Date: Monday October 23<sup>rd</sup>, 2023

Time: 14:00 – 15:30
Place: GoToMeeting
Present: Gerrit, EDSN

Jan, Svenska kraftnät Joachim, Westnetz

Ove, Edisys

**Appendix A:** EBG project and survey list

Appendix B: Mapping from ebIX® Validated measured data for continuous metered AP to CIM

**Attachments: None** 

#### 1 Approval of agenda

The agenda was approved with the following additions:

• Self-association to MP/AP in the HEMRM, see item 8.1 under AOB.

#### 2 Approval of minutes from previous meeting

The minutes from previous meeting were approved.

#### 3 Resolve matters related to close down of ebIX®

Noting to resolve today.

### 4 Review of the change of supplier process from EG1

The item was postponed.

### 5 Review of Appendix A EBG project and survey list

The item was postponed.

#### 6 Mapping from ebIX® Class diagrams to CIM, see Appendix B

At the EBG meeting in September in Maribor, it was agreed to make examples of how the definitions in ESMP could be made more understandable. Hence, a new column is added to the table in Appendix B, i.e. now we have one column for the definition from basic CIM (IEC61968-11, IEC61970 and IEC62325-301) and one column for the definition from ESMP (European Style Market Profile = IEC62to 325-351).

#### 7 Meeting schedule

#### GoToMeetings:

• Every Monday until December 18<sup>th</sup>, 2023.

#### Physical meeting:

• Wednesday December 13<sup>th</sup> and Thursday December 14<sup>th</sup>, in Oslo.

#### 8 AOB

#### 8.1 Self-association to MP/AP in the HEMRM

From HG minutes 25<sup>th</sup> February 2022: ebIX® MR for addition of a self-association to the Metering Point:

ebIX® had submitted the MR "ebIX® HG 2022/001" for addition of a self-association to the Metering Point:

- The background for this maintenance request is the need for addition of links to other MarketEvaluationPoints (= Metering Point in the HEMRM), such as a "Parent MarketEvaluationPoint", one or more "Child MarketEvaluationPoints" or one or more "Linked MarketEvaluationPoints".
- An example of links between MarketEvaluationPoints is the handling of metering in nonconcessional Metering Grid Areas (MGAs) in Sweden, where "Sub Accounting Points" from a non-concessional MGA are associated to an Accounting Point that is part of the concessional grid, such as metered data from production facilities within an industrial grid.
- Another example is Customers having both production and consumption where there are different Energy Suppliers for the two directions, hence there is a need to link the consumption Accounting Point and the production Accounting Point.
- KS thinks we should investigate if we need the self-association for the Metering Point or if it should be a self-association to the Accounting Point instead. In the Netherlands there is an ongoing discussion related to links between Exchange Points but was not sure if this can be solved by a self-association to the Metering Point.
- JO suggested to change the MR to be a request for a self-association to the Accounting Point instead of the Metering Point. It is easy to later on move the self-association to the Metering Point if needed, since it then will be inherited to the Accounting Point and therefore not give problems for older applications.

#### Conclusion:

- o JO will change the MR to be a request for a self-association to the Accounting Point instead of to the Metering Point and thereafter submit the MR to IEC/WG16.
- For the time being we don't do anything with the HEMRM.

#### Action:

 The ebIX® Business Group (EBG) is asked to investigate the consequences for a self-association to the Accounting Point, i.e. how to implement it as master data.

After a brief investigation during the ETC meeting Friday October 20<sup>th</sup>, it looks like the action item above was forgotten, i.e. it doesn't seem that EBG has investigated the issue.

Conclusion from ETC meeting Friday October 20<sup>th</sup>:

- We ask EBG to discuss the topic.
- We reopen the topic in HG if agreed in EBG.

#### From discussion:

Gerrit thinks the self-association is not needed after we introduced the Grid Connection ID. I f you need
to go from a sub-AP to a main-AP you can go via the Grid Connection ID.

- This is comparable with how Registerers in a Meter are modelled, i.e. the Registers are linked to the Meter there are no links between the Registers.
- Jan and Ove stressed that countries that has introduced sub-APs today normally have links between the main-AP and sub-AP.
- Gerrit informed that this currently is the case also in the Netherlands but has shown not to be a sustainable solution.

#### **Conclusion:**

• EBG does not see the need for a self-association.

# Appendix A EBG project and survey list

# A.1 Potential projects

#	Project description	Priority	Start
A)	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 20230914: • See also row E) below
В)	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 20230914:  • In progress
C)	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	<ul><li>20230417:</li><li>When updating role definitions in BRSs</li></ul>
D)	Review of BRS for Settle for Reconciliation, ref. minutes from EBG meeting October 10 <sup>th</sup> , 2022.	Low	<ul> <li>20230417:</li> <li>At least to consider during handover to EU DSO Entity.</li> <li>20230914:</li> <li>We will keep it as is</li> </ul>
E)	Mapping from ebIX® Class diagrams to CIM, see Appendix B	If time item	<ul> <li>20230821:</li> <li>For review at next physical EBG meeting in September 2023</li> <li>See also A) above</li> </ul>

