Date: Monday, May 16th, 2022

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

Present:

Jan, Svenska kraftnät

Kees, TenneT Ove, Edisys

Gerrit, EDSN

Appendix A: Venue, hotel and travel information for meeting June 8th and 9th from Andrzej

Appendix B: Status for BRS review
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:

• ebIX® flex project and ENTSO-E/EG1, see item 8.1 under AOB.

2 Approval of minutes from previous meeting (both from April 25th and May 2nd)

The minutes from previous meetings were approved.

3 Status for "Alignment of master data for areas project"

We are still awaiting a response from the EU DSO entity.

4 Continue review of BRS for Measure for imbalance settlement

Ove had as action from previous meeting updated the BRS for Measure for imbalance settlement.

The second half of the meeting was used to review and update the class diagram for "Aggregated validated measured data per neighbouring grid". Among others:

- Addition of a Series characteristics class.
- Replacing the three classes "Out Area Metering Grid Area", "In Area Metering Grid Area" and
 "Aggregation Object Metering Grid Area" with three attributes in the Series characteristics class: "In
 Area ID", "Out Area ID" and "Neighbouring Metering Grid Area ID".
- Moving all attributes except Observation period from the root class to the Series characteristics class.

- Addition of Metering Grid Area ID to the root class.
- The above changes means that we will use In area and Out area attributes to tell the direction of the energy flow and not the Direction attribute (production/consumption). However, the Direction attribute will still be used for measured data from an Accounting Point.

Action:

• Ove will update the BRS for Measure for imbalance settlement.

5 Start review of BRS for Measure for reconciliation – if time item

The item was postponed.

6 Review of CIM definitions for classes and attributes based on mapping from ebIX® class diagrams for Validated measured data for continuous metered AP to CIM

See Appendix D.

The item was postponed.

7 Meeting schedule

GoToMeetings:

Every Monday from 14:00 to 15:30, scheduled until July 4th, 2022, except for holydays.

Physical meeting:

We will run the physical meeting June 8th and 9th in Warszawa, see Venue, hotel and travel information for meeting June 8th and 9th from Andrzej in Appendix A.

The following participants are confirmed:

#	Participant	Country, company
1.	Andrzej	PL, PSE
2.	Bartosz	PL, PSE
3.	Gerrit (Convenor)	NL, EDSN
4.	Grazyna	PL, Tauron Dystrybucja
5.	Joachim	DE, innogy / Westnetz
6.	Ove (Secretary)	NO, EdiSys
	(maybe) via GoToMeetir	ng
7.	Jan (day 2)	SE, Svenska kraftnät
8.	Kees (dependent on EG1)	NL, TenneT

Action:

Ove will ask Andrzej if there are online meeting equipment available in Warszawa.

8 AOB

8.1 ebIX® flex project and ENTSO-E/EG1

Kees informed that the next topics for EG1 will be master data for change of supplier and master data for flexibility (i.e. the flexibility register).

Further Kees informed that a new group (task force) for interoperability and data exchange "TDNI" (system operation (transmission and market) will be established by ENTSO-E. Kalle will be the convenor of the taskforce. Gerda and Kees will participate from TenneT, and Jan will participate from Svensk kraftnät.

Thereafter Kees asked the question: "How can ebIX® influence the work of this group, i.e. make sure that the ebIX® Flex BRSs are considered and used in a proper way?".

Conclusion:

• Probably the only way will be by participation, i.e. Jan, Kees and Gerda must try to make sure that the ebIX® work is considered. It may also help that Kalle knows the ebIX Flex BRSs.

Appendix A Venue, hotel and travel information for meeting June 8th and 9th from Andrzej

Time schedule:

Day 1: June 8^{th} , 8:00-17:00 - **Note:** the EBG meeting start at 9:00 Day 2: June 9^{th} , 8:00-17:00 - **Note:** the EBG meeting start at 9:00

Place of meeting:

Name: Varso Place

Street: Chmielna 73, Warsaw (Poland)

Entrance: Varso 2

Floor: 1st

Room name: "Strategy" Google maps: <u>VarsoPlace</u>

Accommodation (hotel proposals):

NYX Hotel (Recommended)

71 Chmielna Street

Warsaw

https://www.nyx-hotels.com/warsaw

Booking.com: HotelNYX

Mercure Warszawa Centrum

48/54 Zlota Street

Warsaw

https://mercure-warszawa-centrum-hotel.at-hotels.com/en/ Booking.com: http://www.booking.com/Share-9NEVmzu

Holiday Inn

52 Twarda Street

Warsaw

https://poland.ihg.com/hotele/hotel-holiday-inn-warsaw-city-centre/

Booking.com: Holiday Inn - Warsaw City Centre

Transport (city center – close to proposed hotels and place of meeting)

The best way to get to city center from the Warsaw Chopin Airport is by train. It's "under" airport, it's cheap (4,40 PLN – about 1 euro) and fast (about 25 minutes). You should leave at *Warszawa-Centralna* station. More info you can find here: https://www.lotnisko-chopina.pl/en/train.html

You can also order Uber/Bolt or taxi. If you are ordering Uber/Bolt, you should remember to enter the first floor - departures hall, not arrivals. From there, you should order Uber through the application by selecting the place (terminals AB or terminals CDE). The Uber should cost around 30 PLN (7 €). Taxi you should be able to order from ground floor – departures, outside. Taxi should cost around 40 PLN (9€). Travel time: about 30 minutes.

