


Minutes ETC meeting, January 18th, 2023	 European forum for energy Business Information eXchange
January 24 th , 2022	ETC – ebIX[®] Technical Committee

Minutes ETC meeting, January 18th, 2023

Date: January 18th, 2023
Time: 10:00 – 12:00 and 13:00-15:00
Place: GoToMeeting
Present: Jan (NL), EDSN
Jan (SE), Svenska kraftnät
Kees, TenneT
Ove, Edisys

Appendix A: ebIX[®] rules for how to make MRs to WG16

Attachment:

1. Appendixes for ETC minutes (docx)
2. ETC workplan (see ebIX[®] file manager at <https://filemanager.ebix.org/#>)

1 Approval of agenda

The agenda was approved with the following additions:

- Direction Type vs Metering Point Type, see item 4.2.1.1.
- Review of MeasurementMethod definitions, see item 4.2.1.2.
- New datatype for ESMP: ESMP_CurrentFlow, see item 4.2.1.3.
- Review of HEMRM update suggestions from EBG, see item 6.4.

Note: next meeting will be a face-to-face meeting in Amersfoort.

2 Approval of minutes from previous meetings

The minutes were approved after correction of the meeting days (the meeting was only on Wednesday).

3 Status for a common ebIX[®], EU DSO Entity, ENTSO-E (CIM EG) and ENTSOG Area project

4 Resolve ebIX[®]/IEC issues

4.1 Making a European Style Downstream Market Profile (ESDMP)

4.1.1 [MRs to WG16 CIM modelling team and Information from IEC meetings](#)

MRs to WG16 and their status are found in a separate document “MRs from ebIX to WG16”. The document can be downloaded from the ebIX[®] File Manager.

Minutes from WG16 meetings can be found at: [WG16 / Modelling-Team-Minutes](#).

Continued action:

- Jan (SE) will ask Alvaro if the aggregations with wrong source/target should be updated, such as the aggregation from TimeSeries to FlowDirection.

4.1.2 [MRs based on Dutch requirements](#)

Continued actions:

- 1) Kees will add a MR to the series of other MRs that will be sent from ebIX® based on the Dutch requirements for changing the cardinality of the association between Acknowledgement_MarketDocument and Sender_MarketParticipant/Receiver_MarketParticipant from mandatory [1] into optional [0..1].
- 2) Kees will try to come up with a refined table showing the Dutch MRs, including examples.
- 3) Kees will investigate the usage of a reference to a related document (probably only used in the acknowledgement in the Netherlands) and see if he can find a justification of the “rename of the association named Original Market Document to something more generic”.
- 4) Jan (NL) and Kees will go through the Dutch MRs and see if more of the MRs are MRs to 62325-351 (ESMP).
- 5) Jan (NL) will find a better justification for a MR for the new class Product (ebIX®/2021-035).
 - At an AccountingPoint you can have values of different kind, such as Active Energy, Reactive Energy:
 - Proposal: Add a Product class, with Product type and a Measure unit and associate it with TimeSeries, MarketEvaluationPoint and RegisteredResource.
 - Currently added to the “ebIX® Excel sheet” as ebIX® MR 2021/035
- 6) Jan (NL) will investigate if the attributes measureUnit and priceMeasureUnit should be associations to the Unit class in 301 (MeasureUnit class in ESDMP) instead of attributes in the Product class. According to Kees the measureUnit and priceMeasureUnit should be attributes in the Product class because of normalisation rules.

4.1.3 [Review of non-submitted MRs from the ETC Excel sheet - focus item](#)

Ove had as action from previous meeting made the following MRs to send to EBG before submission to ENTSO-E retail market group:

- 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.
- 2022/025: Add an association from ChargeType to Period (62325-301) and from ChargeType to Series_Period (62325-351)
- 2022/024: Add an association from ChargeGroup to ChargeType in 62325-351.
- 2022/023: Add an association from ChargeType to MarketParticipant in 62325-301 and 62325-351.
- 2022/022: Add an association from Series to ChargeType in 62325-301 and 62325-351.

A Review of the MRs will be added to our next ETC meeting, under the condition the EBG has reviewed them by then.

4.1.4 [Status for governance of reference models: basic IEC CIM and ESDMP \(follow-up item on the agenda\)](#)

Alvaro is maintaining the latest version of the ESMP, based on decisions in CIM EG. Hence, these updates are extensions to the CIM 62325-351 standard. Currently the ESDMP is maintained by ETC.

