Minutes ETC meeting, October 6th, 2020

Date: Wednesday October 6th, 2020
Time: 15:00 – 16:30
Place: GoToMeeting
Present: Fre, TenneT
Jan (NL), EDSN
Jan (SE), Svenska kraftnät
Kees, TenneT
Ove, Edisys

Appendixes: **Appendix A:** MRs for WG16
Appendix B: Status for new BIMs from EBG
Appendix C: Proposed/agreed changes to the ebIX® Business Information Model 2020.A
Appendix D: Pending list
Appendix E: Suggestions for handling renaming MP-terms into AP-terms

Attachment: ETC workplan (see ebIX® file manager at https://filemanager.ebix.org/#)

1 Approval of agenda

The agenda was approved with the following additions:

- Comments to NL MeasurementSeriesNotification XSD from Jan (SE), see item 4.1.2.
- Time Series vs Series, see item 4.1.5.
- We must find timeslots for our scheduled meeting November 18th and 19th, see item 12, Next meetings.

2 Minutes from previous meeting

The minutes from previous meeting were approved without comments.

3 Status for fixing problem with MD Measure and Structure modules

Ove reported that the problem seems to be solved.

The solution was to start with modules from spring 2018 and thereafter copy/past the new content into these modules.

Item closed.

4 Resolve ebIX®/IEC issues

4.1 Making a European Style Downstream Market Profile (ESDMP)

4.1.1 New and continued actions from previous meeting

Continued action:

- Kees will add the following MRs to the series of other MRs that will be sent from ebIX® based on the Dutch requirements :
  - o Addition of a schemeAgency and a listAgency as optional attributes for code lists.
  - o Change cardinality of the association between Acknowledgement_MarketDocument and Sender_MarketParticipant/Receiver_MarketParticipant from mandatory [1] into optional [0..1].

- All are asked to see if they can come up with better names than a schemeAgency and listAgency.

All (Dutch and Nordic pilot project members) had as action from previous meeting to verify that the IEC 62325-450 rules are followed. If other rules are used, these should be presented for ETC to find a common way of handling it. This is a general advice that should be followed at any time; hence the action item is closed.

During this item the following rules from the IEC 62325-450 were discussed:

Table 6 – Regional contextual model other relationships rules:

Rule number	Rule description
[R10.]	The role name at the member end of an aggregation shall be derived from the corresponding CIM "based on" relationship end role name and may be prefixed by an optional qualifier term followed by an underscore.
[R11.]	When the specialization class of a generalization relationship is being completed with the artefacts from the generalization, if the role name associated with the specialization class is the same as the class name of the generalization class, the role name in the contextualized relationship shall be changed to the name of the specialization class in the regional contextual model prefixed by an optional qualifier term followed by an underscore.

Table 8 – Document contextual model aggregation relationships rules

Rule number	Rule description
[R19.]	When the specialization class of a generalization relationship is being completed with the artefacts from the generalization, if the role name associated with the Specialization class is the same as the class name of the Generalization class, the role name in the contextualized relationship shall be changed to the name of the specialization class in the document contextual model prefixed by an optional qualifier term followed by an underscore..

The rules from the IEC 62325-450 above was discussed together with two presentations from Andre (Zamiren), which are under discussion within WG16. These presentations can be found at the ebIX® File Manager.

Conclusions:

- We still want the Series class to have an association to itself in the basic CIM model (62325).

4.1.2 Comments to NL MeasurementSeriesNotification XSD from Jan (SE)

This item was not discussed during the meeting - the content is added for information.

Jan (SE) had noted a few things in the XML-schema. Some will probably be part of the future maintenance requests to be sent to WG16.

1) The ABIE Domain contains three attributes of the same kind (an id), while the class domain in CIM only contains one attribute of that kind (mRID).

   From Kees:
   - In the ACC's the cardinality for the relation between TimeSeries and Domain is 0..*. Therefore we see no problem in having 3 options for the ABIE version for the relation between TimeSeries and Domain.

2) The ABIE DateAndOrTime is used; however you could also have used the class Period (Time_Period in ESMP), also associated with Series and including a datatype with a start and an end attribute.

   From Kees:
   - For all periods where we have to specify the start and end date/time we could use Period just as well. But we also have to specify for example a Meter Reading Date. For this Period cannot be used and DateTime can. We already discussed this end of June beginning of July. Anyway, this is why we have chosen to use DateTime.

3) The ABIE Product is not (yet) based on a separate class in CIM.

   From Kees:
   - Correct. This is going to be part of the list of MR's.

4) The attribute resolution in Detail_Series is not a part of the class Series. It is found in the class Period (Series_Period in ESMP). However, in Series_Period also the attribute timeInterval is required and that has in this example been put at the Series-level.

   From Kees:
   a. You are right regarding the existing cardinality for the present timeinterval-class.

   b. However, at the moment we do not need to specify the timeinterval at the in-between level for the class Series (as required in The Netherlands as you will remember). So, it would be an option to bring the resolution to the top-Series class.

   c. This could then in turn be an argument to use Series_Period associated to TimeSeries as an inheritance for our Series-class instead of the present idea about DateTime. But we still need DateTime for the Reading. As a result, we should then have as a principle that we use Series_Period for the top-Series class and DateTime for individual Readings.In the ABIE Point some attributes are added, not (yet) part of CIM.

5) In the ABIE Point some attributes are added, not (yet) part of CIM.

   From Kees:
   - Correct. This is going to be part of the list of MR's.

6) The ABIE RestVolume_Quantity is associated with Product (not yet possible in CIM) and with FlowDirection (not yet possible in CIM)

From Kees:

- o Correct. This is going to be part of the list of MR's centered around the class Quantity.

  As you know we have already started the preparations for the implementation in The Netherlands. We did so on the basis of our discussions and following agreements/understandings within ebIX ETC. You will understand that when we now come back on the use of DateTime and replace this with Series_Period we will have consumed most of our "goodwill" in the Dutch sector. Given the present discussions in wg16 and the fact that available associations (we think now about Series referring to itself) are proposed to be removed by the same people that insisted some years ago to have this association for Series instead of our ebIX proposal to have it for TimeSeries, we consider in The Netherlands to continue our work on the basis of our presently existing ebIX® agreements/understandings, for which we now prepare the MR's first for ebIX ETC. And once we hopefully will have more stability in the IEC position, we then intend in a later Dutch update to follow the IEC ES(D)MP in full.

From Kees:

For your information: at the moment we are not convinced about the correctness of André's suggestions. First of all, we of course can never make the interpretations of the use of CIM dependent on the capacities of a tool. I hope that is self-evident. And when we intend to stick to UML in combination with the model manager rules for the naming of Core Components, we still do not see how this can be reconciled with André's suggestions. But we will go over his suggestions again thoroughly.

