Minutes EBG meeting	European forum for energy Business Information eXchange
May 4th, 2023	EBG (ebIX® Business Group)

Date: Tuesday April 25th and Wednesday April 26th, 2023
Time: 9:00 –16:00 and 09:00 to 15:00
Place: Svenska kraftnäts offices in Sundbyberg (Stockholm)

Present: Gerrit, EDSN
Jan, Svenska kraftnät
Joachim, Westnetz
Ove, Edisys

Appendix A: Extract of HG minutes from meeting January 31st
Appendix B: Status for update of BRSs
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 with the following additions:

- Review and make proposal for how to include the FSP in HEMRM 2023-01, see item 9.3.

2 Approval of minutes from previous meeting

The minutes from previous meeting were approved after correction of two spelling errors found by Jan.

3 Continue review of ending plan for ebIX®

The ebIX® ending plan was reviewed and updated. The ebIX® ending plan will be discussed at an ebIX® Forum meeting May 30th.

4 Continue "sub-metering" discussion, if needed

No input received from Slovenia, hence postponed.

5 Status for establishment of a German datahub

There is an ongoing BDEW project together with the regulator, where the German TSOs, DSOs and Energy Suppliers are members. The goal is to make a new market communication based on a centralised datahub model. The project is scheduled ended by the end of July. Thereafter, the next steps will be decided together with the regulator. The project has three parts:

a) Roadmap
b) Regulation
c) Architecture

To be continued.

6 Continue review of ebIX comments to the EBG memo "ebIX® (previous EBG) comments to HEMRM", if needed

The document was reviewed, and the roles proposed changed by the HG in HEMRM 2023-01 were updated.

The domains, resources, accounts and CIM objects will (hopefully) be reviewed by ETC at the next ETC meeting May 15th and 16th – And discussed with EBG on Monday May 15th at 14:00.

7 Handover of "Alignment of master data for areas project" to ENTSO-E

Oscar joined the meeting for an hour to discuss possible ways of convincing ENTSO-E in taking the lead of the project, and a mail asking ENTSO-E to take the lead of the project was drafted and sent to Jon-Egil.

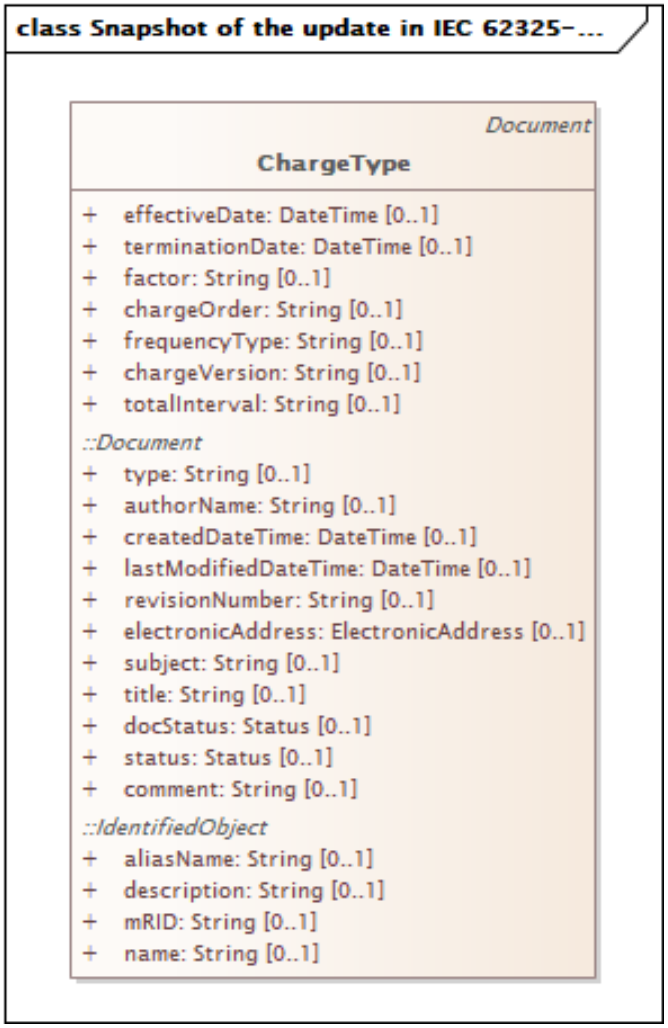
Gerrit mentioned that we should discuss adding a congestion area as a possible area.