# A.2 Approved (and running) projects

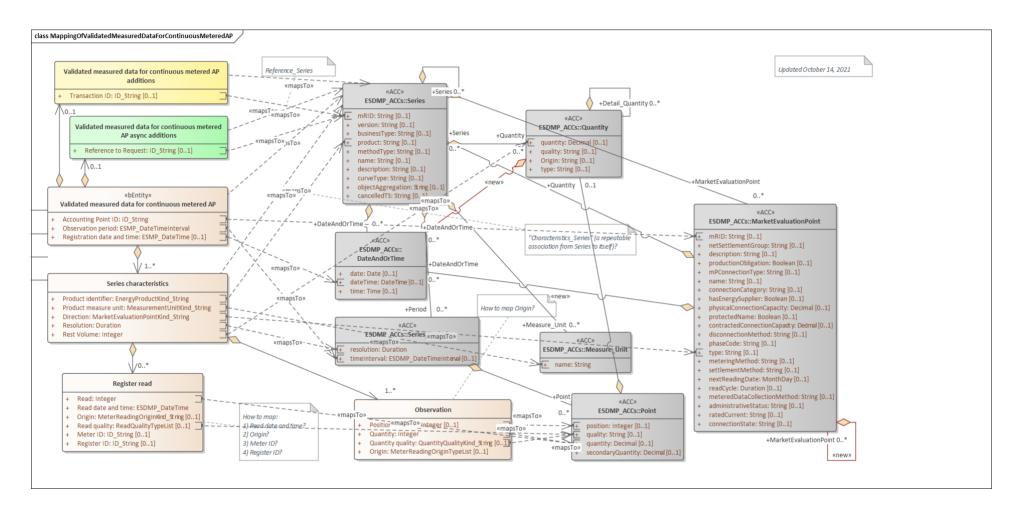
#	Project	Members	Status	Start	End
A)	Common energy market area project	EBG: Bartosz, Boštjan (?), Gerrit, Kees and Ove. "External": Douglas (ENTSOG), Jon-Egil (ENTSO-E/CIM EG) and ? from EU DSO Entity	Will probably be too late for ebIX® to join.	Dependent on ENTSO-E	·

## A.3 Surveys

#	Survey	Status
A)	None.	

## Appendix B Mapping from ebIX® 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.



## **EBG** agenda

BRS attribute	BRS definition	CIM attribute	Basic CIM definition	ESMP 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.	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.	MarketE valuation Point / 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.	A unique identification of the measurement point.  In the ESMP context, the "model authority" is defined as an authorized issuing office that provides an agreed identification coding scheme for market participant, domain, measurement point, resources (generator, lines, substations, etc.) identification.  Master resource identifier issued by a model authority. The mRID is globally unique within an exchange context.  Global uniqueness is easily achieved by using a UUID for the mRID. It is strongly recommended to do this.  For CIMXML data files in RDF syntax, 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_P eriod / timeInter val	The start and end date and time for a given interval.	The start and end time of the period.
Registration date and time	The date and time of the validation (and storage in the database) of this set of validated measured data.	DateAnd OrTime / dateTime	Date and time as per ISO 8601 YYYY-MM-DDThh:mm:ss.sssZ.	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.	A set of similar physical or conceptual objects defined for the same period or point of time.

# **EBG** agenda

BRS attribute	BRS definition	CIM attribute	Basic CIM definition	ESMP definition
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.	The identification of the nature of an energy product such as power, energy, reactive power, etc.
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.	The identification of the formal code for a measurement unit (UN/ECE Recommendation 20).
Direction	A code specifying the direction of the energy flow that was measured with this validated measured data.	Ş		
	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.			
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 / resolutio n	The number of units of time that compose an individual step within a period.	The definition of 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.			

BRS attribute	BRS definition	CIM attribute	Basic CIM definition	ESMP definition
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.	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.	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.	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".

## **EBG** agenda

BRS attribute	BRS definition	CIM attribute	Basic CIM definition	ESMP 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.	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.	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.	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.	A set of similar physical or conceptual objects defined for the same period or point of time.

ebIX®/EBG

BRS attribute	BRS definition	CIM attribute	Basic CIM definition	ESMP definition
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.	A unique identification of the measurement point.  In the ESMP context, the "model authority" is defined as an authorized issuing office that provides an agreed identification coding scheme for market participant, domain, measurement point, resources (generator, lines, substations, etc.) identification.  Master resource identifier issued by a model authority. The mRID is globally unique within an exchange context.  Global uniqueness is easily achieved by using a UUID for the mRID. It is strongly recommended to do this.  For CIMXML data files in RDF syntax, 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.	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.	A unique identification of the measurement point.  In the ESMP context, the "model authority" is defined as an authorized issuing office that provides an agreed identification coding scheme for market participant, domain, measurement point, resources (generator, lines, substations, etc.) identification.  Master resource identifier issued by a model authority. The mRID is globally unique within an exchange context.  Global uniqueness is easily achieved by using a UUID for the mRID. It is strongly recommended to do this.  For CIMXML data files in RDF syntax, the mRID is mapped to rdf:ID or rdf:about attributes that identify CIM object elements.

Target Source	1 DateAndOrTime	2 MarketEvaluationPoint	3 Measure_Unit	Point	5 Quantity	6 Series	7 Series_Period
Observation				Maps To Quant  Maps To Position  Maps To Quantity  Quantity  quantity			
Register read				Maps To Quantity  Maps To Quantity  Maps To Quality			
Series characteristics		Maps To  Direct type	Maps To Produ		Maps To Rest V quantity	Maps To  Produ  Maps To  Maps To	Maps To  Resol
/alidated measured dat	Maps To Regist dateTi	Maps To Accou mRID				Maps To	Maps To Obser time
: 'alidated measured dat						Maps To mRID	
: /alidated measured dat						Maps To  Refer MRID	