Trying then to look at CIM and making the change suggested by ENTSO-E, would give this picture (they want to remove the association from Series to itself, and instead add an association from TimeSeries to itself):
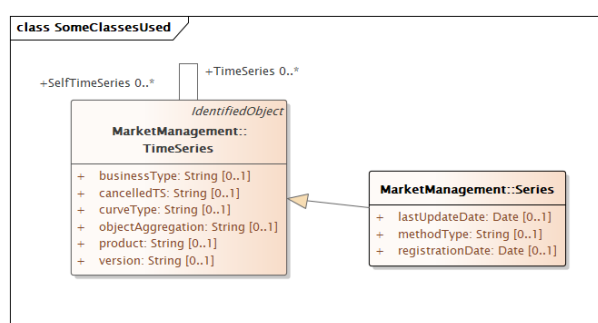
Having done that, it is possible to make these "ACCs" in ESMP:
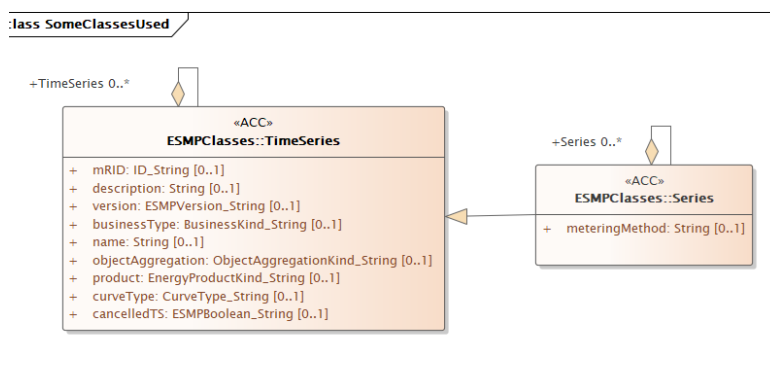
I.e. both ACC:s have an association to itself – the one for Series, inherited, but given the end association name "Series" and not "TimeSeries".

Trying then to make a class diagram, using the CIMConteXtor tool, could give something like the figure below, it is not exactly as your figure, but not so far from.

Perhaps more important, how would the XML schema look like and a corresponding XML file?

As you see from my class diagram below it is not a document with a header, it starts from the payload. And I have made the XML schema from this figure, not first going through the step of making an "assembly model". The schema I attach imports urn-entsoe-eu-wgedi-codelists.xsd. So I also send you that file plus urn-entsoe-eu-local-extension-types.xsd. That was the easy solution when making the schema.

Finally, making XML examples shows that the XML files are rather similar.

Neither XML file mentions "TimeSeries". See the attached sample files.

What I now made is based on ESMP, after having done the changes in the eap file described above.

I have not used what will be available in the European Style Downstream Market Profile.

One question is, will the association end name from Series to itself have the name "Series" or will it have the name "TimeSeries"? In my opinion it could be both. It inherits the association to another TimeSeries. But that TimeSeries could also be a Series.

Perhaps other "selfassociations" in CIM should be studied, if found.

Item closed.
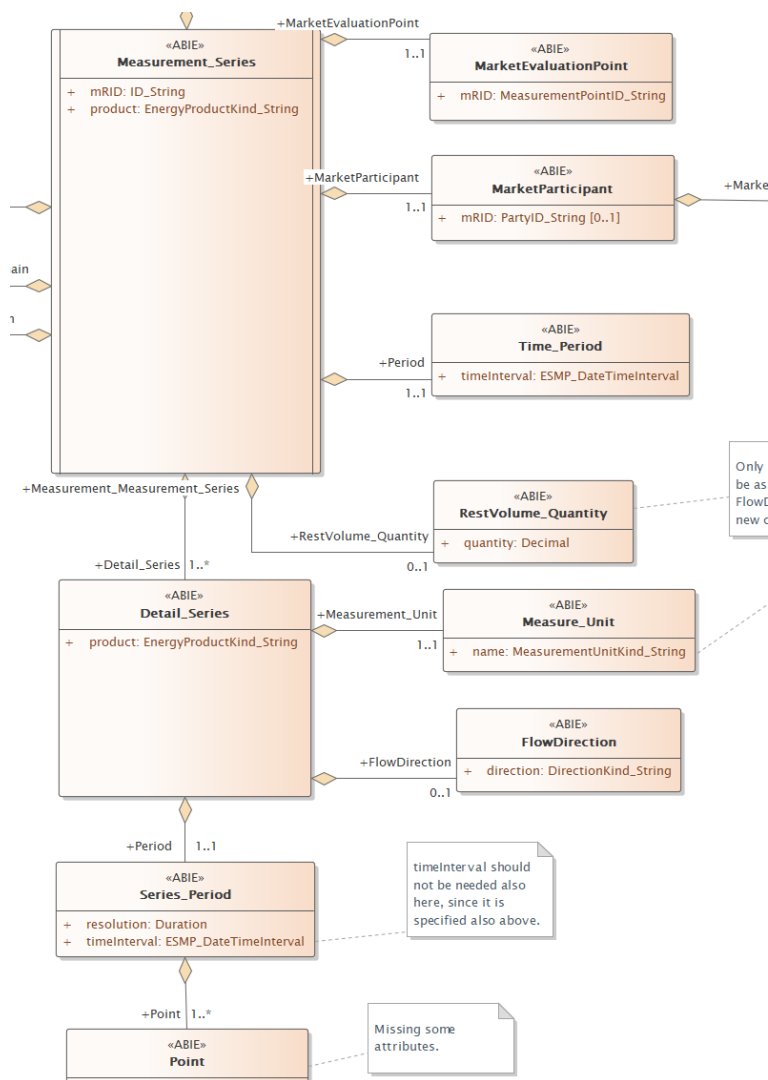
4.1.3   Status for MRs to WG16 based on Dutch and Nordic CIM pilot projects

Due to lack of time the item was postponed.

Continued action:

- 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".

4.1.4   How to implement code lists in the European Style Downstream Market Profile (ESDMP)

Due to lack of time the item was postponed.

Continued action:

- Kees will, as a start, see if he can find an option for combining the Enumeration literals (codes) with a listIdentifier attribute.

4.1.5   Time Series vs Series

This item was not discussed during the meeting - the content is added for information.

Jan (SE) had informed:

At the IEC WG16 model meeting Thursday September 24th, Alvaro Marciel Rodriguez from ENTSO-E (liaison member of WG16) did present a suggested update of associations from TimeSeries. Today, there is an association from Series to itself, see picture below. That goes back to a suggestion by Maurizio Monti some years ago, where ebIX® originally suggested an association from TimeSeries to itself, while Maurizio instead suggested that to be done in an inherited class. Then nothing would have to be changed in the current usage of TimeSeries. At that time also some attributes where added to this new class Series.

Now ENTSO-E suggested this association from Series to itself should be moved to TimeSeries. The reason would be to get associations from BidTimeSeries to other BidTImeSeries. Then the association will also be inherited by Series, so we could still use that from the Series level. However, the end association name, will – I presume – then be "TimeSeries" and not "Series". Comments to this possible change will be discussed next Thursday at the next WG16 model meeting.