8 CIM issues

8.1 MRs related to BRS for common grid and supply billing

ETC asks EBG to review the following draft MRs related to BRS for common grid and supply billing:

- 2022/022: Add an association from Series to ChargeType in 62325-301 and 62325-351.
- 2022/023: Add an association from ChargeType to MarketParticipant in 62325-301 and 62325-351.
- 2022/024: Add an association from ChargeGroup to ChargeType in 62325-351.
- 2022/025: Add an association from ChargeType to Period (62325-301) and from ChargeType to Series_Period (62325-351)
- 2022/026: Add the attribute VATobliged (Boolean) to ChargeType in 62325-301 and 62325-351.
- 2022/035: Add the attribute VATlevel (String (may be a percentage or low/high…)) to ChargeType in 62325-301 and 62325-351.



Action:

- Ove will update the MRs 2022/022 to 2022/26 and 2022/035, including addition of the following attributes to all Charge Type ACCs:
    1) effectiveDate
    2) terminationDate
    3) factor
    4) type
    5) createdDateTime
    6) lastModifiedDateTime
    7) revisionNumber

8) status
9) description
10) mRID
11) name

And add a reference to MR 2022/020 (Add «ACC» ChargeType to ESMP) if applicable.

- Ove will make the following two new MRs:
  - MR 2022/020 - Add «ACC» ChargeType with a "standard set of attributes" (see above) to ESMP
    - We suggest keeping the definition of the class ChargeType from the TC57CIM/IEC62325/ MarketOperations/ParticipantInterfaces package, however without the examples, i.e.:

      Charge Type is the basic level configuration for settlement to process specific charges for invoicing purpose. ~~Examples such as: Day Ahead Spinning Reserve Default Invoice Interest Charge, etc~~.

  - Add MR 2022/021 - Add «ACC» ChargeComponent with the attribute equation and an association to ChargeType.

Item closed.

8.2 MRs related to BRS for metering configuration characteristics

ETC askes how to use the "Conversion factor class" in BRS for metering configuration characteristics, especially for temperature, pressure and measurement – and for electricity: is this the same as the constant in the register? The question was answered as follows:

- The conversion factor for altitude is a multiplier that depends on the hight of the AP above sea-level.
- The conversion factor for pressure is a multiplier that depends on pressure at the measure point, e.g. due to measurements at the end of long pipes.
- The conversion factor for temperature is a multiplier that depends on the temperature of the gas flowing through the meter.
- The conversion factor for measurements for gas is for example used when a parallel smaller pipe is used for the measurement of huge gas flows to be able to measure where the flow is lower, e.g. using a conversion factor.
- The conversion factor for measurements for electricity is used similar as for gas, e.g. measuring in a "bypass" with lower current, voltage etc. It is not the same as the constant for a register.

Thereafter, comments from ENTSO-E retail market wg to "MR ebIX® 2023-002 - Add Meter class to ESMP and add an association from the MarketEvaluationPoint class to the Meter class" was reviewed. Based on this review it was agreed making a new MR for adding the EndDeviceFunction class to ESMP with associations to the Meter class and Register class. The EndDeviceFunction class will be an empty class, i.e. without any attributes, but is needed to associate the Meter to the Register class, which is an requirement in the ebIX® BRS for metering configuration characteristics.

Action:

- Ove will make a MR for adding the EndDeviceFunction class to ESMP and associations from the Meter class to the EndDeviceFunction class and from the EndDeviceFunction class to the Register class and add a reference to this MR in MR ebIX® 2023-002.

There was no time to review the following two MRs. These will be reviewed at a later Monday meeting:

- MR for IEC 62325-351 - ebIX 2023-003-v2 - Add Meter type to Meter in ESMP 20230413 - prelim.docx
- MR for IEC 62325-351 - ebIX 2023-004-v3 - Add connectionCategory to Meter in ESMP 20230413 prelim.docx

8.3 Request for new MRs from NMEG

The item was postponed due to lack of time.

9 HEMRM issues

9.1 MR for addition of Grid Connection to the HEMRM after review by ETC

From ETC minutes:

The draft HG MR from EBG for the new domain (or CIM object) Grid Connection was reviewed and discussed:

- Kees think this is a physical "domain", hence it should be handled by CGM or CIM.
- Jan (SE) stressed the Grid Connection is used as a reference in the grid connection contract between the Grid Access Provider (GAP) and Customer.
- The request originates from Gerrit and is probably related to discussions in the EG1 flex group and discussions related to the linking of Metering points, Accounting Points, sub-Accounting Points, Resources etc.

