Minutes ETC meeting, August 30th and 31st, 2022

Date: August 30th and 31st, 2022

Time: 09:00-11:00 and 12:00 – 14:00 (both days)

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:

- Providing CIM issues to Redmine, see item 4.1.1.
- MRs based on Nordic requirements, see item 4.1.4.
- Suggestions from TR 62325-103 yet to be handled, see item 4.1.6.
- Preparation of MRs not yet sent to WG16, see item 4.2.1.
- How to specify "metering point type" (production, consumption or combined)?, see item 4.2.4.
- How can we make sure that required data attributes are not missing?, see item 4.3.
- Liaison report for IEC TC57 Plenary Meeting 26th 28th October 2021, see item 11.1 under AOB.

Prioritised items:

- Next meetings, see item 10.
- Preparation of MRs not yet sent to WG16, see item 4.2.1.

2 Approval of minutes from previous meeting

The minutes from previous meetings were approved.

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

The status for the common area project is still that we await projects members from the EU DSO Entity.

From Georg:



I am happy to tell you that we could establish an EU DSO / ebIX® co-operation workstream within EG Data Interoperability, and that Vlatka is part of this. Within the group and due to her experience, Vlatka will be the primary responsible for our liaison and the next steps. She will report back to the group and to the other experts.

We are planning to get going a dedicated subgroup on our co-operation in autumn to even strengthen our ties and output for the future. However, for now it would be beneficial please if you could keep Paul and me in CC loops.

Would you think it would be a good idea to start things off with a brief 30-minute virtual kickoff meeting probably?

A PowerPoint presentation showing the ebIX® view of a cooperation that will be presented for the EU DSO Entity in a few weeks' time was shown. The presentation was updated.

4 Resolve ebIX®/IEC issues

4.1 Making a European Style Downstream Market Profile (ESDMP)

4.1.1 Providing CIM issues to Redmine

For information from Jan (SE):

In Redmine you (will) find all issues about CIM under discussion, or to be discussed, in WG13, WG14 or WG16.

Most of the ebIX® issues found in Redmine has recently got "notes" and updated "decisions", see for example https://redmine.ucaiug.org/issues/5806?tab=history.

Alvaro and I got our logins to Redmine last week, so we both can update and add new issues. Also, Kees (and other members of the WG16 modeling team) may get a login. I have so far just added one issue (based on the discussion last week at the weekly WG16 meeting), and that was within WG14 (where I am a member), and it is about "readCycle", see https://redmine.ucaiug.org/issues/5950.

I would suggest that we discuss in ETC what the procedures should be when adding a new issue to Redmine. But I also think that the procedures more general could be discussed at the next IEC meeting in Minnesota. So, perhaps we should wait for that possible discussion until we in ETC write down some procedures. Likewise, CIM EG (and/or its subgroups) should probably also create some procedures. Procedures that may include that we can bring up issues between European groups before they are added to Redmine. We may also, in Europe, discuss if it is relevant to have a "WG16 Part 351 Issues" part among the CIM Issues in Redmine. See https://redmine.ucaiug.org/projects. Having such a list of issues could be valuable if the list will be long, and then WG16 members from US and Japan won't have to look so much on that list. Waiting until after the meeting in Minnesota before we write down some procedures should however not stop us from adding issues before that, but probably then like what I did after the meeting last Thursday. E.g. when bringing up an issue at a (WG16) meeting, it could after that be written down as an issue in Redmine.

Item closed.

4.1.2 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 actions:

Kees will try finding the definition of source and target for associations according to UML and CCTS.



- Jan (SE) and Kees will try finding contradictions between the usage of source and target between basic CIM (301) and ESMP (351).
- Jan (NL) will update the cloud version of ESDMP as soon as the new CIM model is received from Becky.

4.1.3 MRs based on Dutch requirements

Continued actions:

- Kees will add a MR to the series of other MRs that will be sent from eblX® 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].
- Kees will try to come up with a refined table showing the Dutch MRs, including examples.
- 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".
- Jan (NL) and Kees will go through the Dutch MRs and see if more of the MRs are MRs to 62325-351 (ESMP).
- 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.

