Date: Monday, January 31<sup>st</sup>, 2022

Time: 14:00 – 15:30 Place: GoToMeeting

**Present:** Jan, Svenska kraftnät

Gerrit, EDSN 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 addition of:

• Eu-SysFlex final webinars in February 2022, see item 8.1.

#### 2 Approval of minutes from previous meeting

The minutes from previous meeting were approved.

### 3 Alignment of master data for areas project

Nothing new. It is not expected any news before some time in February.

#### 4 Status for update to HEMRM 2022-01

Ove had as action from previous meeting to update all BRSs to use the Harmonised Electricity Market Role Model (HEMRM) 2022-01, with priority to update BRS for Validated measured data, BRS for Measure for renewable energy certificates, BRS for Change of Supplier and BRS for Customer Move.

Ove informed that there are no changes in the HEMRM to the roles that are used in BRS for Validated measured data (Metered Data Responsible and Metered Data Administrator) and BRS for Measure for renewable energy certificates (Metered Data Responsible and Metered Data Administrator).

However, there are other comments to BRS for Validated measured data from Kalle, see item 5 below, and Ove found an error in the Business Partner overview in BRS for Measure for renewable energy certificates. These changes will be seen as comments to the circulation for comments to ebIX® Forum and published when the commenting period is finished.

Ove had also updated the BRS for Change of Supplier and BRS for Customer Move with updated role definitions to Harmonised Electricity Market Role Model (HEMRM) version 2022-01. However, during the review of the

changes it was agreed to add the following text to the definition of the Energy Supplier: "Definition based on the Harmonised Electricity Market Role Model, however updated to also fit the gas market" and to add an introduction explaining that the diagram shows the definitions from the HEMRM, however in some cases updated to fit both the electricity and the gas market.

The BRS for Customer Move is also updated with addition of the Flexibility Register Administrator to the UseCase "Notify Customer move out" in addition to the Business Partner View. These changes will be reviewed at our next meeting.

Finally it was agreed to inform the ebIX® Forum that EBG intends to update the HEMRM definitions. We will await further updates until this is agreed by the ebIX® Forum.

#### 5 Comments to BRS for Validated measured data

Comments from Kalle, Elering:

- 1) The name of BRS and the name of main use case could be the same. The name of BRS seems to be too little because the BRS is not about the validation only (in fact, the validation is referred to as an internal process only). On the other hand the name of main use case ("Validate and exchange measured data") is not sufficiently straightforward because measured data is exchange between much more parties and for much more processes. Therefore on option to call both BRS and main use case could be: "Validate and send measured data to Metered Data Administrator".
- 2) The acronym "MGA" is four times but never explained what it means.

The BRS for Validated measured data was updated according to the proposal from Kalle. Item closed.

#### 6 Start on review of Measure for imbalance settlement

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

The item was postponed.

#### 8 Meeting schedule

Corona GoToMeetings:

Every Monday from 14:00 to 15:30, scheduled until Easter (Monday April 4<sup>th</sup>), 2022, except for holydays.

Normal scheduled face-to-face meetings:

No face-to-face meeting planned. However, the next physical meeting is expected to be at:

PSE S.A. Warszawska 165 street 05-520 Konstancin-Jeziorna Poland

#### 8.1 Eu-SysFlex final webinars in February 2022

#### From EU-SysFlex:

"EU-SysFlex would like to invite you to its last two webinars, which will be held in February 2022. First webinar will be held on 7 February 2022 (14.00 - 16.30 CET) and will present the EU-SysFlex project summary and main results, introduce the Project Roadmap, and include a roundtable with high-profile speakers. Second webinar will be held on 14 February 2022 (time tba) and will be dedicated to the presentation of demo projects and their results. Both webinars will be held online.

EU-SysFlex is a Horizon 2020 project aimed at identifying the long-term needs as well as the technical scarcities of the future power system. The objective of the project is to create a long-term roadmap for large-scale integration of renewable energy in electricity grids as well as provide practical assistance to power system operators across Europe. The project team is working on identifying improvements to European market design, regulation, operational practices and enhanced system tools. EU-SysFlex is a project made up of a pan-European consortium, crossing the industry spectrum from TSOs, DSOs, technology providers and consultants as well as research and academic institutes from 34 organisations across 15 European countries.

More information will be published on EU-SysFlex website in the upcoming days.

#### Conclusion:

We cancel the next EBG/RtR meeting, February 7<sup>th</sup> and await what to do on February 14<sup>th</sup>.

#### 9 AOB

No items.

