRS, but the BRS seems complicated and difficult to understand for people that were not part of the creation of it. Hence, it is agreed to ask all EBG

participants to send the BRS to national reconciliation experts, asking if they can understand the BRS and if the content still is valid.

- The ebIX® members are asked to review and come up with comments to the BRS for Settle for Reconciliation before our last EBG meeting before summer, July 4th.
- It is also proposed to move the BRS for Settle for Reconciliation to the Business Area “Settle” or “Bill” from the ebIX® Domain model.

The item was postponed.

8 Review of ebIX domain model (low priority item)

Continued action:

- Ove will find the latest ebIX® Domain Model and merge the text with the Domain model description in the flex overview, with a special focus on settlement and billing - as input for a review session.

The item was postponed.

9 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.

9.1 Participants at EBG face-to-face meeting in December

Joachim informs that the face-to-face meeting in December will be in Hamburg. Ove suggest sending a mail to EBG asking who could be interested in joining a face-to-face meeting in Hamburg. Joachim has reserved 7 rooms for two days, and needs confirmation for participation or not two weeks before, so that we can finish the reservation:

The George Design Hotel Hamburg
22087 Hamburg
Barcastraße 3

Action:

- Ove will send a reminder to EBG 5 weeks before and inform that credit card information must be sent to Joachim at least two weeks before the meeting.

10 AOB

10.1 EU DSO / ebIX® next steps

From Georg:

I am happy to tell you that we could establish a EU DSO / ebIX co-operation workstream within EG Data Interoperability, and that Vlatka is part of this. Within the group and due to her experience, Vlatka will be the primary responsible for our liaison and the next steps. She will report back to the group and to the other experts.

We are planning to get going a dedicated subgroup on our co-operation in autumn to even strengthen our ties and output for the future. However, for now it would be beneficial please if you could keep Paul and me in CC loops.

Would you think it would be a good idea to start things off with a brief 30-minute virtual kickoff meeting probably?

Georg

Gerrit showed a PowerPoint presentation showing the ebIX® view of a cooperation that will be presented for the EU DSO Entity in a few weeks' time. There were no comments to the presentation.

10.2 Update of BRSs to HEMRM 2022-01

There were no time to go through tis item, hence the information below must be seen as “for information”.

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” an alignment of attribute order within classes.

A general question is: Is it correct that the Transaction ID is optional in asynchronous document exchanges? At an earlier meeting it has been decided that it should be up to each country to decide if the Transaction ID shall be mandatory, hence kept as is.

Ove has updated the following:

BRS	Status	Comments
Structure BRSs		
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.
BRS for Alignment of AP characteristics	Roles are updated to be in line with HEMRM 2022-01. Updated Appendix A.	The BRS needs a review. Thereafter we should probably send it to ebIX Forum for approval.
BRS for Alignment of Area characteristics	Updated the definition of the role Market Operator. Updated Appendix A.	Shall we publish it directly?
BRS for Alignment of characteristics of a Customer at an AP	No changes to roles needed. Updated Appendix A.	Shall we publish it directly?
BRS for Alignment of metering configuration characteristics	No changes to needed. Updated Appendix A.	Shall we publish it directly?

BRS	Status	Comments
BRS for bulk change of BRP	No changes to roles needed	
BRS for Bulk change of Shipper	Updated Balance Supplier to Energy Supplier, incl. update of the definition.	Shall we publish it directly?
BRS for Change of BRP	Updated roles, such as Balance Supplier to Energy Supplier, incl. update of the definitions.	Shall we publish it directly?
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?
BRS for Change of Shipper	Updated roles, such as Balance Supplier to Energy Supplier, incl. update of the definitions.	Shall we publish it directly?
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 ?
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 review it and publish it directly?
BRS for Consented request for Accounting Point characteristics	No changes to roles or other updates needed.	
BRS for Customer move	No changes to roles needed. Updated attribute sequence in class diagrams.	Shall we publish it directly?
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?
BRS for End of supply	Updated definitions of BRP, Balance Supplier (to Energy Supplier) and Metering Point	Shall we publish it directly?

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
	Administrator incl. update of the definition. Updated attribute sequence in class diagrams.	
BRS for Manage APs	No changes to roles or other updates needed. Updated attribute sequence in class diagrams.	Shall we publish it directly?
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?
Measure BRSs		
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?
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.	Updated Appendix A. Shall we publish it directly?
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?
BRS for Measure for Imbalance Settlement	No changes to roles needed to roles.	
BRS for Measure for Reconciliation	No changes to roles needed to roles.	
BRS for Measure for renewable energy certificates		Moved Resolution to the Product, unit cluster in all class diagrams. Updated Appendix A.