4.1.4 MRs based on Nordic requirements

#	Proposed Nordic extension	Comment	NMEG action	Priority
1.	Add an association from MktActivityRecord to ChargeGroup	Used when exchanging DSO's price lists, e.g. in Notify billing master data.	Jan (SE)/Ove will ask ETC if we shall make a MR	Low priority
2.	Add the attribute "phaseCode" to MarketEvaluationP oint	Not used in the Nordics (?) There is an ebIX® requirement for an attribute "number of phases" (1 or 3) in the BRS for AP Characteristics. Already part of UsagePoint but not in ESMP.	Jan (SE)/Ove will ask ETC if we shall make a MR for ESMP (62325-351)	Low priority
3.	Add the attribute "ratedCurrent" to MarketEvaluationP oint	Used in AP Characteristics. Already present in UsagePoint but not in ESMP.	Jan (SE)/Ove will ask ETC if we shall make a MR for ESMP (62325-351)	Medium priority
4.	Add the attribute "connectionState" to MarketEvaluationP oint	Used in AP Characteristics. Already present in UsagePoint but not in ESMP.	Jan (SE)/Ove will ask ETC if we shall make a MR for ESMP (62325-351)	High priority
5.	Add new class EnergyTechnologyA ndFuel to be	Partly solved with the addition of a Fuel class, however only associated with RegisteredResource. And	Jan (SE)/Ove will ask ETC what to do with this issue – currently only	For the time being use the already existing association



#	Proposed Nordic extension	Comment	NMEG action	Priority
	associated with MarketEvaluationP oint with the attributes technology and fuel	Typestyle, telling the Technology, is also only associated with RegisteredResource. Addition of the attribute technology is NOT approved. Solution: use instead psrType in MktPSRType class.	associated with TimeSeries and not MarketEvaluationPoint	between Market- EvaluationPoint and RegisteredResource
	ebIX® 2019/014 + 015 + 16 + 17 WG16: 16_0093 + 0094 + 0095	Solved with the addition of a Fuel class, however, see 16_0093		
6.	Add an association from MarketEvaluationP oint to MktPSRType	E.g. used in AP Characteristics for "asset types" (hydro, nuclear, wind) – see also the item above.	Jan (SE)/Ove will ask ETC if we shall make a MR	For the time being use the already existing association between Market-EvaluationPoint and RegisteredResource
7.	Add the «ACC» ChargeType	The ChargeType is already part of IEC62325 / MarketOperations / ParticipantInterfaces, but not part of ESMP. See ebIX® BRS for Combined grid and supply billing.	Jan (SE)/Ove will ask ETC what to do with this issue	Low priority
8.	Add the «ACC» ChargeComponent with the attribute equation and an association to ChargeType	Used for sending an equation (ebIX® term; Charge algorithm (A textual description of the algorithm used for calculating the amount for this charge)). See ebIX® BRS for Combined grid and supply billing.	Jan (SE)/Ove will ask ETC if we shall make a MR	Low priority
9.	Add an association from Series to ChargeType	ChargeType is e.g. used for Subscription, Fee or Tariff. See ebIX® BRS for Combined grid and supply billing.	Jan (SE)/Ove will ask ETC if we shall make a MR	Low priority
10.	Add an association from ChargeType to MarketParticipant	E.g. used for sending the owner of a ChargeType (ChargeType-Owner_MarketParticipant). See ebIX® BRS for Combined grid and supply billing.	Jan (SE)/Ove will ask ETC if we shall make a MR	Low priority
11.	Add an association from ChargeGroup to ChargeType in ESMP	E.g. used for characteristics of a Charge Type within a Charge Group. See ebIX® BRS for Combined grid and supply billing.	Jan (SE)/Ove will ask ETC if we shall make a MR	Low priority



#	Proposed Nordic extension	Comment	NMEG action	Priority
12.	Add an association from ChargeType to Series_Period	See ebIX® BRS for Combined grid and supply billing.	Jan (SE)/Ove will ask ETC if we shall make a MR – We need the structure ChargeType -> SeriesPeriod -> Point -> Price	Low priority
13.	Add the attribute VATobliged to ChargeType.	See ebIX® BRS for Combined grid and supply billing.	Jan (SE)/Ove will ask ETC if we shall make a MR for VATobliged (taxIndicator)	Low priority

Action:

- Jan (SE) will ask the ENTSO-E retail market subgroup if we should make an MR for item 4 above, i.e. "Add the attribute "connectionState" to MarketEvaluationPoint".
- Ove will add the Proposed Nordic extension to the common ETC Teams excel sheet, mark it as "Nordic requirement for further discussion in ETC" #4 will be marked as sent to "Retail market group".