Status:

The ESMP (IEC 62315-351) is formally maintained by WG16, however we might in the future see a looser connection to IEC for the profile, i.e. a European profile maintained by a European group, among others

consisting of ENTSO-E and the EU DSO Entity. The ebIX® goal is still having one common European profile and not a split between upstream and downstream profiles.

4.1.5 [Not yet mapped attributes from the BRS for Alignment of metering configuration characteristics](#)

Continued action:

- Ove will make a mapping from the class diagram for metering configuration characteristics to CIM to discover need for MRs.

4.2 Status for ENTSO-E CIM EG Retail market workgroup (follow-up item on the agenda)

4.2.1 [MRs to ENTSO-E CIM EG Retail market workgroup](#)

Action:

- Ove will make a first draft of a MR for addition of a ratedCurrent attribute to MarketEvaluationPoint class
 - And the related datatype for CurrentFlow. The Current Flow will be of datatype Integer and UnitSymbol will be fixed AMP (from UN/Recommendation 20).

Status:

- Jan (SE)/Ove has drafted:

MR for IEC 62325-351 - ebIX 2022-016-v1 - Add ratedCurrent to ESMP 20230116

- See also 4.2.1.3

- Ove will make a first draft of a MR for addition of phaseCount: Integer [0..1] to MarketEvaluationPoint in ESMP.

Status:

- Jan (SE)/Ove has drafted:

MR for IEC 62325-351 - ebIX 2022-015-v1 - Add phaseCount to ESMP 20230116

- The MR was updated during the meeting, i.e. the phaseCount is already available in 62325 version 4.14.

- Jan (SE) and Ove will ask EBG for comments to the proposal of changing the MR ebIX®/2022-017 to add a new attribute to the MarketEvaluationPoint class instead of extending the current DirectionType enumeration, to 62325 and ESMP.

- Name energyDirectionCategory
- Data type will be an enumeration, among others containing consumption, production and combined.

Status:

- Jan (SE)/Ove has drafted:

MR for IEC 62325-351 - ebIX 2023-001-v2 - Add energyFlowCategory to the Accounting Point class 20230116

- See also 4.2.1.1

- The MR was updated during the meeting – correction of a spelling error.

- Jan (SE) will bring the comments to ebIX®/2022-030 regarding GridAgreementType to the ENTSO-E retail market WG.

Status:

- Jan (SE) has updated the MR:
 - MR for IEC 62325-351 - ebIX 2022-030-v7 - Add GridAgreementTypeList to ESMP 20230113
- The codes E03 (Contract between Grid operator and Customer through Supplier) and E04 (No net using contract) were discussed but may be removed later. EBG was asked to ask Vlatka/Joachim if it is OK for Germany to deprecate the two codes in the ebIX® code list and to remove from a later version of the MR (or from CIM if agreed in the Retail market workgroup).
- Jan (SE) and Ove will ask EBG to review the update of MeasurementMethod codes E16/E24. Thereafter Jan (SE) will bring the comments to the ENTSO-E retail market WG.

Status:

- Jan (SE)/Ove has drafted:
 - MR for IEC 62325-351 - ebIX 2022-032-v7 - Add MeasurementMethodList to ESMP 20230113
- See also 4.2.1.2

4.2.1.1 Direction Type vs Metering Point Type

This is a “for information item”, i.e. background for the new MR: ebIX®/2023-001-v1 (Add energyFlowCategory to the Accounting Point class), see item 4.2.1 above.

The ebIX®/2022-027 MR (resubmitted as ebIX®/2023-001-v1), which is related to the addition of a “Metering Point Type” or similar, to CIM, was discuss at an ENTSO-E Retail market WG in December 2022. Here it was proposed changing the MR to addition of a new attribute to the MarketEvaluationPoint class instead of extending the current DirectionType enumeration (Up, Down, Up and down...).

At the ETC meeting December 14th, 2022, it was agreed to add a new attribute to the MarketEvaluationPoint class instead of extending the current DirectionType enumeration. ETC proposed the name “energyDirectionCategory” for the new attribute.

