Date: Monday, December 20<sup>th</sup>, 2021

Time: 14:00 – 15:30
Place: GoToMeeting
Present: Boštjan, SODO

Gerrit, EDSN

Jan, Svenska kraftnät

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.

#### 2 Approval of minutes from previous meeting

The minutes from previous meeting, November 29<sup>th</sup>, were approved.

#### 3 Alignment of master data for areas project

Status for invitation of the EU DSO Entity, ENTSOG, EASEE-gas and ENTSO-E (CIM EG) to participate in the "Alignment of master data for areas" project.

ebIX® has received a positive response from Peter Vermaat, Secretary General in the EU DSO Entity:

Following up on an earlier conversation between Gerrit Fokkema and Paul de Wit, I would like to inform you that EU DSO Entity is certainly interested in exploring the opportunity to join the ebIX project "harmonising master data for Metering Grid Areas between European energy market segments". As you know, the EU DSO Entity is in the start-up phase, in which we recently launched 2 Expert Groups ('cybersecurity' and 'flexibility'). We will also shortly create an expert group on 'data access & interoperability'. A call for interest among our members is foreseen at the beginning of January of 2022. We will ask for volunteers to join your project in this expert group as soon as it is started. However, that will probably be mid-February. Looking at your planning for this project it seems that that is still in time. If I'm correct you are planning to start this project in Q2 of 2022.

So if this is alright for you we will get back to you in February 2022 to further discuss this (including the way this work stream could be aligned with the work on the Implementing Act for data etc. and the way to synchronise with our Annual Plan 2022.

#### 4 Continue review of BRS for Measure for Labelling / Measure for renewable energy certificates

The last part of the BRS was reviewed, I.e., chapter "4, Business Entity View":

- Production device was renamed to Resource.
- The attribute Metering Point Type was renamed to Type of Accounting Point to be in line with BRS for Alignment of AP characteristics.
- A Series Characteristics class was added to make the structure in line with the BRS for Validated measured data.
- Resource was moved into Series Characteristics and we removed Meter/Register, as we think that won't be relevant.
- Meter ID and Register ID was removed from the BRS, however with a comment that we will do a final evaluation of this decision at the next meeting.
- Metering Grid Area was removed from the Request validated measured data for renewable energy certificates and from Reject request validated measured data for renewable energy certificates.

#### Action:

- Ove will try to find a term for "quantity from Resource with renewable certificates", that can replace the currently used term "Delivered quantity".
- Ove will look in older AIB documents to see if Meter ID and Register ID is used there.

At the next meeting we expect to do a final review before the BRS is sent to ebIX® Forum for approval and thereafter publication.

# 5 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.

#### 6 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

#### 7 AOB

No items.

# Appendix A Status for BRS review

	Structure BRSs				
#	BRS	Status	Comment		
1.	Administer Customer Consent	Published at <u>www.ebix.org</u>	Finished		
	Alignment of Accounting 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 Characteristics	Published at <u>www.ebix.org</u>			
4.	Alignment of characteristics for a Customer linked to an AP	Published at <u>www.ebix.org</u>	Finished		
5.	Alignment of Metering Configuration 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 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 <u>www.ebix.org</u>	Finished		

	Structure BRSs					
#	BRS	Status	Comment			
12.	Combined grid and supply billing	Published at <u>www.ebix.org</u>	Finished			
13.	Consented (earlier Upfront) request for Metering Point Characteristics	Published at <u>www.ebix.org</u>	Finished			
14.	Customer move	Published at <u>www.ebix.org</u>	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 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 <u>www.ebix.org</u>	Finished			

	Measure BRSs					
#	BRS	Status	Comment			
1.	BRS for Measure Calorific 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	Draft for version 3.1.A,     which includes a UseCase     for "Publish established     calorific values", will be sent     to EBG for 14 days (before     sent to ebIX® Forum for     final approval for four     weeks.	• Services, such as flex-services, is expected added in the next version of the BRS (v3.2). Addition of flex-services includes addition of a Resource ID to the class diagram(s) and extension of the Basic assumption chapter.			