BRS	Status	Comments
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.
Distributed Flexibility BRSs		
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"
BRS for Prepare and aggregate Resources for flexibility services	No changes to roles or other updates needed.	
Settlement and reconciliation BRSs		
BRS for Settle for Reconciliation	TBD	TBD

Appendix A Status for BRS review

Structure BRSs			
#	BRS	Status	Comment
1.	Administer Customer Consent	Published at www.ebix.org	Finished
2.	Alignment of Accounting Point characteristics	Published at www.ebix.org	<p>To remember: Review of MR NMEG 2021/2 – Addition of a Supply Start Date to the AP Administrative Characteristics class,</p> <p>To remember: Review of MR NMEG 2021/3 – Addition of a Reporting resolution and Reporting Interval to the AP Administrative Characteristics class.</p> <p>To remember (20210913): Sub Accounting Points have been introduced in the BRS for Prepare and aggregate Resources, hence EBG should introduce references to parent and child APs, or another way of handling Sub Accounting Points, in the BRS for Alignment of AP characteristics BRS (parent and child APs are for instance used in Denmark)? Sub Accounting Points.</p>
3.	Alignment of Area Characteristics	Published at www.ebix.org	Finished
4.	Alignment of characteristics for a Customer linked to an AP	Published at www.ebix.org	Finished
5.	Alignment of Metering Configuration Characteristics	Published at www.ebix.org	Finished
6.	Bulk change of BRP	Published at www.ebix.org	Finished
7.	Bulk change of Shipper	Published at www.ebix.org	Finished
8.	Change of BRP	Published at www.ebix.org	Finished
9.	Change of Metered Data Responsible	Published at www.ebix.org	Finished
10.	Change of Shipper	Published at www.ebix.org	Finished
11.	Change of supplier	Published at www.ebix.org	Finished
12.	Combined grid and supply billing	Published at www.ebix.org	Finished

Structure BRSs			
#	BRS	Status	Comment
13.	Consented (earlier Upfront) request for Metering Point Characteristics	Published at www.ebix.org	Finished
14.	Customer move	Published at www.ebix.org	Finished.
15.	End of Metered Data Responsible	Published at www.ebix.org	Finished
16.	End of supply	Published at www.ebix.org	Finished
17.	Manage Accounting Points	Published at www.ebix.org	Finished
18.	Rearrange MPs between grids	Published at www.ebix.org	Finished

Measure BRSs			
#	BRS	Status	Comment
1.	BRS for Measure Calorific Value	Finished	The content of the BRS is moved to a separate UseCase in BRS for Measure for Billing
2.	BRS for Measure for Billing	20211209: Published at www.ebix.org	Finished
3.	BRS Validated measured data	20220221: Published at www.ebix.org	Finished
4.	BRS for Measure for Collected Data	20200402: Published at www.ebix.org .	<p>20200608:</p> <ul style="list-style-type: none"> “Collected Data” should be renamed to “Collected <i>Measured</i> Data” <p>20220104:</p> <ul style="list-style-type: none"> The BRS need a layout update, incl. renaming of the term “negative response” to “Rejection”.
5.	BRS for Measure for determine and exchange validated meter read	20220310: Published at www.ebix.org .	Finished
6.	BRS for Measure for Imbalance Settlement	20220809: Published at www.ebix.org .	Finished
7.	BRS for measure for renewable energy certificates	20220221: Published at www.ebix.org	Finished

Measure BRs			
#	BRS	Status	Comment
8.	BRS for Measure for Reconciliation	20220809: Published at www.ebix.org .	Finished
9.	BRS for Settle for Reconciliation	To be reviewed	<p>20210125:</p> <ul style="list-style-type: none"> Investigate the need for addition of MDR and MGA in the “root class”, ref Dutch requirements. <p>20220609:</p> <ul style="list-style-type: none"> All EBG participants are asked to send the BRS to national reconciliation experts, asking if they can understand the BRS and if the content still is valid. Answer before July 4th, 2022.

Appendix B EBG project and survey list

B.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 24 th , 2020, including: <ul style="list-style-type: none"> 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 2021/2 (to ebIX®) – Addition of a Supply Start Date to the AP Administrative Characteristics class in Alignment of AP characteristics BRS	Medium	After finalising RtR
H)	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
I)	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), G) and H)
J)	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.

#	Project description	Priority	Start
K)	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
L)	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