It is a pity that we have not yet established a group outside ENTSO-E that could discuss and maintain the ESMP within IEC. In my opinion that group should consist of European members from WG16 regardless if they represent ENTSO-E or not. We could call that group a "part 351" group, working with the standard IEC 62325-351. With input from the European WG16 members and liaisons, and output to the whole WG16 group. Anyhow, I would join such a group. And if we would have had such a group, this suggested change should have been discussed there before going to WG16.

Since the project in the Netherlands has described how to base the exchange of metered data on Series, and not TimeSeries, I think it could be too late for them to change now And perhaps it is not needed to change, since we would still have the inheritance at the Series level. And we can also still use Series in our Danish project.

However, will there be other consequences? Beside the "end association name"?

And what about the future?

Item closed.

--- The rest of this agenda, except for item 13 AOB is "to remember items" to be handled at a later meeting ----

4.2   Status for MRs to WG16, see Appendix A

Should these be added to Appendix A?

Item #	Date Requested	Class	Attribute	Description	Discussion Status	Model Status
16	3/5/2020 - Folsom	Street-Address	MunicipalityDetail; use datatype of "TownDetail". Description "May be used for local addressing" TownDetail; Description update "Town detail.	Need to associate multiple towns with an address; question is how many; one or more, need to clarify the true/final requirements. Fulfills a need for multiple taxing entities per address.	**Discussed in WG14 Jun 2nd Mtg**: Proposal coming from Part 6	Next step, participate in joint virtual session where Part 6 will present their proposal.
17	3/5/2020 - Folsom	Person	streetAddress; datatype (StreetAddress) postalAddress; datatype (StreetAddress)	Add street address and postal address to the class Person.	Use of PersonRole could represent the various different types of Contacts (Person). Confirmed with Kees diagram. **Discussed in WG14 Jun 2nd Mtg**: Part 6 needs to provide a proposal	Next step, participate in joint virtual session where Part 6 will present their proposal.

4.3 Where to put the ebIX® element Energy Industry Classification Type (Electricity or Gas)?

Continued action:

- Jan (SE) will make an ebIX® MR to WG16 for addition of Energy Industry Classification Type (Electricity or Gas) to the Market Document class (or another class) in 62325.

4.4 How to add additions to CIM

Status for "how to add additions to CIM".

4.5 Procedures for how to align IEC MRs between EBG and ETC

At the EBG meeting June 15th, ETC was asked to draft procedures for how to align IEC MRs between EBG and ETC. The request is based on a MR from NMEG to EBG.

5 Problems with TT (Eclipse)

Continued action:

- Ove will send a reminder to Paweł at In4Mate.

6 Review of BIMs from EBG

See status in Appendix B.

7 Resolve HG issues

7.1 Status for new project for alignment of Area configuration

7.2 BRP vs Energy Trader

Kees suggest we "*should think again on the inheritance relations. Now we pretend that a Trader is different from a Balance Responsible Party and the Trader is explicitly used for not being a Balance Responsible Party, but also when you look at the characteristics of a Trader in UML, it is everything a BRP is*".

7.3 Issues with the HRM module of the ebIX® model

How to show which roles an «Initiator» or «Entitled Party» is a generalisation of?

8 Status for harmonisation of the electricity and gas role models

9 ebIX® Business Information Model 2020.A

9.1 Use of XOR in combination with cardinalities

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.

9.2 Reporting interval

From Jan (SE):

In Sweden we are reporting (currently in the PRODAT messages, and in the future to/from the datahub) several things about the accounting point. Four or five things of those that we intend to report to/from the datahub I don't find in ebIX.

One of these things is the "Reporting interval" that we today send in PRODAT. I.e. the values are typically collected daily or monthly. But when are they reported? You are, depending on some rules, allowed just to send the hourly values once a month.

For accounting points part of the imbalance settlement, they must be reported daily (i.e. quarterly values or hourly values). For accounting points part of the reconciliation, hourly values might be reported daily, but you are allowed to send them once a month. But: as a supplier I want to know that. Will I get the values once a month, or will I get them daily? For accounting points part of the reconciliation, monthly values will be sent once a month. (Perhaps we also have some rules when sending values to the customer – perhaps using the same standard and format as sending to suppliers – that those values might be sent more seldom.)

Anyhow, we then have an attribute that can be translated into "Reporting interval" or "Reporting frequency". Has this been discussed in ebIX? Perhaps it is only we in Sweden that informs the supplier how often he will get timeseries for a specific accounting point. If so, this attribute – and some others – will be of the kind "local extension to CIM" (whenever we will use CIM….).

Reply from Ove:

I believe we have these elements:

Scheduled Meter Reading Date	The indication of when the regular meter reading is scheduled.
Meter Reading Periodicity	The length of time between the regular meter readings.

Reply from Jan (SE):

In today's PRODAT messages we have:

- First meter reading Date, optional. And I don't think in use.

- Report start date, optional (will tell when you first start to send the metered values). I don't think it is in use.

- Meter reading frequency, required. Back in 2005 we changed this from telling how often you read the values to how often you send them.

In the datahub we will (at least) have

- Metering interval

- Reporting interval

I.e. how often will you do the metering (every 15 minutes, once an hour, monthly). And, how often will you send those values (once a day, every month…).

If "Meter Reading Periodicity" in ebIX® is used for telling how often you report the values, the name is not good. But perhaps then it is implemented differently in different countries… And how can we in the ebIX® model tell that we e.g. have quarterly values? (or hourly, monthly, yearly).

9.3 Comment to Settlement Method Code E15

Gerrit has noted that the descriptions of Settlement Method Codes are not very clear:

.Z01¤	Flex·settled¤	Consumption·or·production·from·small·continuously·read· Accounting·Points¤
▪E15¤	Non-profiled· netted·with·special· rules¤	~~Metering~~·Accounting·point·with·~~both~~·consumption· and/or·production·with·special·~~settlement~~·rules.¤

The first says it is consumption or production, the latter states it is an AP. I at least would expect that it is something with settlement and the way how it is done. The current definitions do not make much sense.

9.4 Request from EBG for a new Response Reason Description Code

In the BRS for Area characteristics we need a new Response Reason Description Code:

E?? Area Not identifiable

Or a rename of the existing:

E49 Metering grid area Not identifiable

9.5 Continue review and update of version 2020.A

Review of proposed updates in Appendix C and Appendix E.

10 Code lists from Magic Draw model in Word format

Review of proposal for introduction - Some questions:

1. What does the text of the code list "ebIX Aggregated for Maintenance" mean?
2. Why do we have an Agreement Type Code both under "ebIX Aggregated for Maintenance" and "ebIX® Subset"?
3. There are some deprecated code lists, e.g. from the Netherlands – should these be removed?
4. How to deal with deprecated codes in the Word code list?
5. How to deal with "used by"?
6. How to deal with national customisation of codes – do we need a rule stating that national codes should avoid an "E" as a prefix?

11 Review of ETC workplan

See ebIX® File Manager.