	Measure BRSs				
#	BRS	Status	Comment		
3.	BRS Validated measured data	20211129: • Final review by EBG/RtR.	The BRS will be sent for review by EBG (14 days) before sent to ebIX® Forum for final approval.		
4.	BRS for Measure for Collected Data	20200402:  • Published at <a href="https://www.ebix.org">www.ebix.org</a> .	Finished.  The BRS may be used as a template for how the Measure BRS may look like.  20200608:  "Collected Data" should be renamed to "Collected Measured Data"		
5.	BRS for Measure for Determine Meter Read	To be reviewed	<ul> <li>Investigate the need for addition of MDR and MGA in the "root class", ref Dutch requirements.</li> </ul>		
6.	BRS for Measure for Imbalance Settlement	To be reviewed	<ul> <li>20200615:</li> <li>Include handling of MR "NMEG 2020-01".</li> <li>20210125:</li> <li>Investigate the need for addition of MDR and MGA in the "root class", ref Dutch requirements.</li> </ul>		
7.	BRS for measure for renewable energy certificates	Review started at     GoToMeeting February 17 <sup>th</sup> ;	<ul> <li>20210125:</li> <li>Investigate the need for addition of MDR and MGA in the "root class", ref Dutch requirements.</li> <li>20211011:</li> <li>Renamed from "BRS for Measure for Labeling"</li> </ul>		
8.	BRS for Measure for Reconciliation	To be reviewed	<ul> <li>Investigate the need for addition of MDR and MGA in the "root class", ref Dutch requirements.</li> </ul>		

	Measure BRSs					
#	BRS	Status	Comment			
9.	BRS for Settle for 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- to-face meeting	First possible face- 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 linked to "C), Efficient data alignment" task and GDPR	To be started Q1 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 between Gateway, Gateway Operator and Gateway Administrator</li> <li>Making a BRS for Gateway related stuff.</li> </ol>	Awaiting decision in Germany or 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 an ebIX® class diagram to CIM will be done during 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 Model starts adding 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- remember item	When the flex project is finalised

# B.2 Approved (and running) projects

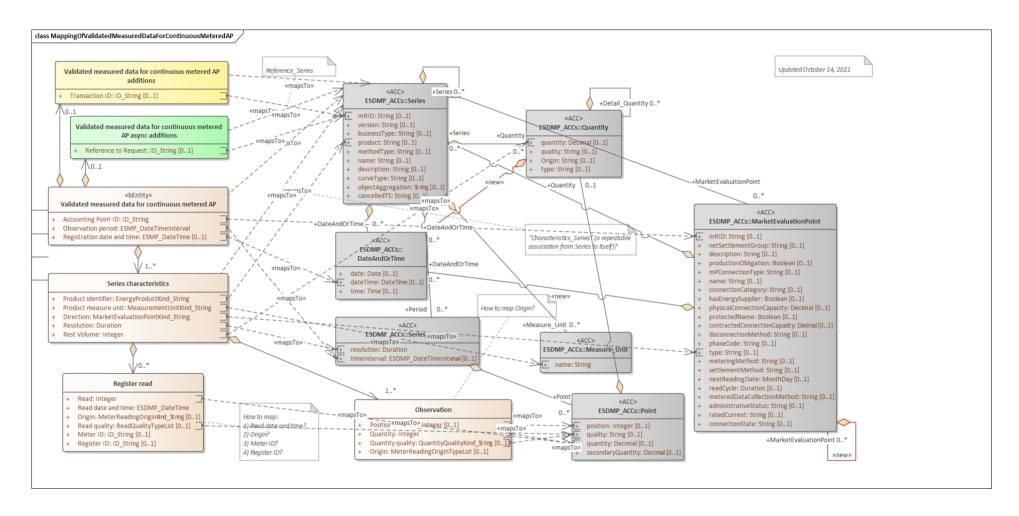
ŧ	Project	EBG members	Status	Start	End
A	A) RtR, Role-to-Role (hub)	All EBG	Start October 2018	Q4 2018	Q4 2021

# **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
<b>«Business entity»</b> 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).	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 start-	Quantity / quantity	The quantity value.  The association role provides the information about what is
	and end meter read and the aggregated volume from the exchanged time series.		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 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.

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.

MappingOfValidatedMeas	appingOfValidatedMeasuredDataForContinuousMeteredAP									
Target	1 DateAndOrTime	2 MarketEvaluationPoint	ਤ Measure_Unit	4 Point	5 Quantity	6 Series	7 Series_Period			
1 Observation				Maps To Quant  Maps To Position  Maps To Position  Maps To Quantity  Quantity						
2 Register read				Maps To quantity  Maps To Read quality						
3 Series characteristics		Maps To  Direct type	Maps To Produ name		Maps To Rest V quantity	Maps To product  Maps To	Maps To  Resol			
4 Validated measured dat	Maps To Regist	Maps To Accou mRID				Maps To	Maps To Obser timel			
5 Validated measured dat						Maps To  Trans  Maps To  Maps To				
6 Validated measured dat						Maps To  Maps To  Refer				