## Appendix A Status for BRS review

|     | Structure BRSs  |                                  |  |  |  |  |
|-----|---|----------------------------------|--|--|--|--|
| #   | BRS   | Status                           | Comment  |  |  |  |
| 1.  | Administer Customer<br>Consent                              | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
|     | Alignment of Accounting<br>Point characteristics            | Published at www.ebix.org        | Finished  To remember: Review of MR NMEG 2021/2 — Addition of a Supply Start Date to the AP Administrative Characteristics class,  To remember: Review of MR NMEG 2021/3 — Addition of a Reporting resolution and Reporting Interval to the AP Administrative Characteristics class.   |  |  |  |
| 2.  |   |                                  | 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. |  |  |  |
| 3.  | Alignment of Area<br>Characteristics                        | Published at www.ebix.org        |  |  |  |  |
| 4.  | Alignment of characteristics for a Customer linked to an AP | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 5.  | Alignment of Metering<br>Configuration<br>Characteristics   | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 6.  | Bulk change of BRP  | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 7.  | Bulk change of Shipper                                      | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 8.  | Change of BRP   | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 9.  | Change of Metered Data<br>Responsible                       | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 10. | Change of Shipper   | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 11. | Change of supplier  | Published at www.ebix.org        | Finished   |  |  |  |

|     | Structure BRSs   |                                  |  |  |  |  |
|-----|--|----------------------------------|--|--|--|--|
| #   | BRS  | Status                           | Comment  |  |  |  |
| 12. | Combined grid and supply billing                                       | Published at www.ebix.org        | Finished   |  |  |  |
| 13. | Consented (earlier Upfront) request for Metering Point Characteristics | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 14. | Customer move  | Published at www.ebix.org        | Finished.  To remember (20210913): A Flexibility Register Administrator has been introduced in the BRS for Quantify and settle flexibility services, hence the EBG should introduce the Flexibility Register Administrator to the BRS for Customer Move. |  |  |  |
| 15. | End of Metered Data<br>Responsible                                     | Published at <u>www.ebix.org</u> | Finished   |  |  |  |
| 16. | End of supply  | Published at <u>www.ebix.org</u> | 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<br>Value | To be reviewed  | 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        | Sent to ebIX® Forum for 4     weeks of approval, until     Friday February 18 <sup>th</sup> , 2022. | •   |  |  |  |

|    | Measure BRSs                                      |   |   |  |  |
|----|---|---|---|--|--|
| #  | BRS   | Status  | Comment   |  |  |
| 4. | BRS for Measure for<br>Collected Data             | Published at <u>www.ebix.org</u> .  | First RtR review finished.  20200608:      "Collected Data" should be renamed to "Collected Measured Data"  20220104:      The BRS need a layout update, incl. renaming of the term "negative response" to "Rejection". |  |  |
| 5. | BRS for Measure for<br>Determine Meter Read       | <ul> <li>Will be sent on circulation<br/>for comments to EBG for<br/>two weeks before sent to<br/>ebIX® Forum for 4 weeks of<br/>approval.</li> </ul> |   |  |  |
| 6. | BRS for Measure for Imbalance Settlement          | 20220124:<br>EBG/RtR review to start January<br>31 <sup>st</sup> 2022.  | 20200615:  • Include handling of MR "NMEG 2020-01".   |  |  |
| 7. | BRS for measure for renewable energy certificates | <ul> <li>Sent to ebIX® Forum for 4         weeks of approval, until         Friday February 18<sup>th</sup>, 2022.</li> </ul>                         |   |  |  |
| 8. | BRS for Measure for<br>Reconciliation             | To be reviewed  | Investigate the need for addition of MDR and MGA in the "root class", ref Dutch requirements.   |  |  |
| 9. | BRS for Settle for<br>Reconciliation              | To be reviewed  | Investigate the need for addition of MDR and MGA in the "root class", ref Dutch requirements.   |  |  |

# 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)   | First possible face-<br>to-face meeting   | First possible face-<br>to-face meeting   |
| В) | Review and propose update to the HRM, based on new procedures from ETC and EBG, ref minutes from ebIX® Forum meeting March 24 <sup>th</sup> , 2020.   | After review of BRSs  | TBD   |
| C) | Efficient data alignment, including the possibility to request historical and/or future master data.  | EBG must do a survey for the need of such a project                                   | Not prioritised   |
| 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)  | EBG task – will be<br>linked to "C),<br>Efficient data<br>alignment" task and<br>GDPR | To be started Q1<br>2021  |
| E) | Making a BRS for alignment of Exchange Point characteristics  | TBD   | TBD   |
| F) | <ol> <li>Making MRs to the HG for definition for and relations<br/>between Gateway, Gateway Operator and Gateway<br/>Administrator</li> <li>Making a BRS for Gateway related stuff.</li> </ol>  | Awaiting decision in<br>Germany or<br>elsewhere                                       | TBD   |
| G) | Making an introduction to the ebIX® BRSs, including an overview of the BRSs and a short description.  | In finalising RtR   | TBD   |
| H) | Review of MR NMEG 2021/2 (to ebIX®) – Addition of a <b>Supply Start Date</b> to the AP Administrative Characteristics class in Alignment of AP characteristics BRS  | TBD   | TBD   |
| I) | 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   | TBD   | TBD   |
| J) | 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). | TBD   | A first mapping from<br>an ebIX® class<br>diagram to CIM will<br>be done during<br>summer 2021. |
| K) | Update of Gas Role Model with addition of Aggregated Reception Station, Calorific Value Area and Temperature Area for gas.  | TBD   | When the Gas Role<br>Model starts adding<br>domains.  |

| #  | Project description   | Priority   | Start                                |
|----|---|--|--------------------------------------|
| L) | Update definition of Accounting Point in the HRM.   | TBD  | When the flex project has concluded. |
| M) | Making an ebIX® BRS for Exchange Point Characteristics  | To be started after finalising review of measure BRSs. | Q1/2022 (?)                          |
| N) | 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-<br>remember item                         | When the flex project is finalised   |