The MR was thereafter reviewed at the EBG meeting December 19th, 2022, where it was agreed to add the new attribute, however to the AccountingPoint class (and not MarketEvaluationPoint), with the name **energyFlowCategory**. It was also proposed some updates of the definitions of the relevant codes:

Code	Name	Description
E17	Consumption	Consumption signifies that an AccountingPoint takes energy from the grid.
E18	Production	Production signifies that an AccountingPoint supplies feeds energy into the grid.
E19	Combined	<p>Combined signifies that an AccountingPoint, at a point in time, either takes energy from the grid or supplies feeds energy into the grid.</p> <p>From Gerrit:</p> <p><i>The old description relating to “one moment in time” also is thru for the other two values, but what we mean is that is can alter between the two. I see the urge to state that it cannot be done at the same time, but do we need to state that?</i></p>

		<p>Proposal for new definition:</p> <p>Combined signifies that an Accounting Point can consume, take energy from the grid, or produce, feed energy into the grid.</p>
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Conclusions from EBG meeting December 19th, 2022:

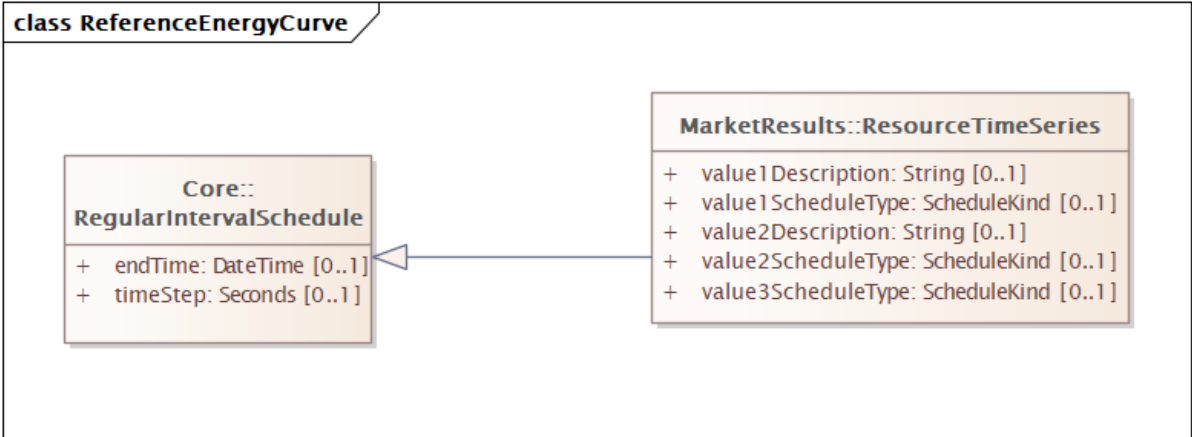
- ETC is asked to withdraw the current MR and make a new for a new attribute and new codes.
- Jan will bring the new MR to the ENTSO-E Retail market WG.

Info from Jan after the EBG meeting:

Regarding the discussion earlier today about “energy flow [direction]”, I found something in a (draft) “US/Japanese standard” related to Demand response (schedules) that somewhat corresponds to what we discussed. It is not similar, however I mentioned that I wanted to check the US document. I found it, and there it is about resources, not Accounting Points that we described.

(The draft standard is called **Systems interface between customer energy management system and the power management system - Part 4: Demand Side Resource Interface** and will have the identification IEC 62746-4).

There is a class in the package MarketResults (within the MarketSystem package) called ResourceTimeSeries. That class is a bit strange; I would rather have used repetition of an attribute (in another class) than having three similar pairs of attributes in the class, see the following figure:



Anyhow, the description of the “value1ScheduleType” attribute is this:

“Value1ScheduleType documents two key features for a specific resource operating mode: (a) the energy flow convention for a positive number as either production or consumption of service and (b) the sense of how the resource is planned to be used or was used as either a target or setpoint or as a relative change to a defined level.”

¹ To Jan (SE) it would be likely to have either one or two timeseries for an Accounting Point being “combined”. Then either one timeseries with netted values or two timeseries for the same Accounting Point, both with the “energyFlowCategory” (if also specified for the timeseries) = “combined”, and one with “flowDirection” = “UP”, if using ENTSO-E enumerations, and another with “flowDirection” = “DOWN”. Or, if also here using ENTSO-E codes/attributes, “businessType” = “Production” and another “businessType” = “Consumption”. Or specifying “Production” / “Consumption” in another way for the two timeseries.

To be further looked into when making examples (we can look at that in ETC).

So here in the text we find “energy flow”. In the timeseries sent in this way it would be possible to specify different “schedule kinds” (at actually the same time). E.g. you could specify up to three different ScheduleKinds for the resource:

- 1) “generation”,
- 2) “load”,
- 3) “loadIncrease” – relatively current consumption or baseline. An example could be an energy storage where a positive “loadIncrease” would result in a faster rate of charging,
- 4) “loadReduction” - relatively current consumption or baseline. An example could be an energy storage where a positive “loadReduction” would result in a slower rate of charging.