4.1.5 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.

Action:

• Kees/Jan (SE) will ask the Retail market group if IEC/CIM is the common information model to be used in all new process specifications by the European TSOs.

4.1.6 Suggestions from TR 62325-103 yet to be handled

Jan (SE) showed a presentation that was reviewed:

- Add the attribute standardLoadProfile to TimeSeries and/or MarketEvaluationPoint
 - o Probably not needed in the future, hence no action for the moment
- Add the attribute scheduledMeterReadingDate to TimeSeries and/or MarketEvaluationPoint
 - Already submitted to WG16
- Add the attribute MktPSRType to MarketEvaluationPoint
 - For the time being use the already existing association between MarketEvaluationPoint and RegisteredResource
- Add the attribute Fuel to MarketEvaluationPoint
 - For the time being use the already existing association between MarketEvaluationPoint and RegisteredResource
- Add BusinessSector with an attribute telling the type of utility
 - o MR under discussion in WG16
- Add Municipality to address information
 - o Will be solved in future versions of CIM
- Add meterTimeFrame or use the attribute touTierName?
 - o Action for Jan (NL) to see if the attribute is in use in the Netherlands
- 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
- Action for Jan (NL) to find a better justification for a MR for the new class Product.

Action:

- Jan (NL) will investigate if the meterTimeFrame is in use in the Netherlands
- Jan (NL) will find a better justification for a MR for the new class Product (ebIX®/2021-035).

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

Nothing new reported.

4.2.1 Preparation of MRs not yet sent to WG16

From Jan (SE):

Every second Wednesday there is this "CIM for retail market" meeting (a ENTSO-E subgroup) where I and Kees present ebIX®-MRs (and BRSs).

The next one is scheduled for the 31st of August at 15:00, so I would suggest we stop our ETC meeting before that – and also prepare work on that issue at our ETC meeting the 30th.

E.g. looking at MRs not yet sent to WG16.

New MRs were prioritized at the meeting, see item "4.1.4 MRs based on Nordic requirements" and "4.2.1 Preparation of MRs not yet sent to WG16.

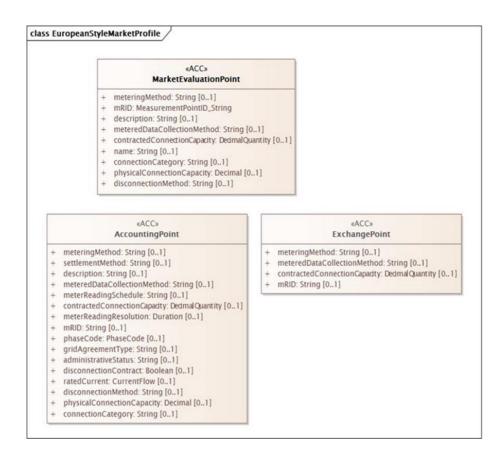
Item closed.

4.2.2 Review of how MRs regarding AccountingPoint are implemented in IEC 62325-351 (ESMP)

What remains from the earlier MRs regarding AccountingPoint are updates of IEC 62325-351 (ESMP). Those are described in the MRs, but not all of them added to ESMP. There are some issues there to be discussed before that update could be done. The issues are some attributes to be found in AccountingPoint in IEC 62325-351, i.e. inherited attributes from UsagePoint. And their datatypes.