# B.2 Approved (and running) projects

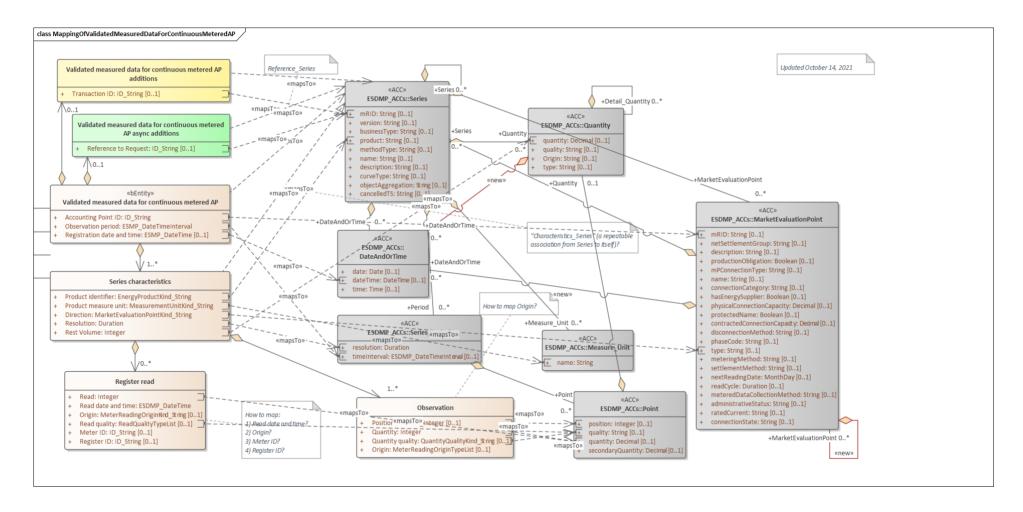
| #  | Project                 | EBG members | Status                | Start   | End     |
|----|-------------------------|-------------|-----------------------|---------|---------|
| A) | RtR, Role-to-Role (hub) | All EBG     | Start October<br>2018 | Q4 2018 | Q4 2021 |

## **B.3** Surveys

| #  | Survey | Status |
|----|--------|--------|
| A) |        | •      |

### 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<br>/ 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 /<br>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 /<br>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).  | Series / resolution | The number of units of time that compose an individual step within a period.                                   |
|                    | 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 <b>PT15M</b> for 15 minutes resolution.  |                     |  |
| 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 startand 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 <sup>1</sup>  | 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. |

<sup>&</sup>lt;sup>1</sup> 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   |
|--|--|------------------|--|
| Meter ID   | The unique identification of the Meter linked to the Accounting Point, which contains the register that has been read. | N/A              |  |
| 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<br>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<br>data for continuous<br>metered AP async<br>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.  |

| BRS attribute        | BRS definition  | CIM attribute | CIM definition  |
|----------------------|---|---------------|---|
| 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. |

| MappingOfValidatedMeasuredDataForContinuousMeteredAP / |                           |                            |                   |   |                         |                                |                     |
|--|---------------------------|----------------------------|-------------------|---|-------------------------|--------------------------------|---------------------|
| Target   | 1<br>DateAndOrTime        | 2<br>MarketEvaluationPoint | 3<br>Measure_Unit | 4<br>Point  | 5<br>Quantity           | 6<br>Series                    | 7<br>Series_Period  |
| 1<br>Observation                                       |                           |                            |                   | Maps To Quant  Maps To Position  Maps To Quantity  Maps To Quantity  Quantity |                         |                                |                     |
| 2<br>Register read                                     |                           |                            |                   | Maps To  Read ————————————————————————————————————                            |                         |                                |                     |
| 3<br>Series characteristics                            |                           | Maps To Direct type        | Maps To Produ     |   | Maps To Rest V quantity | Maps To Produ Product  Maps To | Maps To Resol       |
| 4<br>Validated measured dat                            | Maps To<br>Regist →dateTi | Maps To Accou mRID         |                   |   |                         | Maps To                        | Maps To Obser timel |
| 5<br>Validated measured dat                            |                           |                            |                   |   |                         | Trans Maps To mRID             |                     |
| 6<br>Validated measured dat                            |                           |                            |                   |   |                         | Maps To  Maps To  Refer        |                     |