We want something different: “Production, Consumption, Combined”. And what I found is not about the master data for the resource, it is that you could send some timeseries for the resource telling if it is for generation, for load or for loadIncrease or loadReduction. Anyhow, I gave you also the text here describing the different “schedule kinds”, it might be relevant when at some future point trying to merge this future standard into how we handle this in Europe:

Many DER [Distributed Energy Resource] types are easy to classify; for example, a distribution-connected wind turbine would mostly likely choose a scheduleType of “generation” whereas a residential demand response resource would mostly likely choose “loadReduction”. A storage resource, however, could choose any number of options and having well-defined definition for each scheduleType should eliminate ambiguity. For example, a stand-alone battery might choose “generation” if it has capacity available to discharge to the grid or “load” if it needs energy to charge; a battery coupled with a load might choose “loadReduction” if the battery offsets the associated load at the service meter, or “loadIncrease” if the battery desires to increase load from the grid to charge the battery. The standard makes no claims to which models should be used for which resources, rather provides the set of all four possible options and should be constrained by business rules for a given implementation.

We will not call our attribute “ScheduleType” and we will not use the datatype “ScheduleKind”. But, in the discussion within WG16 I think I will need to be aware of what I just found, since it was about “energy flow convention”, however here just for “schedules”, and not as master data for the Resource or Accounting Point. Finally, looking at the many attributes for a resource in CIM, there is nothing that tells if the resource is for “generation”, “load”, etc.

The conclusion is then: We need a new attribute, and the name could very well be something with “Energy flow”.

Item closed.

4.2.1.2 Review of MeasurementMethod definitions

This is a “for information item”, i.e. background for the new MR: ebIX®/2022-032, see item 4.2.1 above.

The MR ebIX®/2022-032 from ETC, requesting addition of ebIX® MeasurementMethod codes to the CIM/ESMP profile, has been reviewed in the ENTSO-E retail market WG with the following comment:

- MeasurementMethod, agreed (after removal of E21), but the usage of E16/E24 needs to be investigated and described - what is the difference between "Calculated" and "Not metered"? Make examples. Suggests update of the descriptions. To be discussed in ETC.

An update proposal from ETC was reviewed and slightly modified during the EBG meeting December 19th, 2022:

Code	Name	Description
E13	Continuous	The measurement originates from a continuous metered meter. ²³
E14	Non-continuous	The measurement originates from a non-continuous metered meter.
E16	Not metered	<p><i>Original proposal:</i> The measurement originates from a not metered meter.</p> <p><i>New ETC proposal:</i> The measurement originates from a virtual Meter, i.e. the measurements energy quantities are not originating from a physical meter read but a result of a calculation or other agreement.</p>
E21	Non-continuous, monthly	The measurement originates from a non-continuous metered meter that is read monthly.
E24	Calculated	<p><i>Original proposal:</i> The measurement is calculated.</p> <p><i>New ETC proposal:</i> The measurement is calculated based on meter reads from two or more physical meters.</p>

Conclusions from EBG meeting December 19th, 2022:

- Jan will bring the update proposal to the ENTSO-E Retail market WG.

Item closed.

4.2.1.3 New datatype for ESMP: ESMP_CurrentFlow

This is an “for information item”, i.e. background for the new MR: ebIX®/2022-016, see item 4.2.1 above.

Jan (SE) as has got the following action from NMEG:

- Jan (SE) will make an MR (ebIX® 2022/016) and ask ETC to send it to the ENTSO-E Retail market TF to add a new datatype to ESMP, ESMP_CurrentFlow where value is of type Float and unit is of type AMP, (both are meeting Wednesday January 18th).

Item closed.

² From Gerrit: *I do not like the wording of “metered meter” that is still in the first two descriptions. Couldn’t we better state something different, for instance “continuous measuring meter” and “discrete measuring meter” or similar.*

³ From Jan (SE): *Regarding the change from “metered meter”, I agree that the text could be improved. That MR has been sent to the Retail group within ENTSO-E and will be discussed January 18th. Maybe “from a continuous read meter” is better. Another suggestion (but I don’t say it is better) could be just “from a continuous meter”. Before the meeting in January there will be both EBG and ETC meetings where this further could be discussed.*

4.3 Preparations for coming WG16 meetings

Jan (SE) informed that one of the items at the joint WG13, WG14 and WG16 meeting in February is the question if mRID should be replaced with a UUID. Jan (SE) informed that the Swedish position is that usage of UUID should be specified in the profiles and not in basic CIM, which is supported by the rest of ETC.