In the MR we expected this to be the result in the ACCs

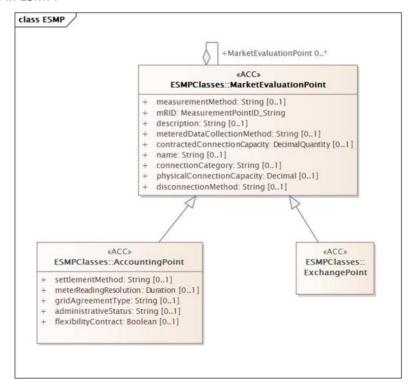




With the following changes noted in a footnote:

The attribute meteringMethod is now changed to measurementMethod and the attribute disconnectionContract in the figure is now changed to flexibilityContract.

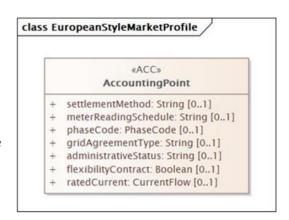
But it now looks like this in ESMP:





Comments so far:

- 1) Good with the self-association for MarketEvaluationPoint
- 2) All attributes are missing in ExchangePoint
 - a. But those would be inherited with the above model, and can then still be taken from MarketEvaluationPoint
- 3) Several attributes are missing in AccountingPoint
 - a. Some could be inherited, as for ExchangePoint
 - b. Some are to be inherited from UsagePoint, and are not needed in MarketEvaluationPoint, and should then only be found in AccountingPoint.
 - c. AccountingPoint in ESMP should then rather look like this:



«CIMDatatype»

CurrentFlow

+ uncefactUnitCode: UncefactUnitCode [0..1]

+ multiplier: UnitMultiplier [0..1]

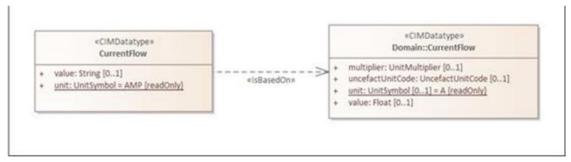
+ unit: UnitSymbol [0..1] = A + value: Float [0..1]

class ElectricityDatatypes

Further comments

- 4) phaseCode and ratedCurrent are missing. The issue to be discussed regards their data types.
 - a. There are no datatypes "PhaseCode" and "CurrentFlow" in ESMP
 - In IEC61970 (package Base > Core) there is an enumeration for PhaseCode that we perhaps can't/will not use
 - c. In IEC61970 (package Base > Domain) there is a CIMDataType for CurrentFlow that looks like below, but we don't use "multiplier" in Europe, and we will use the unit "AMP"
 - d. I suggest we make a specific MR for IEC 62325-351

 describing how we would like to handle the
 datatypes PhaseCode and CurrentFlow. For CurrentFlow we could there suggest having it like this in
 ESMP:



I.e. only with the value and with the unit AMP, found in the ENTSO-E code list, taken from UN/Recommendation 20. But how PhaseCode should be handled I think we need to discuss a bit more in ETC. Are there existing enumerations that will tell "one phase" or "three phase"? Or shall we suggest specific ESMP enumerations?

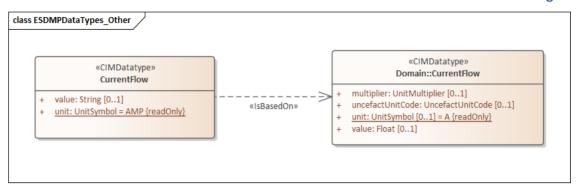
MRs for PhaseCode and CurrentFlow are already agreed added to the common ETC Teams Excel sheet, see item "4.1.4 MRs based on Nordic requirements".

Action:

 Jan (SE) will bring up the question in the coming WG16 meeting in Minnesota: How/when can a profile have different datatype than the original datatype in basic CIM? E.g. can the profile only restrict the original datatype in basic CIM? Can an enumeration be replaced with another? Etc.

E.g., is this restriction OK?





Item closed, but the action will be followed up in coming ETC meetings.

