


Minutes ETC meeting, January 8 th and 9 th , 2020	 European forum for energy Business Information eXchange
January 16 th , 2019	ETC – ebIX® Technical Committee

Minutes ETC meeting, January 8th and 9th, 2020

Date: Wednesday and Thursday January 8th and 9th, 2020
Time: 09:00 – 17:30 and 09:00 – 16:00
Place: TenneT's offices in Arnhem
Present: Fre, TenneT
 Jan, EDSN
 Jan, Svenska kraftnät
 Kees, TenneT
 Ove, Edisys
 Vlatka, Westnetz (day two)
Appendixes: **Appendix A**, MRs for WG16
Appendix B, CIM based Measure documents
Appendix C, Comments to the HRM 2020-01 from EBG
Appendix D, Status for new BIMs from EBG
Appendix E, Proposed/agreed changes to the ebIX® Business Information Model 2019.A
Appendix F, Update of ebIX® profile after meeting May 15th
Appendix G, 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:

- How to add additions to CIM, see item 5.4;
- Comments to the HRM 2020-01 from the ebIX® Billing project, see item 6.5;
- Comment to Settlement Method Code E15, see item 8.3;
- New code from EBG, see item 8.4;
- Redispatch, see item 13.1 under AOB.

2 Minutes from previous meeting

The minutes from previous meeting were approved.

3 Problems with TT (Eclipse)

Action:

- Ove will try to install Open Java to see it his works. If not Kees will contact In4Mate.

4 Review of BIMs from EBG

See status in Appendix D.

Minutes ETC meeting

Due to priority of migration to IEC/CIM, the item was postponed.

5 Resolve ebIX®/IEC issues

5.1 Status addition of Event class

Nothing new.

5.2 Status for MRs to WG16, see Appendix A

The Maintenance Requests (MR) for EnergyLabel (ebIX® 2019/14, 2019/15, 2019/16 and 2019/17) were reviewed. Among others, Jan (SE) expected some questions from WG16, such as:

- What is the difference between EnergyLabel and AssetType?
- How does the table "FuelType" in CIM relate to EnergyLabel and AssetType?

The MRs shows a Market Evaluation point Characteristics class with many attributes. Kees noted that we, when implementing the information into CIM, should accept that the it is implemented as many smaller classes, to be in line with the principles of a data model (and not as a Core Component).

The MRs only concerns AP Administrative Characteristics from the ebIX® model, hence linked to the Market Evaluation Point. Jan (SE) explained that the AP Physical Characteristics should be submitted in a separate set of MRs. However, we should be open for a discussion within IEC if the AP Administrative Characteristics should be linked to the Usage Point instead of the Market Evaluation Point.

A set of comments related to the MRs for EnergyLabel can be found in the document "Maintenance request for IEC 62325-301 - ebIX 2019-14 -- 17 - draft - 20200109.docx" at the ebIX® File Manager.

Jan (SE) had also a note regarding ebIX® 2019/11 (and 2019/12), see Appendix A, i.e. that Jan (SE) in the "to do" text suggest using the data type "stringquantity", then we will get both a value and a unit. So, then we would not need 2019/12. But that will first be checked with Becky. Maybe we also can check: where is this data type "stringquantity" used?

The list of MRs in Appendix A was updated, among others by addition of a new column with a status for the MRs.

5.3 Interim period for ebIX® migration to CIM

The following priorities were agreed at the previous ETC meeting:

1. Find a generic solution for measure data based on CIM, including:
 - a) Imbalance settlement
 - b) Billing data between Metered Data Responsible/Administrator and Energy Supplier
 - c) Alignment with My Energy Data

i.e. based on the current ebIX® BRSs for validated- and aggregated data. And, publish it as ebIX® BIMS.

Conclusion:

- We will start by making an example, by making a CIM based validated data document based on the current ebIX® BRS for validated data, using CIM Contextor;
- We will start at the ETC meeting in January 2020;
- We will continue and prepare a presentation for ebIX® Forum on ETC meeting in February.

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First versions of CIM based xml documents were drafted for “Validated data for imbalance settlement” and “Aggregated data per MGA for Settlement for ISR”, with the following comments:

- We are missing the following attributes for the Validated data for imbalance settlement:
 - Metering Point Type.
- We are missing the following attributes for the Aggregated data per MGA for Settlement for ISR:
 - Metering Point Type;
 - Settlement Method.
- Do we need a MR to CIM for linking the Metering Point to an MGA – Currently the in- and Out-Area must be linked to the Time Series?
- The Measure Unit and the Product should be in the same ACC;
- We miss a way of specifying code usage per document – today the principle is using the ENTSO-E code list + “local extensions” common for all documents.
 - We also miss a way to combine code lists.

The contextual and assembly model class diagrams are shown in Appendix B.

It was questioned if it is a good idea to flatten the ABIEs (using the property grouping in the CIMConteXtor). It was noted that the flattening is invented by ENTSO-E. Hence, during the meeting it was generated xml schemas based on WG19 methodology, however the result was just as flat as the xml schemas generated the WG16 way.