Appendix B 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 <u>www.ebix.org</u>	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 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 <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 www.ebix.org	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 Value	Finished	The content of the BRS is moved to a separate UseCase in BRS for Measure for Billing			
2.	BRS for Measure for Billing	Finished	20211209: • Published at www.ebix.org			
3.	BRS Validated measured data	Finished	20220221:Published at www.ebix.org			

Measure BRSs				
#	BRS	Status	Comment	
4.	BRS for Measure for Collected Data	Finished	 20200402: Published at www.ebix.org. 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 determine and exchange validated meter read	Finished	20220310: • Published at www.ebix.org .	
6.	BRS for Measure for Imbalance Settlement	20220131: • EBG/RtR review to started.	20200615: • Include handling of MR "NMEG 2020-01".	
7.	BRS for measure for renewable energy certificates	Finished	20220221: Published at www.ebix.org	Fin
8.	BRS for Measure for Reconciliation	To be reviewed	 20210125: Investigate the need for addition of MDR and MGA in the "root class", ref Dutch requirements. 	
9.	BRS for Settle for Reconciliation	To be reviewed	 20210125: Investigate the need for addition of MDR and MGA in the "root class", ref Dutch requirements. 	

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)	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 th , 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)	 Making MRs to the HG for definition for and relations between Gateway, Gateway Operator and Gateway Administrator Making a BRS for Gateway related stuff. 	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 Supply Start Date to the AP Administrative Characteristics class in Alignment of AP characteristics BRS	TBD	TBD
1)	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
O)	Make a preproposal for update of the definition of the «Harmonised Role» Resource Provider. Among others we think it is the BRP that sends schedules and not the Resource Provider and we think the term "manages" could be clarified.	TBD	When the flex project is finalised
P)	Investigate if we need to add something, e.g., to one of our BRSs, related to a possible "Request Customer measured data from an ESCO"	TBD	When EG1 has added "my energy data" to an IA.
Q)	Verify extensions to the definitions of roles with the group harmonising the electricity and gas markets role models before adding the extension to the role definitions in a BRS to include gas.	Continuous	When updating role definitions in BRSs

C.2 Approved (and running) projects

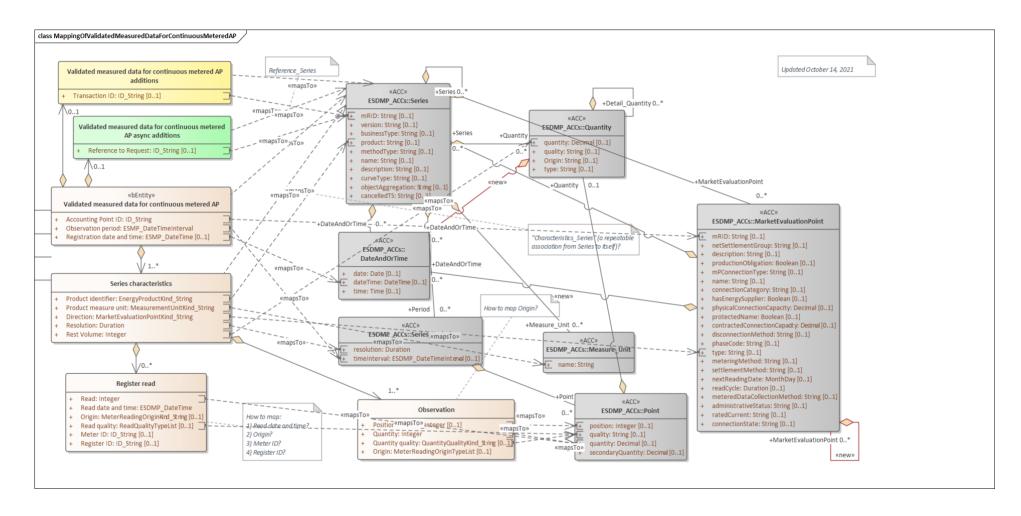
#	Project	EBG members	Status	Start	End
A)	RtR, Role-to-Role (hub)	All EBG	Start October 2018	Q4 2018	Q4 2021

C.3 Surveys

#	Survey	Status
A)		•

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).	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 PT15M 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 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.

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
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.

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Target	1 DateAndOrTime	2 MarketEvaluationPoint	з Measure_Unit	4 Point	5 Quantity	6 Series	7 Series_Period
Observation				Maps To Quant Maps To Position Maps To Quantity Maps To Quantity quantity			
2 Register read				Maps To quantity Maps To Read quality			
s Series characteristics		Maps To Direct	Maps To Produ name		Maps To Rest V quantity	Maps To product Maps To	Maps To Resol
# /alidated measured dat	Maps To Regist	Maps To Accou mRID				Maps To	Maps To Obser timel
s Validated measured dat						Maps To mRID Maps To MRID	
s /alidated measured dat						Maps To Maps To Refer MRID	