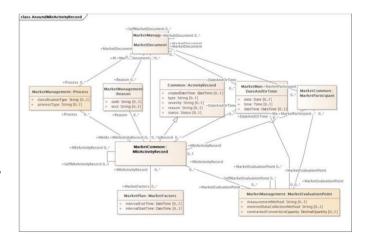
4.2.3 Around MktActivityRecord in CIM

From Jan (SE):

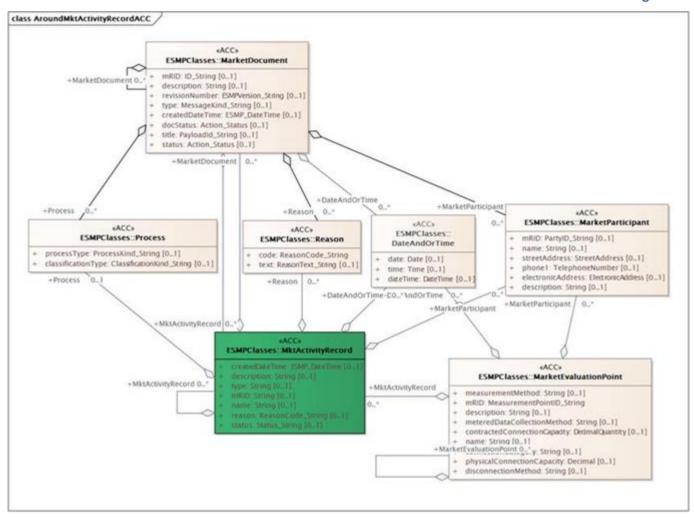
The MarketManagement package in CIM will now be updated and have these associations

Good. But how will this look like for the ACCs? Which attributes should we find there for each class? Which associations should we find? See figure below, created by Alvaro from ENTSO-E when also updating the MarketManagment package based on the MRs from ebIX®.

One thing needed to be updated/added is an association from MktActivityRecord to MarketEvaluationPoint. Not only the opposite as in the figure below and what is found in the current ESMP model. But there could be more. To be investigated.







Ove did a QA and found that the Nordic ESDMP has an additional association to Domain. However the association is currently not used in the Nordics, hence we will not do anything with it.

Item closed.

4.2.4 How to specify "metering point type" (production, consumption or combined)?

NMEG is missing some way to identify the metering point type (production, consumption or combined). There is a FlowDirection (up, down, stable, up and down), however this is not ideal.

In addition, information if the measured data is relevant for billing (Finnish need) is missing.

Conclusion:

- We have an issue with datatypes for ACCs, i.e. code lists should be in ABIEs and not in ACCs.
- For master data we need extra codes for the FlowDirection.direction, i.e. production, consumption and combined.
- Jan (SE) made a brief presentation explaining the issue, which will be presented for the ENTSO-E Retail market group.

A report from the discussions in the ENTSO-E Retail market subgroup will be put on our next ETC agenda.



4.3 How can we make sure that required data attributes are not missing?

Information item: mail from Jan (SE) to Alvaro August 18th, 2022:

For some attributes in the XML schemas, it is stated a maxlength, e.g. for a MarketParticipant.mRID the maxlength is 16. And it might be other maximum lengths for other attributes.

The problem now is that several attributes that are required may be (by accident) empty in the XML-file, resulting in that the XML-file is still valid but nothing is stored or could be checked by the recipient. Let us take the example:

sender MarketParticipant.mRID

the codingScheme may be valid (e.g., A01), but then comes nothing:

<sender MarketParticipant.mRID codingScheme="A01"></sender MarketParticipant.mRID>

When wanting to send an acknowledgement message back, you cannot find the information telling whom to send the ack. to (well, if the communication channel is still open you might be able to send something to the original sender, but not a complete file).

A similar problem could exist for the attribute

recipient MarketParticipant.mRID.

E.g., if the receiver is not the final receiver (e.g. the system receiving this is just a middleware a "post office" transferring the message further), that system cannot see to whom the message should be sent further.

And you cannot just "switch" the sender and receiver parts from the received message into the acknowledgement message, as you would typically otherwise do when sending an acknowledgement message back. But similar problems could of course also be found for other attributes, like the information about the process. If a required process attribute is missing, then you may not (internally) be able to send the information to a system that can create an acknowledgement message back.

So, in general a question could be: how can we make sure that required data attributes are not missing?