12 Next meetings

- Tuesday October 13th,2020 from 11:00 to 12:00, GoToMeeting;
- Tuesday October 20th,2020 from 14:00 to 15:30, GoToMeeting;

- Thursday October 29th,2020 from 14:00 to 15:30, GoToMeeting;
- Tuesday November 3rd,2020 from 14:00 to 15:30, GoToMeeting;
- Wednesday November 18th, 2020 from 10:00 to 11:30 and from 13:00 to 14:30;
- Thursday November 19th, 2020 from 13:00 to 14:30.

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

13 AOB

No items.

Appendix A MRs for WG16

A.1 Event class

The request for an Event class has been submitted as PowerPoint presentation and is part of the TR.

To be followed up.

A.2 MRs related to new class MarketEvaluationPointCharacteristic

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/1	~~Market Evaluation Point Characteristic~~	~~Add a new MarketEvaluationPointCharacteristic class~~	~~The relevant administrative characteristics of a Market Evaluation Point.~~	Submitted to WG16 **20200219:** Will be withdrawn. Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint **20200221:** Withdrawn. Item closed
ebIX® 2019/2	Balance Group ID	Add new association from MarketEvaluationPoint class [0..1] to the Domain class [0..1], where the association end name at the Domain side is BalanceGroup		TBD

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/3	Metering Point Type	Add marketEvaluation-PointType attribute (string) to the MarketEvaluation-PointCharacteristic class	A code specifying the direction of the active energy flow for the Market Evaluation Point(s), such as consumption, production or combined.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200709:** Reviewed at the WG16 meeting: Addition of marketEvaluationPointType was agreed (however – not discussed – perhaps it just should be an attribute called "type"?) **20200717:** Further discussed at a WG16 meeting. Jan (SE) suggestions for definitions of the attributes that remains within MarketEvaluationPoint: • marketEvaluationPointType o Probably just called type o Suggested definition: Specifies the direction of the active energy flow for the Market Evaluation Point*(s), such as consumption, production or combined.* • administrativeStatus

MR #	ebIX® element	To do	Definition	Status
				o Suggested definition: Specifies whether (or not) the MarketEvaluationPoint is active part of the imbalance settlement. E.g. if still physically connected, but inactive in the market, the energy volume for the class ExtensionMetering ExtensionMarketManagement:: Ext_MarketEvaluationPoint + marketEvaluationPointType: String [0..1] + administrativeStatus: String [0..1] MarketEvaluationPoint will be part of the losses in the grid. o [The physical status is given by the attribute connectionState in UsagePoint.]
ebIX® 2019/4	Metering Method	Add new meteringMethod attribute (string) in the MarketEvaluation-PointCharacteristic class [0..1]	A code specifying how the energy volumes are established for the Market Evaluation Point(s), such as continuous- non-continuous- or not-metered.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16.

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/5	Settlement Method	Add new settlementMethod attribute (string) in the MarketEvaluation-PointCharacteristic class [0..1]	A code specifying how the energy volumes are treated for settlement for the Market Evaluation Point(s), such as profiled or non-profiled.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200709:** Reviewed at the WG16 meeting: Add a new class, called xxxxMethod, with two attributes telling the category and type of method (category = settlement, metering, disconnection; type = non-profiled, profiled, continuous, non-continous, not metered, …) a. Associate that class to UsagePoint (many xxxxMethods, but just 0..1 UsagePoint) b. I.e. remove settlementMethod and meteringMethod from the MarketEvalutationPoint c. And remove disconnectionMethod from UsagePoint d. Question: What should be the prefix before Method in order to be more specific than just "Method"? (And what should be the description of the new class and its attributes.) **20200717:** Further discussed at a WG16 meeting. The result is that Becky will go further and ask WG14 about adding the class with the (preliminary) name UsagePointMethod. It will be brought up at a joint modelling meeting (probably) in September. And/or at a joint WG13-14-16 meeting preliminary scheduled for the week starting September 28 (or perhaps the week before – but I suggested the second week of the two). Jan (SE) suggestions for definitions of the class and its attributes: • Category: would be "settlement, metering, disconnection, …"

MR #	ebIX® element	To do	Definition	Status

				• The "type" will, in implementations, contain codes telling if the type is:
				   o continuous, non-continuous, not-metered, calculated, profiled, non-profiled, remote, manual, …
				   o It is not obvious which type code that may be used together with which category code – it is a mixture of fruits, vegetables and berries in the same box…
				• Draft definitions: A set of characteristic methods for a UsagePoint.
				   o Category: Specifies the different categories of Method for an associated UsagePoint, like disconnection, settlement and metering.
				   o Type: Specifies, together with the category, the type of Method for an associated UsagePoint, like remote *(disconnection), manual (disconnection), profiled (settlement), and continuous (metering).*

ebIX® 2019/6	Scheduled Meter Reading Date	Add new scheduledMeterReadingDate attribute (string) in the MarketEvaluation-PointCharacteristic class [0..1]	The indication of when the regular meter reading is scheduled.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPoint-Characteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200326:** Will be discussed with WG14 in future weekly meeting(s). Suggested to be a string. **20200526:** *WG14:* Agreed on the addition of a new attribute in UsagePoint; **nextReadingDate**.

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/7	Meter Reading Periodicity	Add new meterReading-Periodicity attribute (string) in the MarketEvaluation-PointCharacteristic class [0..1]	The length of time between the regular meter readings.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200326:** Will be discussed with WG14 in future weekly meeting(s). Probably readCycle in UsagePoint can be used. **20200520:** *Jan (SE):* To be verified: Can the attribute readCycle from UsagePoint be used?
ebIX® 2019/8	Metered Data Collection Method	Add new meteredData-CollectionMethod attribute (string) in the MarketEvaluation-PointCharacteristic class [0..1]	A code specifying how a Metered Data Collector collects data from the Meter for the Market Evaluation Point, such as Automatic or Manually.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200326:** The attribute, amrSystem, in class EndDevice, is an alternative. To be further discussed. **20200526:** *WG14:* AMR is linked to a meter, not to a UsagePoint. amiBillingReady - refers to the meter is ami ready for billing purposes. amrSystem indicates the EndDevice is an AMR (ITRON AMR System). **Boolean flag could be added to EndDevice - isAMR.**

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/9	Grid Agreement Type	Add new gridAgreementType attribute (string) in the MarketEvaluation-PointCharacteristic class [0..1]	Specification of type of grid contract, such as if the contract is directly between the Grid Company and the Grid Customer, or through the Energy Supplier.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200403:** Suggest a new attribute to UsagePoint called "Agreement type", but with the description suggested form ebIX. Calling it "Agreement type" makes it a bit more general than "Grid Agreement Type". **20200526:** Use inherited "type" attribute from Document. Add a new attribute "agreementType" in UsagePoint to describe the type of CustomerAgreement (Contract) associated with the UsagePoint. This new attribute would have a String datatype - with the capability of using a coded string (outside of UML) defined as "DSO" or "Supplier". Within IEC62325 the class MarketEvaluationPoint will inherit the new "agreementType" from UsagePoint. **No model changes necessary**.