Action:

- We will ask EBG (Gerrit) for better justification for the need for the Grid Connection.

The "Reason for request" part of the MR was updated with a better justification:

> There is a need to link together multiple Accounting Points, e.g. within the same "address", in a proper way. Today this is done differently in different countries, among others by using sub–Accounting Points linked to a main Accounting Points or by using linked Accounting Points, mother/child Accounting Points etc. However, we believe that the correct way is to link these Accounting Points to the same Grid Connection. Furthermore the administration at the Grid Access Provider becomes very complex with multiple Accounting Points at the "same address", hence the Grid connection (a point in the physical grid, which may have coordinates) seems the solution for this too.
>
> There is a need to have a link from the energy market to the physical grid (as physical energy is delivered).

Conclusion:

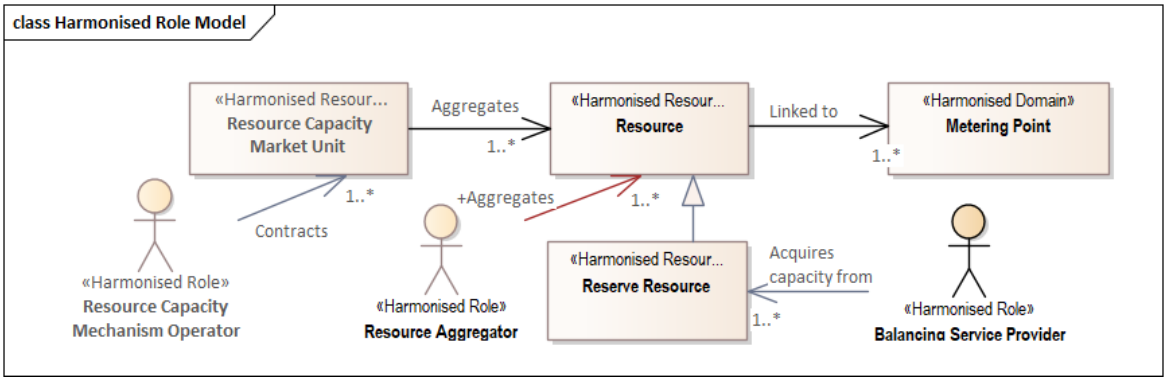
- ETC will be asked to review the updated MR and if ok, submit it to the HG.

Item closed.

9.2 Continue review of comments to Resource Aggregator by HG at meeting January 31st

The Harmonisation Group (HG) reviewed January 31st the comments ebIX® sent in June 2022 to the definition and related associations of the Resource Aggregator in HEMRM, see Appendix A.

For aggregated Resources, such as a Generator Group or a "Pool of Resources" (term used in the ebIX® flex project), EBG suggested in June last year to use the Resource Capacity Market Unit.



Hower, the response from the HG was: "HG thinks that a Resource, e.g. a generator group, can be related to more than one AP", which may be a result of the HG not having read the suggestion from EBG properly.

Conclusion:

- We suggest renaming the Resource Capacity Market Unit to Resource Pool or alternatively making the Resource Capacity Market Unit a specialisation of the Resource Pool.
- Based on the comment in the bullet point above, the cardinality of the association from Resource to Metering Point can be changed from [1..*] to [1].
- Added to the ebIX® comments to HEMRM document.

Item closed.