Has this been discussed in ESMP? Or in CIM-EG? (WG-EDI?) According to Jon-Egil it hasn't.

One possible solution could be not just to use "maxlength", but also sometimes to use "minlength" (when the attribute is required and you may need that information, as a receiver, in order to process the message).

(And perhaps use minlength when maxlength is not required, depending on the needs.)

In cases like above, minlength could be "1", and hopefully several of the senders would check their messages against the schema before sending the message and therefore noting the error and correcting the message before it is sent.

We can discuss this at some future meeting.

Item closed.

4.4 Preparations for coming WG16 meetings

4.4.1 ebIX® MRs to WG16 – discussions with CIM EG

Discussed elsewhere.

Item closed.

4.4.2 Status for versioning discussions in CIM EG Retail market subgroup and WG16

What was presented, mainly from ebIX®, is agreed. How to implement it will be discussed in the future.



Item closed.

4.4.3 Addition of code list responsible attribute where missing

We should try convincing the CIM EG Retail market subgroup and WG16 that we need a code list responsible attribute together with all code list attributes.

Examples could be:

- For the "type of AP" ebIX® would like to use **E17** consumption, **E18** production and **E19** combined to the flowDirection datatype instead of the ENTSO-E codes **A01**, **A02**..., ref item "4.2.4 How to specify "metering point type" (production, consumption or combined)?" above.
- For national identification or coding schemes ebIX® uses a combination of "agency identifier" and a "list identifier", e.g. the agency identifier can be ebIX® and the list identifier can be Netherlands, Sweden, Germany....

Action:

 Kees and Jan (SE) will reopen the discussion in CIM EG retail market subgroup and present the examples above.

4.5 Status for European (ebIX® and CIM EG Retail market subgroup) MRs to CIM

Review and update of Excel sheet keeping track of the MRs sent from ebIX®, via the CIM EG Retail Market Subgroup 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.

Continued action:

• Jan (SE) will continue the update of the dates and status for the latest submitted MRs in the common Teams Excel sheet.

5 Persistent uri for the European energy market (follow up item)

The source of this item is the Common Grid Model working group. There is a wish for a common uri for the European energy market. The question is: Shall ebIX® (EU DSO Entity) be part of this process?

Kees informed that there has been a request to "some EU body" for making ENTSO-E responsible for an "European energy uri", however the request was rejected. Currently there is no known ongoing discussions.

Item closed.

6 EG1 status

Not much has happened during summer.

To be followed up at next meeting.

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

The item was postponed.



8 ebIX® Business Information Model 2022.A

The item was postponed.

9 Review of ETC workplan

The item was postponed.

10 Next meetings¹

- Tuesday September 27th, 2022, 10:00 12:00 and 13:00 15:00, GoToMeeting
- Tuesday October 25th, 2022, 10:00 12:00 and 13:00 15:00, GoToMeeting
- Wednesday December 14th and Thursday December 15th, 09:00 16:00, Stockholm

11 AOB

11.1 Liaison report for IEC TC57 Plenary Meeting 26th – 28th October 2021 – Prioritised item

Heiko Englert, Secretary TC57, has asked Vlatka to provide a streamlined liaison report for the upcoming TC57 plenary meeting in Munich, Germany on 14th and 15th November 2022:

In the last meetings we had a good experience with the use of a two-pager presentation for the liaison reports (see template attached). If necessary, further information can be put into an annex of the presentation.

I am looking forward to receiving your reports by 2021-11-01.

A liaison report was drafted based on the previous report. However, it was proposed added an issue to the third slide (Issues, questions & decisions to be discussed):

"ebIX® foresees issues in alignment of different versions of CIM modules and profiles used in different work areas".

An example could be the alignment of CGM and "market information".

It was agreed to raise the question in WG 16 before adding it to the TC57 report.

Action:

• Kees and Jan (SE) will discuss in WG16 if we should inform the TC57 plenary that "ebIX® foresees issues in alignment of different versions of CIM modules and profiles used in different work areas".

The item will be put on our next ETC meeting end of September and sent to Vlatka for forwarding to TC57 thereafter.

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¹ 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.