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/10	Administrative Status	Add new administrativeStatus attribute (string) in the MarketEvaluation-PointCharacteristic class [0..1]	A code specifying whether (or not) the Market Evaluation Point is active part of the imbalance settlement.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200709:** Reviewed at the WG16 meeting: Addition of a administrativeStatus was agreed, however the description should be more clarified telling that for instance that there could be a physical connection, but the status of the MarketEvaluationPoint is (for a short time of period) "inactive", and meanwhile the energy volumes will be handled as losses.
ebIX® 2019/11	Contracted Connection Capacity	Add new contracted-ConnectionCapacity attribute (string) in the MarketEvaluation-PointCharacteristic class [0..1]	Quantitative information about the capacity of the connection that is contracted for the Market Evaluation Point.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200602:** WG14: New attribute contractedConnectionCapacity (DecimalQuantity) Description: "It is the contractually agreed capacity that the affiliated party reasonably expects to need at most at any point in the year for this metering point. The attribute ContractedCapacity is for large consumption metering points only." **Add the new attribute to CustomerAgreement.**

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/12	Contracted Connection Capacity Measure Unit	Add new contracted-ConnectionCapacity MeasureUnit attribute (uncefactUnitCode) in the MarketEvaluation-PointCharacteristic class [0..1]	The unit of measure used for the Contracted Connection Capacity.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200326:** Could be discussed with WG14 to change cardinality between UsagePoint and CustomerAgreement to use the inherited Document.type attribute. **20200520:** Jan (SE): Use a data type for contractedConnectionCapacity having a unit, the suggestion would be DecimalQuantity

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/13	Disconnection Contract	Add new disconnection-Contract attribute (Boolean) in the MarketEvaluation-PointCharacteristic class [0..1]	Disconnection Contract indicates if there is a contract at the Market Evaluation Point for disconnection as a result of the demand side management or the load management for the Market Evaluation Point. The element is Boolean and is used for both gas and electricity.	Submitted to WG16 **20200219:** Instead of creation of a new class MarketEvaluationPointCharacteristic, we will ask for addition of the attributes to MarketEvaluationPoint. **20200221:** MR sent to WG16. **20200709:** Reviewed at the WG16 meeting: Instead of adding an attribute disconnectionContract to MarketEvaluationPoint, the class MarketAgreement will be associated with MarketEvaluationPoint. However, it was not time enough to look into the details of which attribute to use. **20200717:** Further discussed at a WG16 meeting. Jan (SE) suggestions for new attribute in class MarketAgreement (disconnectionContract -> MarketAgreement): • Add an association from MarketAgreement to MarketEvaluationPoint • Suggested definition was: Indicates if there is a contract at the MarketEvaluationPoint for disconnection as a result of the demand side management or the load management for the MarketEvaluation-Point. The element is Boolean and is used for both gas and electricity. • There is no existing boolean attribute within MarketAgreement ○ Suggestion: add a new boolean "disconnectionContract" ○ Draft definition: "Indicator if there is a contract at the MarketEvaluationPoint associated with this MarketAgreement for disconnection … [etc.]

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/14	Energy Label	Add a new EnergyTechnology-AndFuel class in the MarketManagement package.	A class indicating the origin of the energy produced at the related Market Evaluation Point(s).	Planned submitted to WG16 Q1/2020
ebIX® 2019/15	Energy Label	Add a new association from MarketEvaluationPoint class [0..*] to the Energy-TechnologyAndFuel class [0..*]		Planned submitted to WG16 Q1/2020
ebIX® 2019/16	Technology	Add new technology attribute (string) in the EnergyTechnologyAnd-Fuel class [0..1]	An indication of the technology of the energy production, or part of the energy production, that is potentially fed into the grid at the related Market Evaluation Point(s). It is advised to use codes from the AIB-EECS-FS05 code list.	Planned submitted to WG16 Q1/2020
ebIX® 2019/17	Fuel	Add new fuel attribute (string) in the Energy-TechnologyAndFuel class [0..1]	An indication of the fuel used for the energy production, or part of the energy production, that is potentially fed into the grid at the related Market Evaluation Point(s). It is advised to use codes from the AIB-EECS-FS05 code list.	Planned submitted to WG16 Q1/2020

MR #	ebIX® element	To do	Definition	Status
ebIX® 2020/18	Metering Grid Area	Add new association from MarketEvaluationPoint class [0..1] to the Domain class [0..1], where the association end name at the Domain side is MeteringGridArea	A Metering Grid Area is a physical area where consumption, production and exchange of (electrical) energy can be metered. It is delimited by the placement of meters for period measurement (continuous metering) for input to, and withdrawal from the area. It can be used to establish the sum of consumption and production with no period measurement (profiled Market Evaluation Point s) and network losses.	TBD
ebIX® 2020/19	Identification	Use mRID attribute in the Domain class	The unique identification of the Metering Grid Area to which this Market Evaluation Point belongs.	TBD
ebIX® 2020/20	MGA Name	Use name attribute in the Domain class	The name, in clear text, of the Metering Grid Area.	TBD
	Aggregated Reception Station	Add new association from MarketEvaluationPoint class [0..1] to the Domain class [0..1], where the association end name at the Domain side is Aggregated-ReceptionStation. **Remark**: The ARS is expected to be replaced by the CVA, hence to be deprecated from the ebIX® business	An administrative entity that represents one or more reception (and distribution) stations for gas (which are physical installations). This entity functions as the exchange point between grids where calorific value and volumes are established.	TBD

MR #	ebIX® element	To do	Definition	Status
		requirements and NOT to be added to CIM.		
	Identification	Use mRID attribute in the Domain class. **Remark:** The ARS is expected to be replaced by the CVA, hence to be deprecated from the ebIX® business requirements and NOT to be added to CIM.	The unique identification of the Aggregated Reception Station to which this Market Evaluation Point belongs.	TBD
ebIX® 2020/21	Calorific Value Area	Add new association from MarketEvaluationPoint class [0..1] to the Domain class [0..1], where the association end name at the Domain side is CalorificValueArea	A Calorific Value Area is a predefined set of Market Evaluation Points for which the same established calorific value is applied.	TBD
ebIX® 2020/22	Identification	Use mRID attribute in the Domain class	The unique identification of the Calorific Value Area to which this Market Evaluation Point belongs.	TBD

A.3   MRs related to additions to the class Usage Point

MR #	ebIX® element	To do	Definition	Status
	Connection Status	Already there; Use connectionState attribute in UsagePoint	State of the usage point with respect to connection to the network.	Already approved Item closed.
	Disconnection Method	Already there; Use disconnectionMethod attribute in UsagePoint	Is an indication of how the usage point is physically connected or disconnected.	Already approved Item closed.
	Capacity of the Accounting Point	Already there; Use physicalConnection-Capacity attribute in UsagePoint	Quantitative information about the maximum physical capacity of the connection for the UsagePoint.	Already approved Item closed.
ebIX® 2020/23	Capacity of the Accounting Point	Change the datatype for physicalConnection-Capacity from "Decimal" to "StringDecimal" (to include the unit)		***Action:*** Jan (SE) will send the DMR to WG16 to be handled at the meeting March 2nd. **20200221:** MR sent to WG16. **20200326:** Approved, but changed from "StringDecimal" to "DecimalQuantity". Item closed.
ebIX® 2020/24	Number of phases	Add new numberOfPhases attribute (integer) in the UsagePoint class [0..1] **Remark:** We have noted the phaseCode, but it is not clear how it serves our purpose.	The number of phases in the UsagePoint, either 1 or 3.	***Action:*** Jan (SE) will send the DMR to WG16 to be handled at the meeting March 2nd. **20200221:** MR sent to WG16. **20200326:** Approved, the attribute phaseCount will be added to UsagePoint. Item closed.