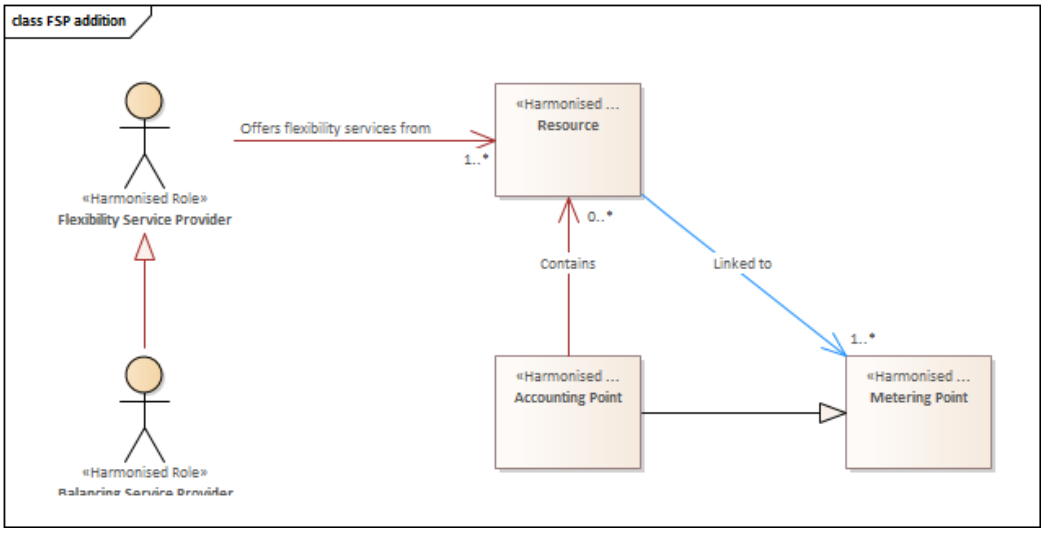
9.3 Review and make proposal for how to include the FSP in HEMRM 2023-01

Vlatka has proposed to add the Flexibility Service Provider (FSP) in HEMRM 2023-01 and EBG should make a proposal for definition and associations.

EBG suggest the following definition of the FSP:

> A party that offers flexibility services to the energy and/or capacity market(s) based on acquired (aggregated) capabilities.
>
> **Additional information:**
> Flexibility is used to meet the needs of energy market participants or System Operators on different energy-, power or capacity marketplaces. Flexibility Services may be balancing services, capacity services, non-frequency ancillary services, congestion management services etc.

And the following new links:



1) Add an association from the FSP to the Resource.
2) Add an association from AP to Resource.
3) Add a generalisation from BSP to FSP.
4) Move the blue association that currently goes “from Resource to MP” to go “from Resource to AP”. The reason being that it is unlikely that an Exchange Point has Resource(s) linked to it.

For the BSP we should add an “Additional information”:

> This is a type of Flexibility Service Provider.

The proposal was added to the document “ebIX® comments to HEMRM and will be presented at the next HG meeting end of May.

Item closed.

10 Update of BRSs

10.1 Review of memo: “Usage of attributes in confirm and reject documents in ebIX BRSs”

To see if we need to update the attributes to send in confirmations and/or rejections (e.g. all from the request, only approve/disapprove or some core attributes, such as AP.

The memo: “Usage of attributes in confirm and reject documents in ebIX BRSs” was briefly reviewed and it was agreed to keep this as an “if time item” with low priority.

The item was added to Appendix C, row K).

Item closed.

10.2 Continue review of status for update of BRSs, if needed

Appendix B, “Status for update of BRSs” was reviewed.

Action:

- Ove will publish the updated BRSs
    - The BRS for Alignment of Area characteristics will be updated as version 2r0B – and not to version 3r0 (version 3r0 is the skeleton to be used for the area project).

10.3 Making an introduction to the ebIX® BRSs

The item was postponed.

11 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.

An initial discussion was taken at the ETC meeting February 14th and 15th, and a continuation of the discussion is on the ETC agenda for the meeting May 15th and 16th.

12 Review of ebIX domain model (low priority item)

The item was postponed.

13 Meeting schedule

GoToMeetings:

- Every Monday until (including) July 3rd, 2023, except for holydays. And from August 21 onwards

Physical meeting:

- Thursday September 14th and Friday September 15th, in Slovenia (?)
- Tuesday December 12th, Wednesday December 13th and Thursday December 14th, in Oslo

14 AOB

No items.

Appendix A Extract of HG minutes from meeting January 31st

From item 4.6 in the latest HG minutes:

4.6 Review of Resource Aggregator Role, see Appendix D, item (row) 5 (from FO)

ebIX®/EBG had as action verified the latest proposal, see comments in Appendix D, item (row) 5.

LW stressed that there are several projects working with flexibility and several guidelines and reports are underway, such as the ACER framework guidelines Hence, LW suggest that we don't do more changes than need related to flex processes before these processes are more mature.

The definition was slightly modified. Also other ebIX® comments from ebIX® were discussed, see Appendix D, item (row) 5.