4.4 Status for European (ebIX® and CIM EG Retail market workgroup) MRs to CIM

Review and update of Excel sheet keeping track of the MRs sent from ebIX®, via the CIM EG Retail Market workgroup to WG 16. The Excel file is uploaded to the Teams “Team” “ebIX® ETC” where Jan (NL), Jan (SE), Kees and Ove can edit the document simultaneously.

The Excel sheet is up to date.

5 EG1 status

Gerrit is participating in a Demand/response (flexibility) workstream. Kees (convenor of the Change of supplier workstream) and Jan (SE) are participating in a Change of supplier and the Master data workstream, convened by Georg Hartner. There is also a Legal workstream, however without any ebIX® member. Kalle is in general helping the workstreams with the information content needed by the workstreams.

The ebIX® BRS are accepted as basis for discussions within the workstreams.

More information can be found at:

<https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&do=groupDetail.groupDetail&groupID=2892>

6 Resolve HG issues - Prioritised item on ETC meeting September 27th

6.1 BRP vs Energy Trader

Now a Trade Responsible Party inherits from a BRP, which means that he inherits all the characteristics of the BRP. However the Trade Responsible Party has always a “balance position”, i.e. not dealing with physical energy. Hence, we suggest turning the direction of the generalisation.

In addition we suggest a rephrasing of the definition of the Trade Responsible Party:

A party who can be brought to rights, legally and financially, for any financial imbalance within a given imbalance settlement period between energy nominated and consumed for all associated Accounting Points.

Note:

A power exchange without any privileged responsibilities acts as a Trade Responsible Party.

Continued action:

- Kees and Jan (SE) are asked to verify the proposal above within TenneT and Svenska kraftnät.

6.2 Status for harmonisation of the electricity and gas markets role models

Nothing new since previous ETC meeting.

6.3 Suggestions for HEMRM extensions

The intention with this item is to describe the roles not suitable for HEMRM / HGRM, such as Hub, DSO, TSO etc.

The item will be discussed at the meeting on Amersfoort.

Continued action:

- Kees will try to make the table below more “understandable”:

Business roles	Implementation-dependent roles	Roles linked to physical devices
<p>HRM / GRM</p> <p>This is already available in the present HRM and GRM (maybe with the exception of the meter-related roles which may have to be moved to the physical devices)</p>	<p>Exchange architecture:</p> <ul style="list-style-type: none"> • Document exchange • Web service • Data sharing 	
	<p>System/device roles</p>	

6.4 Review of HEMRM update suggestions from EBG

We should review HEMRM comments from EBG and thereafter forward them with *urgency* to the HG.

Gerrit informs that the HEMRM is heavily used in the European energy market, e.g. within the EG1 working groups, however with a lot of misunderstandings....

Conclusion:

- This will be a main item for next ETC.
- We suggest inviting the EU DSO Entity to review the definition in HEMRM together with EBG before submitting the update proposal to the HG.

Action:

- Ove will distribute the comments in due time before next ETC and all are asked to review these – then we can concentrate on reviewing “comments to the comments”.

7 ebIX® Business Information Model 2022.A

7.1 Use of XOR in combination with cardinalities

Continued action:

- Kees will make a proposal for update the “ebIX® introduction to Business Requirements and Information Models” with a chapter explaining the relationship between cardinalities and OR/XOR, including:
 - o XOR and cardinality of [1] lead to a required choice in the XML schema.
 - o XOR and cardinality of [0..1] lead to an optional choice in the XML schema.

7.2 Continue review and update of version 2022.A

Review of proposed updates in Appendix A and Appendix B in the separate appendix document.

At our next ETC meeting, we should discuss how to make progress in the update of the “ebIX® model”.

8 Next meetings⁴

- February 14th and 15th, 09:00 – 16:00 both days, 2023, Amersfoort
- March 20th, 10:00 – 12:00 and 13:00 – 15:00, 2023, GoToMeeting

9 AOB

No items.

⁴ All Face-to-face meeting starts 09:00 the first day and end at 16:00 unless otherwise explicitly stated.

Appendix A ebIX® rules for how to make MRs to WG16

- 1) Artefacts used for MRs to WG16 shall be stored as separate packages in the common cloud EA model.
- 2) Always review existing definitions of attributes, classes etc. that are related to the MR in question and if needed propose updates to these definitions.
- 3) First investigate basic CIM to see if the object we intend to send an MR for already is available there.
If yes, we should make a MR for 62325-351 (ESMP), if not we make a MR for both basic CIM and ESMP.