MR #	ebIX® element	To do	Definition	Status

ebIX® 2020/25	Current limitation	Add new currentLimitation attribute (CurrentFlow) in the UsagePoint class [0..1]	The current limitation, i.e. maximum current or fuse size, for the UsagePoint in Ampere.	*Action:*
				
				    Jan (SE) will send the DMR to WG16 to be handled at the meeting March 2nd.
				
				20200221:
				
				    MR sent to WG16.
				
				Most likely this change request can be withdrawn.
				
				20200326:
				
				    We will use the existing attribute "ratedCurrent" in UsagePoint".
				
				Item closed.

	Current limitation Measure Unit	Implicit given by the data type (CurrentFlow), which always is Ampere	The measure unit used for the current limitation, i.e. Ampere	

ebIX® 2020/26	connectionCategory	Rephrase the definition:
		
		    "A code used to specify the connection category, e.g., low voltage or low pressure, where the usage point is defined."
				Action:
				
				    Jan (SE) will send the DMR to WG16 to be handled at the meeting March 2nd.
				
				20200221:
				
				    MR sent to WG16.
				
				20200326:
				
				    The definition will be updated: "A code used to specify the connection category, e.g., low voltage or low pressure, where the *usage point is defined*".
				
				Item closed.

ebIX® 2020/27	Pressure level	Add new pressureCategory attribute (integer) in the UsagePoint class [0..1] **Remark:** In Europe level (high, medium, low…) is used,	A code specifying the gas pressure in the grid to which the installation of the UsagePoint is connected.	

MR #	ebIX® element	To do	Definition	Status
ebIX® 2019/28	MarketEvaluationPointCharacteristic	Add new association from MarketEvaluationPoint class [0..*] to the MarketEvaluationPointCharacteristic class [0..*]		Submitted to WG16. **20200221:** Withdrawn.

A.4   Candidates for new MRs related to MktActivityRecord

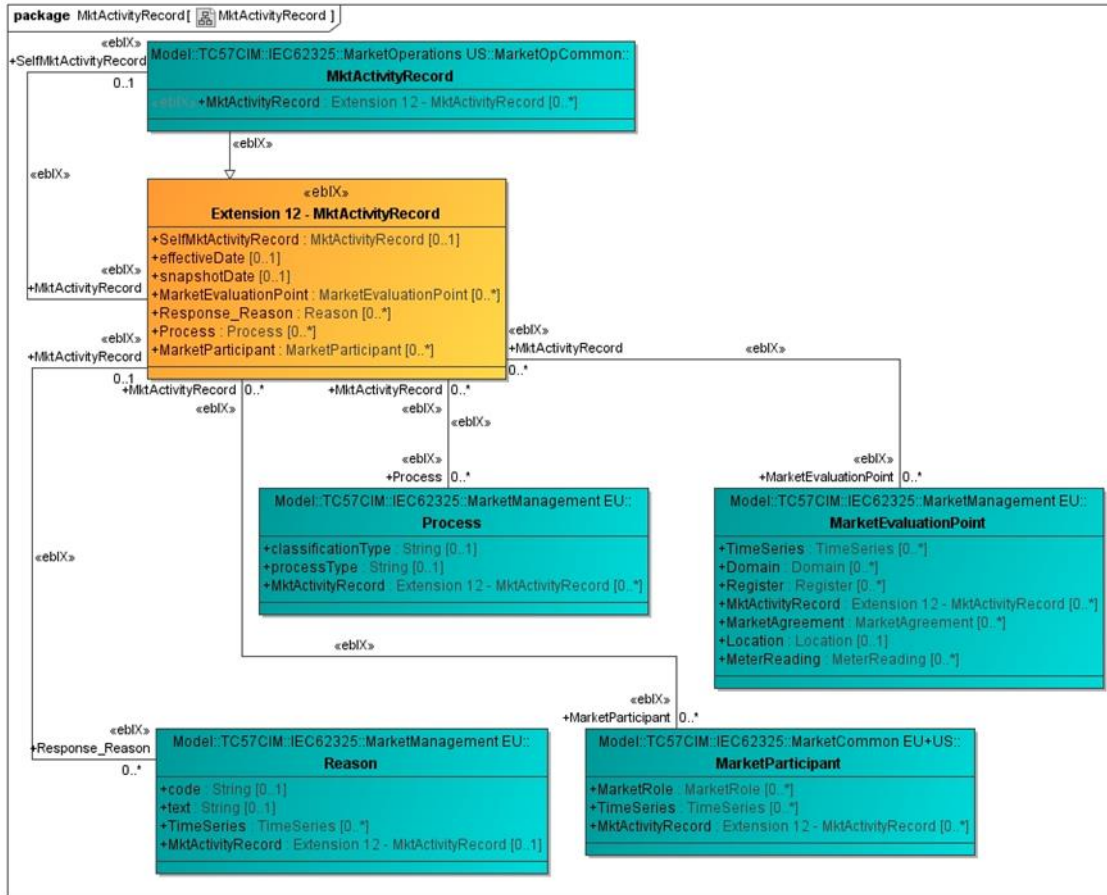We should make MRs from what still are valid from figure 122 from the TR:

Figure 122 – MktActivityRecord, suggested extensions in CIM

Appendix B   Status for new BIMs from EBG

See draft BIMs, approved BIMs and workplan at the ebIX® File Manager.

1. Alignment of characteristics for a Customer linked to an AP:

   o At this meeting we will finalising the associations not yet added:

     ▪ Association from «ABIE» Customer Party to «ABIE» Contact;

     ▪ Association from «ABIE» Customer Party to «ABIE» Domain Location (AP);

     ▪ Association from «ABIE» Customer Party to «ABIE» Metering Point Address;

     ▪ Association from «ABIE» Customer Party to «ABIE» Communication;

     ▪ Association from «ABIE» Contact «ABIE» Communication;

     ▪ Association from «ABIE» Communication to «ABIE» Communication Preference;

2. Change of TCR:

   o The BIM is ready for review.