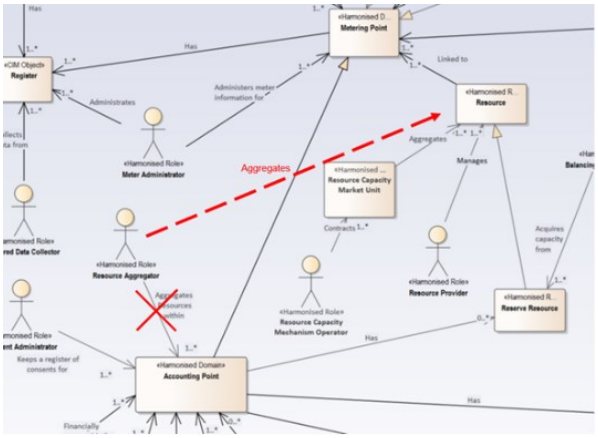
Agreed proposal for Resource Aggregator:

~~A party that aggregates Resources for usage by other market participants~~

~~**Additional information:**~~

~~The domain to aggregate within, such as Resource or Accounting Point, must be defined by market rules.~~

And the association will be moved to go from the Resource Aggregator to the Resource.



20230131:

New proposal:

A party that aggregates Resources for usage by other market participants.

Additional information:

The aggregation must be defined by market rules.

The changes to the associations were agreed, i.e.:

20220620 comments from ebIX® Business Group (EBG):

- We are missing the "bigger picture", i.e. we should look at all the new roles identified in the flex arena. We question if a Resource Aggregator really is needed, as we see no need for a role for purely aggregation of Resources. It must at least be linked to the Service Provider roles, such as the BSP role. However, it would probably be better to replace the Resource Aggregator with the FSP (Flexibility Service Provider) or one or more Service Providers that also do the aggregation. We think that in the future it will be difficult to differentiate between different kinds of flexibility service providers and that an FSP will offer services in multiple 'flexibility domains', as for Congestion, Frequency, etc.

20220627 comments from EBG meeting:

a) We support moving of the association to go to the Resource instead of the Accounting Point.
b) The text "… to aggregate within …. Resource" sounds strange. We suggest removing the "Additional information".

20230131:

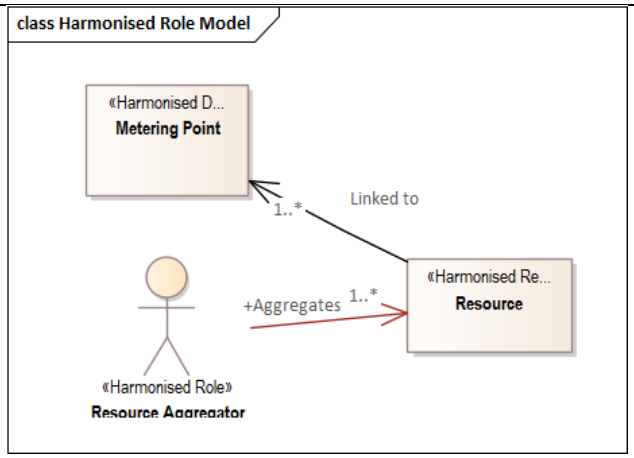
- The "Additional information" was suggested simplified but not removed.

In general we think the roles and domains needed for energy flexibility services should be more generic than in the current HEMRM, such as:

c) Since we cannot see that a Resource linked to an Exchange Point can be active in a market. Hence, we suggest moving the association currently going from the Resource to the Metering Point to go from the Resource to the Accounting Point.

20230131:

- HG agrees that it cannot be linked to an Exchange Point (EP), however it could be



linked to a MP not being either an EP or an AP.

d) We cannot see that a Resource can be associated with more than one AP (or MP), hence we suggest changing the cardinality to 1. For aggregated Resources, a "pool" of Resources could be used – Maybe the Resource Capacity Market Unit should be a specialisation of a "pool".
20230131:

- HG thinks that a Resource, e.g. a generator group, can be related to more than one AP.

e) We think the Reserve Resource is obsolete (it is just a Resource), hence we suggest removing it and link the FSP (we suggest above to make the BSP a specialisation of the FSP) to the Resource instead.

20230131:

- HG thinks we should await ACER framework guidelines and the results from other ongoing flex projects before doing this kind of changes, i.e. postponed.