B.2 Approved (and running) projects

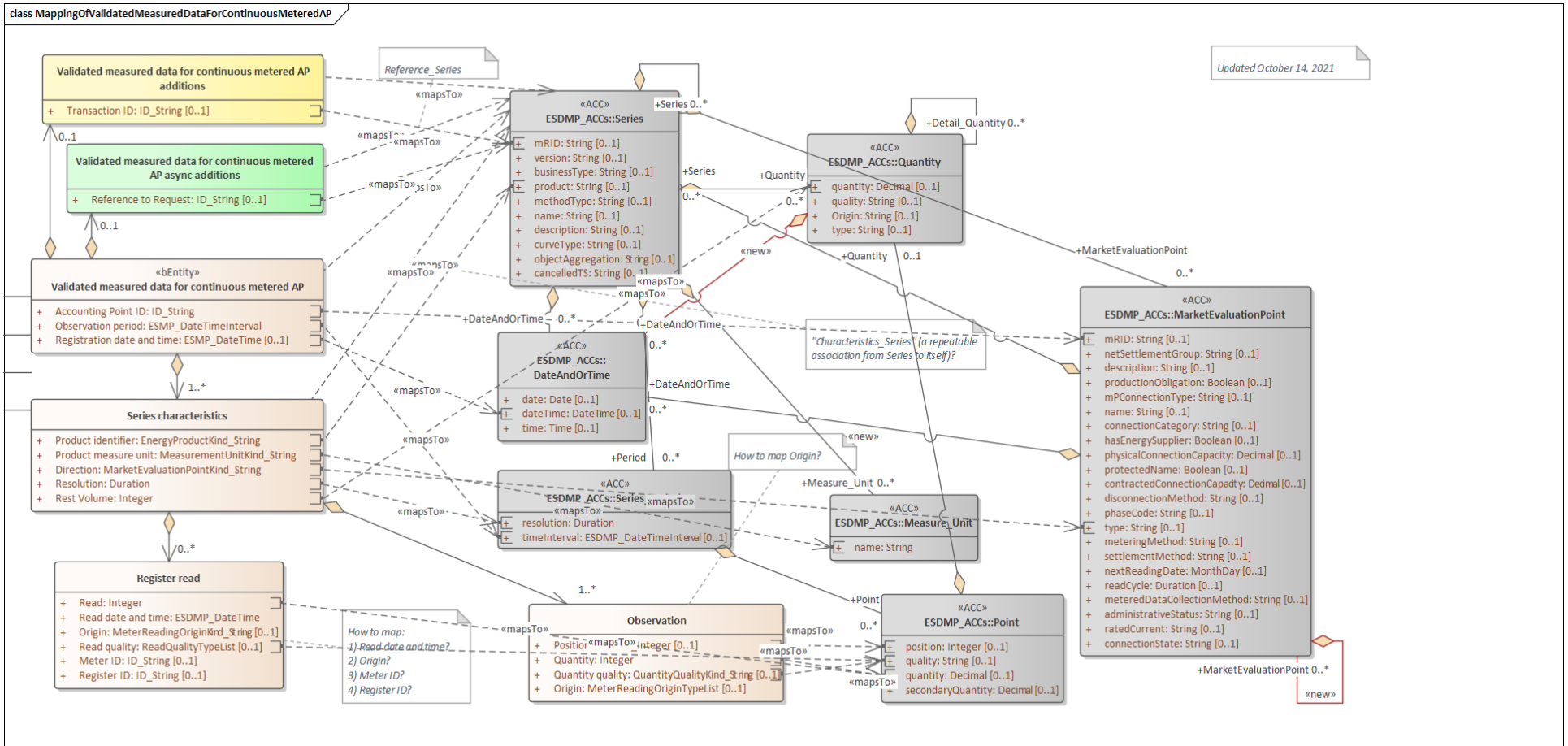
#	Project	Members	Status	Start	End
A)	RtR, Role-to-Role (hub)	All EBG	Start October 2018	Q4 2018	Q4 2021
B)	Common energy market area project	EBG: Bartosz, Boštjan (?), Gerrit, Jan (?), Kees and Ove. “External”: Douglas (ENTSOG), Jon-Egil (ENTSO-E/CIM EG) and? from EU DSO Entity	Hopefully start October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

B.3 Surveys

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

Appendix C 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	<p>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).</p> <p>The Observation Period must contain a whole number of observations as derived from the resolution.</p> <p>The resolution is expressed in compliance with ISO 8601 in the following format:</p> <p style="text-align: center;">PnYnMnDTnHnMnS.</p> <p>For example PT15M for 15 minutes resolution.</p>	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	<p>The quantity value.</p> <p>The association role provides the information about what is expressed.</p>
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	<p>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.</p> <p>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.</p>
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	<p>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.</p> <p>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.</p>

class MappingOfValidatedMeasuredDataForContinuousMeteredAP

Target \ Source	1 DateAndOrTime	2 MarketEvaluationPoint	3 Measure_Unit	4 Point	5 Quantity	6 Series	7 Series_Period
1 Observation				Maps To Quant... → quantity			
				Maps To Position → position			
				Maps To Quantity → quantity			
2 Register read				Maps To Read → quantity			
				Maps To Read ... → quantity			
3 Series characteristics		Maps To Direct... → type	Maps To Produ... → name		Maps To Rest V... → quantity	Maps To Produ... → product	Maps To Resol... → resolu...
						Maps To →	
4 Validated measured dat...	Maps To Regist... → dateTi...	Maps To Accou... → mRID				Maps To →	Maps To Obser... → timel...
5 Validated measured dat...						Maps To Trans... → mRID	
						Maps To →	
6 Validated measured dat...						Maps To →	
						Maps To Refer... → mRID	