3. Alignment of Metering Configuration Characteristics:

   o The Business Choreography View is ready for review, but Ove has some questions regarding the Business Information View:

     ▪ How to map Snap Shot Date?

     ▪ Most of the attributes in Meter, Register, Conversion factor, Placement Information and Gateway are missing.

     ▪ We mis a Role Code for ESCO.

     ▪ ….

4. Alignment of AP Characteristics:

   o Notify AP Characteristics:

     ▪ We must remove Voltage Level, Pressure Level and Physical Status Type from «ABIE» AdministrativeMeteringPoint_Characteristic.

     ▪ The Capacity of AP Measurement Unit in AP Physical Characteristics and Contracted Connection Capacity Measurement Unit in AP Administrative Characteristics are currently mapped to the Energy Product Characteristics Quantity Unit, which requires a Product Code, but since we also use the Energy Product Characteristics in the Reconciliation Information with several Product Types this seems a bit strange (six different Product Types instead of one; Connection Capacity). Should we add MeasurementUnitCommon_CodeType to unitCode in «BDT» MeasureType instead?

     ▪ Where to map the Capacity of the Accounting Point (in «ABIE» PhysicalMeteringPoint_Characteristic)?

- The content of the MeteredDataCollectionMethod_CodeType shoul be MeteredDataCollectionMethodCode (from ebIX® Original) and not AdministrativeStatusCode (from ebIX® Subset)

MeteredDataCollectionMethod_CodeType «BDT»
- ○ +content : ebix:org::Codes::ebIX Assembled::**AdministrativeStatusCode [1]** «CON»
- ○ +listIdentifier : ebix:org::Codes::ebIX Assembled::**CodeListIdentificationCode [0..1]** «SUP»
- ○ +listAgencyIdentifier : ebix:org::Codes::ebIX Assembled::**CodeListResponsibleAgencyCode [1]** «SUP»
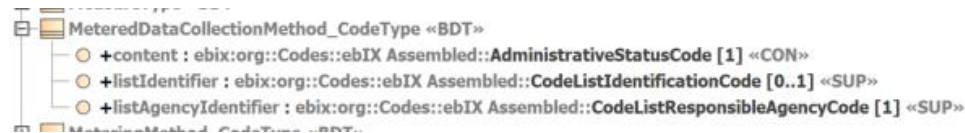
- Missing a «BBIE» for MGA Name.

o Request AP Characteristics:

- How to map Initiator ID?

o Reject Request AP Characteristics:

- Ready for review.

o Request Change AP Characteristics from GAP:

- Same comments/questions as for Notify MP Characteristics

o Request Change AP Characteristics from BS:

- Missing the ID Scheme Type Code + the Reference code qualifier (CEFACT) + the Assembled ID Scheme Type Code (Kees' homework).

o Request Creation of new AP

- Missing an association for GAP from MP_Event to Energy Party

- Missing an association from MP_Event to MP Address

- Document Name Code is missing for all connection documents (Create, Connect, Disconnect and Decommission)

- The Reason Code should be reviewed for all connection documents (Create, Connect, Disconnect and Decommission)

o Confirm Request Creation of new AP

- Missing an association for GAP from Response_Event to Energy Party

Appendix C   Proposed/agreed changes to the ebIX® Business Information Model 2020.A

C.1   UN/CEFACT DMR

1) Verify that addition of an ASCC between the ACC Event and the ACC Address is on the list of ebIX® changes to UN/CCL

   Status 20190424:

   o   Postponed

C.2   General question for later elaboration

Can we remove the Document Name Code from the ebIX® models?

Status:

- The question will be kept for later elaboration

C.3   BRS for Request Change grid responsibility

a) ETC is asked to find Document Name codes for:

   o   Request change grid responsibility;

   o   Response change grid responsibility;

   o   Notify change grid responsibility;

b) And Business Reason codes for Change grid responsibility.

C.4   Requests from EMD

a) How to represent the exchange of calorific value in ABIEs

C.5   General model updates

a) Replace the ACCs, BCCs etc. in the current CEFACT Profile with the "CEFACT Profile_Recast.mdzip" from Belgium and add generalisation from the "ebIX® assembled code list" to the related Belgian code list, received from Thibaut.

b) Make the usage of "Time of Use" and "Meter Time Frame" consistent

   o Check what is agreed with IEC in the TR

   o Check what is the significance of "Time of Use"/"Meter Time Frame" in the proposal from Atrias

   o Make the ebIX® model (Business requirements view and BIES) in line with the Atrias proposal

c) At previous meeting, the ABIE MeteringPoint_Characteristic was split into AdministrativeMeteringPoint_Characteristic and PhysicalMeteringPoint_Characteristic. Due to this change, both the MDS and the EMD part of the ebIX® model must be corrected. Ove had corrected the MDS part, but noted that also the EMD document "Mapping Validated Data for Labeling for Certificate Issuer" needs to be corrected.

   Homework 20190612:

   o Kees will review the "BRS for Validated Data for Labeling for Certificate Issuer" and prepare a discussion for ETC.

d) Clean up of not used national enumerations

e) In the file generic\ebIX_ValidatedDataForBillingEnergy_2016pA.xsd I read

xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:rsm="un:unece:260:data:EEM" ...

and later

<xsd:element name="ValidatedDataForBillingEnergy" type="crs:ValidatedDataForBillingEnergyType"/>...

<xsd:element ref="crs:Header" minOccurs="0" maxOccurs="1"/>

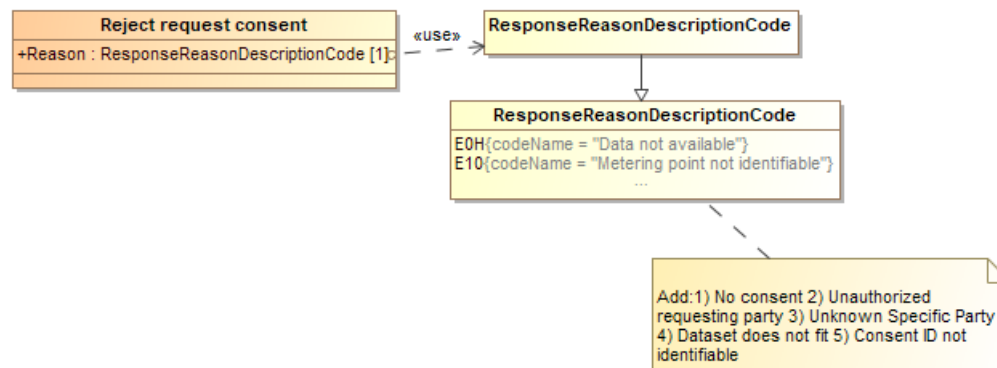The namespaces doesn't match. Should be "rsm" or "crs" in both places, not different.

C.6   Code request from EBG

1) For all Reason codes, change (added at ETC meeting 20190212):

   o   Balance Supplier to Energy Supplier;
   o   Metering Point to Accounting Point.