20220629:

- CIM WG and ebIX®/EBG are asked to verify if the latest proposal is OK, ***especially if we can remove the "Additional information"***

Appendix B Status for update of BRSs

B.1 Structure BRSs

#	BRS	Shall we: • Rename the class "Reconciliation information" to "Energy volume information"? • Add attribute "Consumption detail" to "Energy volume information" class? • Add Metered Data Administrator ID and/or Metering Point Administrator ID? • Add Accounting Point level and Grid Connection ID to the root class? • Other additions?	Status
1.	BRS for administration of consent	Not applicable.	
2.	BRS for Alignment of AP characteristics	Already updated.	
3.	BRS for Alignment of Area characteristics	Not applicable.	Earlier agreed, but not yet, published: • Updated the definition of the role Market Operator. • Updated introduction (chapter A). • Updated Appendix A.
4.	BRS for Alignment of characteristics of a Customer at an AP	Not applicable.	Earlier agreed, but not yet, published: • Updated introduction (chapter A). • Updated Appendix A.
5.	BRS for Alignment of metering configuration characteristics	Not applicable.	Earlier agreed, but not yet, published: • Addition of clarifying text in chapter A • Hiding attributes from the root class in Appendix A, to make the class diagrams more readable. • Update of spelling errors
6.	BRS for bulk change of BRP		Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Correction of spelling errors.

#	BRS	Shall we:	Status
		• Rename the class “Reconciliation information” to “Energy volume information”? • Add attribute “Consumption detail” to “Energy volume information” class? • Add Metered Data Administrator ID and/or Metering Point Administrator ID? • Add Accounting Point level and Grid Connection ID to the root class? • Other additions?	
7.	BRS for Bulk change of Shipper	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Moved Reference to requesting Transaction ID to Async Additions. • Correction of spelling errors. • Update of roles to be in line with HEMRM (renamed Balance Supplier to Energy Supplier, incl. update of the definition).
8.	BRS for Change of BRP	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Moved Reference to requesting Transaction ID to Async Additions. • Correction of spelling errors. • Update of roles to be in line with HEMRM (renamed Balance Supplier to Energy Supplier, incl. update of the definition).
9.	BRS for Change of Metered Data Responsible	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Moved Reference to requesting Transaction ID to Async Additions. • Correction of spelling errors. • Update of roles to be in line with HEMRM (renamed Balance Supplier to Energy Supplier, incl. update of the definition).

#	BRS	Shall we:	Status
		• Rename the class "Reconciliation information" to "Energy volume information"? • Add attribute "Consumption detail" to "Energy volume information" class? • Add Metered Data Administrator ID and/or Metering Point Administrator ID? • Add Accounting Point level and Grid Connection ID to the root class? • Other additions?	
10.	BRS for Change of Shipper	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Moved Reference to requesting Transaction ID to Async Additions. • Correction of spelling errors. • Update of roles to be in line with HEMRM (renamed Balance Supplier to Energy Supplier, incl. update of the definition).
11.	BRS for Change of supplier	Not applicable.	Earlier agreed, but not yet, published: • Updated role definitions incl. update of Energy Supplier to fit gas. • Hiding attributes from the root class in Appendix A, to make the class
12.	BRS for Combined grid and supply billing	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Hiding attributes from the root class in Appendix A, to make the class. • Correction of spelling and grammatical errors.
13.	BRS for Consented request for Accounting Point characteristics	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Hiding attributes from the root class in Appendix A, to make the class.
14.	BRS for Customer move	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Hiding attributes from the root class in Appendix A, to make the class.

#	BRS	Shall we:	Status
		• Rename the class “Reconciliation information” to “Energy volume information”? • Add attribute “Consumption detail” to “Energy volume information” class? • Add Metered Data Administrator ID and/or Metering Point Administrator ID? • Add Accounting Point level and Grid Connection ID to the root class? • Other additions?	
15.	BRS for End of Metered Data Responsible	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Moved Reference to requesting Transaction ID to Async Additions. • Update of roles to be in line with the ebIX®, EFET and ENTSO-E Harmonised Electricity Market Role Model version 2022-01. • Updated attribute sequence in class diagrams. • Hiding attributes from the root class in Appendix A.
16.	BRS for End of supply	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Moved Reference to requesting Transaction ID to Async Additions. • Update of roles to be in line with the ebIX®, EFET and ENTSO-E Harmonised Electricity Market Role Model version 2022-01. • Hiding attributes from the root class in Appendix A.
17.	BRS for Manage APs	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Update of roles to be in line with the ebIX®, EFET and ENTSO-E Harmonised Electricity Market Role Model version 2022-01. • Hiding attributes from the root class in Appendix A.

#	BRS	Shall we:	Status
		• Rename the class "Reconciliation information" to "Energy volume information"? • Add attribute "Consumption detail" to "Energy volume information" class? • Add Metered Data Administrator ID and/or Metering Point Administrator ID? • Add Accounting Point level and Grid Connection ID to the root class? • Other additions?	
18.	BRS for Rearrange MPs between grids	Not applicable.	Earlier agreed, but not yet, published: • Harmonised the introduction with other ebIX® BRSs. • Update of roles to be in line with the ebIX®, EFET and ENTSO-E Harmonised Electricity Market Role Model version 2022-01. • Hiding attributes from the root class in Appendix A

B.2 Measure BRSs

#	BRS	shall we add Consumption detail and/or move Fuel and Technology?	Status
1.	BRS for Measure for Billing	Not applicable.	Earlier agreed, but not yet, published: • 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.
2.	BRS for Measure for Collected Data	Not applicable.	Already aligned with latest HEMRM.
3.	BRS for Measure for determine and notify validated meter read	Not applicable.	Earlier agreed, but not yet, published: • Exchange UCs and documents has been renamed to Notify. • The BRS is renamed from "BRS for Measure for determine and exchange validated meter read" to "BRS for Measure for determine and notify validated meter read".

#	BRS	shall we add Consumption detail and/or move Fuel and Technology?	Status
4.	BRS for Measure for Imbalance Settlement	Already added and the BRS is published.	Already aligned with latest HEMRM.
5.	BRS for Measure for Reconciliation	Not applicable.	Already aligned with latest HEMRM.
6.	BRS for Measure for renewable energy certificates	Not applicable.	Earlier agreed, but not yet, published: • Moved Resolution to the Product, unit cluster in all class diagrams. • Updated Appendix A
7.	BRS for Validate and notify measured data	Not applicable.	Earlier agreed, but not yet, published: • Moved Resolution to the Product, unit cluster in all class diagrams. • Exchange UCs and documents has been renamed to Notify. • The BRS is renamed from “BRS for Validate and exchange measured data” to “BRS for Validate and notify measured data”

B.3 Distributed Flexibility BRSs

#	BRS	Status	Comments
1.	BRS for Flexibility register administration	The published version: • Is already aligned with latest HEMRM. • Grid Connection ID is already added.	
2.	BRS for Prepare and aggregate Resources for flexibility services	The published version: • Is already aligned with latest HEMRM. • Grid Connection ID is already added.	
3.	BRS for Quantification and settlement of flexibility services	The published version: • Is already aligned with latest HEMRM. • Grid Connection ID is already added.	

B.4 Settlement and reconciliation BRSs

#	BRS	Status	Comments
1.	BRS for Settle for Reconciliation	TBD autumn 2024	

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	***20230206:*** • Started February 2023
B)	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. EBG should start with aa survey for the need of such a project.	To be decided by ebIX® Forum	***20230417:*** • Not achievable.
C)	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	***20230417:*** • Not achievable.
D)	Making a BRS for alignment of Exchange Point characteristics	High	***20230417:*** • Not achievable.
E)	Making an introduction to the ebIX® BRSs, including an overview of the BRSs and a short description.	In finalising RtR	***20230417:*** • Is on next EBG agenda
F)	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	***20230417:*** • If time item
G)	Update of Gas Role Model with addition of Aggregated Reception Station, Calorific Value Area and Temperature Area for gas.	Low	***20230417:*** • Inform the HGRM wg of the suggested domains.
H)	Investigate if exchange of measured data from "ebIX BRS for Quantification and settlement of flexibility services" should be moved to a separate "Measure for quantification BRS".	This is a to-remember item	***20230417:*** • TBD
I)	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	***20230417:*** • When updating role definitions in BRSs
J)	Review of BRS for Settle for Reconciliation, ref. minutes from EBG meeting October 10th, 2022.	Low	***20230417:*** • At least to consider during handover to EU DSO Entity.