2) Add remining Reason codes, ref BRS for Customer consent:

   a.   Dataset does not fit
   b.   Consent ID not identifiable

3) ETC will be asked to rename the following Response Reason Description Codes:

   o   E10: "Metering Point …" to "Accounting Point …."
   o   E16: "Unauthorised Balance Supplier" to "Unauthorised Energy Supplier"
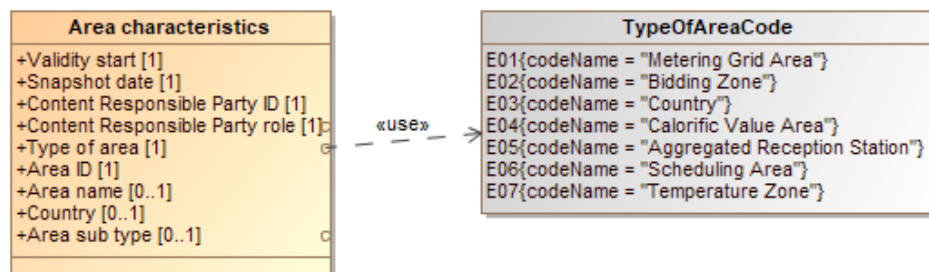   o   E18: "Unauthorised Balance Responsible" to "Unauthorised Balance Responsible Party"

4) ETC will be asked to rename the Business Role Code Transport Capacity Responsible Party to Shipper:

5) For ETC: Can we rename Balance power supplier to Energy Supplier?

6) Add a Type of Area code, ref BRS for Bulk change of BRP and BRS for Alignment of Area characteristics:

7) Add an Area Sub Type Code, ref BRS for Alignment of Area characteristics:

Area characteristics
+Validity start [1]
+Snapshot date [1]
+Content Responsible Party ID [1]
+Content Responsible Party role [1]
+Type of area [1]
+Area ID [1]
+Area name [0..1]
+Country [0..1]
+Area sub type [0..1]

«use»

AreaSubTypeCode
E01{codeName = "Regional"}
E02{codeName = "Industrial"}
E03{codeName = "Distribution"}
E04{codeName = "Non-concessional"}
E05{codeName = "Production"}
E06{codeName = "Transmission (main/central grid)"}
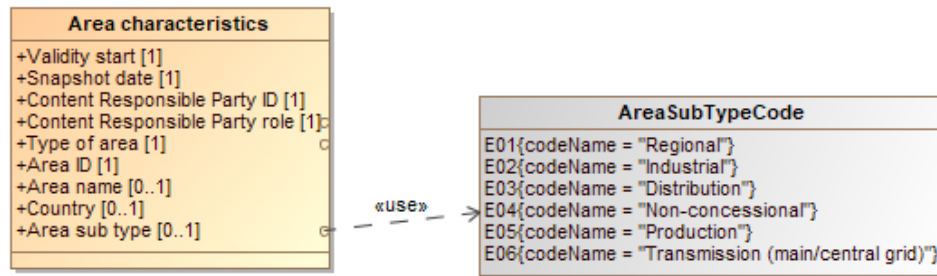
8) New Document Name Codes for BRS for Alignment of Area characteristics:

> Request change area characteristics
> Response (or confirm) change area characteristics
> Request area characteristics
> Alignment of area characteristics
> Request change area relations
> Response (or confirm) change area relations
> Request area relations
> Alignment of area relations

9) New Document Name Codes related to BRS for administration of consent:

    a. Request consent
    b. Response request consent
    c. Notify consent
    d. Termination of consent
    e. Notify withdrawal of consent
    f. Request termination of consent
    g. Response request termination of consent
    h. Request withdrawal of consent
    i. Response request withdrawal of consent
    j. Notify termination of consent
    k. Request valid consent
    l. Response request valid consent

10) New Document Name Codes related to BRS for Combined grid and supply billing:

    a. Request update MGA billing characteristics
    b. Response request update MGA billing characteristics
    c. Alignment of MGA billing characteristics
    d. Request MGA billing characteristics
    e. Response request MGA billing characteristics
    f. Request MGA grid billing data
    g. Response MGA grid billing data
    h. Alignment of MGA grid billing data
    i. Request AP grid billing data
    j. Response AP grid billing data
    k. Alignment of AP grid billing data

11) New Business Reason Codes

    a. Consent administration - related to BRS for administration of consent
    b. Alignment of area configuration – related to BRS for Alignment of Area characteristics
    c. Alignment of area relations – related to BRS for Alignment of Area characteristics
    d. Update MGA billing characteristics - related to BRS for Combined grid and supply billing
    e. Align MGA billing characteristics - related to BRS for Combined grid and supply billing

12) Renamed Business Reason Codes

    a. Rename Change of Transport Capacity Responsible Party to Change of Shipper - related to BRS for Change of Shipper

13) New Role Codes

    a. Billing Calculator – related to BRS for Combined grid and supply billing

14) The ebIX® Combined grid and supply billing project (EBG) asks ETC for a new ebIX® code for Grid billing type:

    a. Prepayment
    b. Advance
    c. Final

C.7 «extend» request from EBG

1) Add an extension from UC "Change metering configuration characteristics" to "Determine Meter Read";

2) Add an extension from UC "Bulk change of BRP" to "Determine Meter Read";

3) Remove one out of two extensions from UC "Bulk change of Shipper" to "Determine Meter Read".
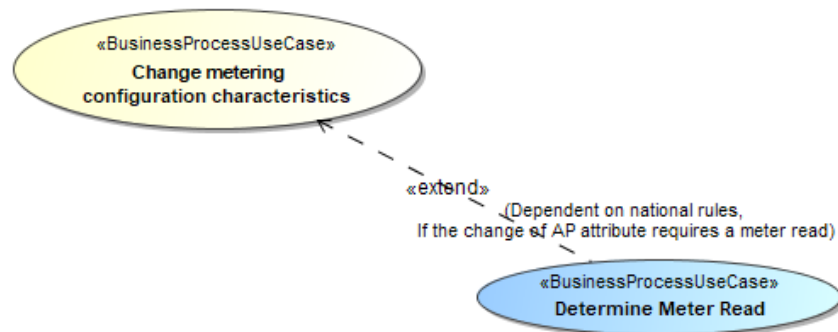
C.8 New codes from Sweden

1. In 6.1.1.2 in the (soon) published code list I find the list of Swedish "Document Name Code". A new code will be used now in April 2019: **S08** Accepted bids. (We are using this code in UTILTS messages sent in Operation phase. Earlier we have just used UTILTS in the metering and settlement phases.)

C.9 Codes without a code name

1. All codes without a code name should be deprecated.

Appendix D   Pending list

1. EBG has asked ETC to remove chapter "4.2 Business Area Validate" in the "Introduction to ebIX® Models" – the content is not valid anymore.

2. EBG has asked ETC to remove chapter "5.2.1 Validate Measurements (Business Process UseCase)" from the "Introduction to ebIX® Models" – The text will be moved to the BRS for Measure for validated data and instead.