#	Project description	Priority	Start
K)	Uniform the way of using attributes in “Addition” and “Async addition” classes, see memo: “Usage of attributes in confirm and reject documents in ebIX BRSs”	Low	***20230426:*** • If time

C.2 Approved (and running) projects

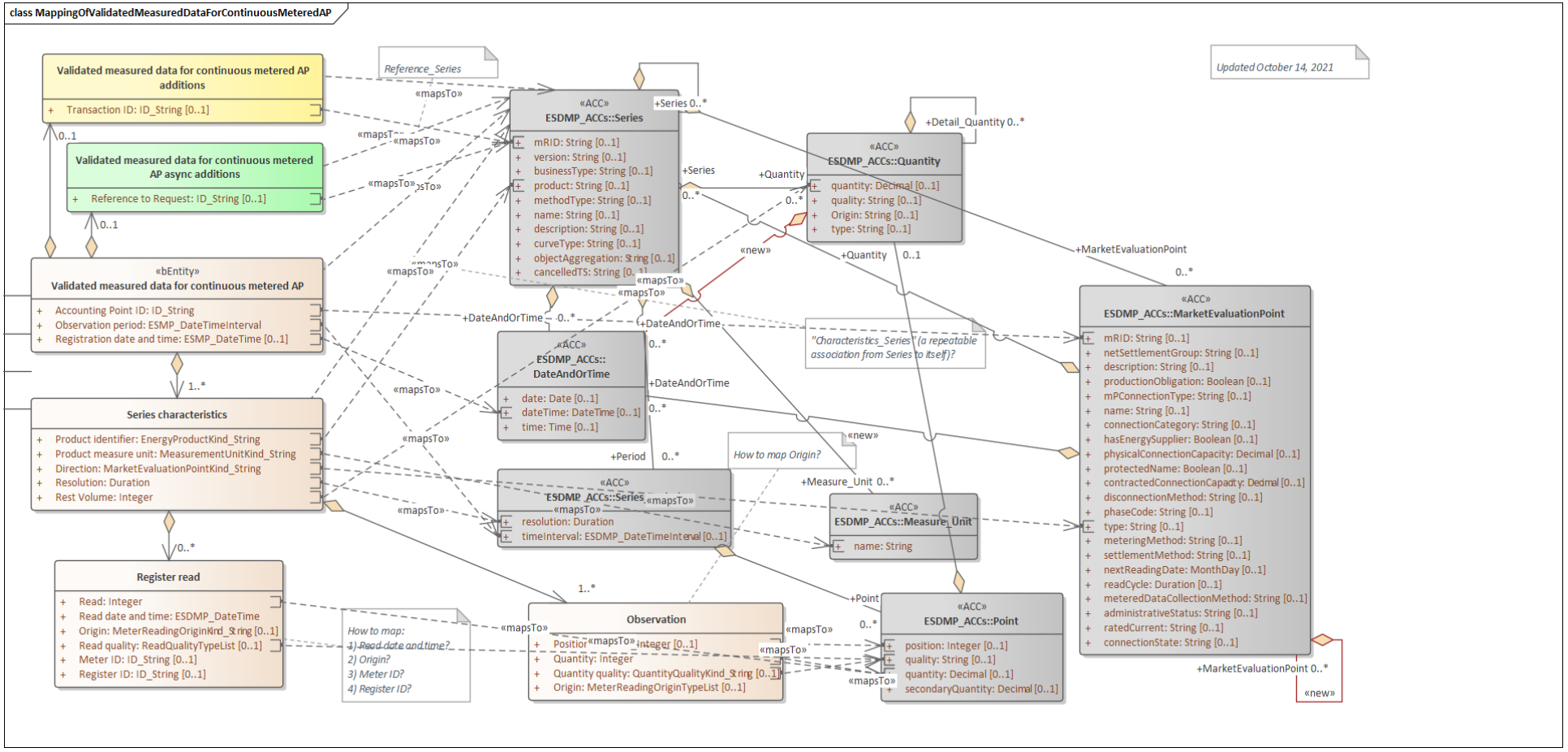
#	Project	Members	Status	Start	End
A)	Common energy market area project	**EBG:** Bartosz, Boštjan (?), Gerrit, Kees and Ove. **“External”:** Douglas (ENTSOG), Jon-Egil (ENTSO-E/CIM EG) and ? from EU DSO Entity	Hopefully start October 2022	Dependent on ENTSO-E	?

C.3 Surveys

#	Survey	Status
A)	None.	

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[1]	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	

[1] 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