Actions:

- Jan (NL) will arrange a presentation of the tool EDSN is using at the next ETC meeting in Amersfoort;
- Ove will check the CIMTool at <https://wiki.cimtool.org/index.html>, to see if this also flattens the xml schemas.

5.4 How to add additions to CIM

Jan (SE) had a walkthrough with Jean-Luc where Jean-Luc suggested how to add additions to CIM. I.e. create a package called “Extension” and how for instance new attributes in a class and new associations from other classes to the old class can be handled.

Jan (SE) has almost followed his example and have described how to do this in a Word file. Jan (SE) has also made an eap-file together with the basic CIM file from IEC that are available for testing. The eap-file includes most of our Maintenance Request to be sent to IEC TC57 WG16.

The document “Creating and using an ebIX extension in CIM (003).docx” can be downloaded from the ebIX® File Manager.

Action:

- Jan (SE) will ask Becky and Greta how such an “extension package/file” should be maintained.

6 Resolve HG issues

6.1 Status for new project for alignment of Area configuration

Nothing new.

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6.2 Status for question to David regarding introduction of a Constraint Service Provider to the HRM

At the latest ebIX® Forum meeting it was a discussion regarding addition of a Constraint Service Provider to the Harmonised Role Model (HRM), from the minutes:

8 Report from ETC, HG and IEC (Jan)

...

During the related discussion, David asked if it is time to introduce the Constraint Service Provider in the Harmonised Role Model.

Decision:

- The ebIX® members in the HG will open a discussion in the HG if we should add the Constraint Service Provider in the Harmonised Role Model (HRM).

At the previous ETC meeting we tried to prepare the request for this new role but concluded that we don't know enough of what this role will do to make the request, hence Ove sent a mail to David and asked if he has some more background information and if he think this role is mature enough for the HRM. The answer from David was:

I'm willing to provide some information/thoughts based on my understanding/expectations regarding the CSP but I need to analyze the latest version of HRM first. As far as I remember you have made a proposal on mapping of USEF flex services to HRM roles: USEF defines constraint management very well so this mapping might be a good start for discussion what is to be covered by CSP.

However, I'm overloaded with work till 10th of January so I will not be able to dig into this till then. Maybe you can prepare some foundation for discussion (a proposal) in the meantime and then we schedule a call.

It is also hard to conclude on maturity of CSP role, at least for me – I do not have enough experience with the evolution of HRM, so you're better suited to decide. Maybe it will be easier after some more brainstorming.

And a new response December 19th, 2019:

I'm participating the H2020 INTERFACE telco – within WP3 the balancing & congestion management services are modelled based on current published HRM version by responsible persons. I assume they will come up with proposal on additional new roles if they find them missing in existing HRM during the modelling.

I can inject the information on the CSP role candidate in case we agree at least on draft short description of the role. Do you have anything ready to share?

Action:

- Ove will ask David for written material related to the CSP and propose a telephone conference with the ebIX® HG members.

6.3 Comments to the HRM 2020-01 from EBG

See questions in Appendix C.

Due to priority of migration to IEC/CIM, the item was postponed.

6.4 ENTSO-E Energy Trader proposal for new role code

From Alvaro (CIM EG):

- Jon-Egil (CIM EG) requested to create a new Role Type code for Trader. However, the ESMP group advised to call it Energy Trader.
- In order to align the code list and the HRM, we shall change Trader for Energy trader in the HRM.

ebIX® has no comments to the proposal.

6.5 Comments to the HRM 2020-01 from the ebIX® Billing project

Due to priority of migration to IEC/CIM, the item was postponed.

7 Status for harmonisation of the electricity and gas role models

Vlatka mentioned that she will contact a colleague in VNG to see if we can do something together for aligning the gas and electricity roles, including suggestions to include GTS (Gas system operator in NL) in this alignment.

8 ebIX® Business Information Model 2019.A

8.1 Use of XOR in combination with cardinalities

Due to priority of migration to IEC/CIM, the item was postponed.

8.2 Continue review and update of version 2019.A

Due to priority of migration to IEC/CIM, the item was postponed.

8.3 Comment to Settlement Method Code E15

Due to priority of migration to IEC/CIM, the item was postponed.

8.4 New code from EBG

For information; At the latest EBG meeting a new error code “**E0V** Metering Point Connected” was added to the ebIX® model.

9 Status for upgrade of MagicDraw to version 19.0

In progress.

10 Code lists from Magic Draw model in Word format

Due to priority of migration to IEC/CIM, the item was postponed.

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11 Review of ETC workplan

Due to priority of migration to IEC/CIM, the item was postponed.

12 Next meetings

- Wednesday and Thursday February 19th and 20th, 2020, EDSN offices in Amersfoort.
- Wednesday and Thursday March 25th and 26th, 2020, BDEW's offices in Berlin.
- Wednesday and Thursday May 13th and 14th, 2020, Svenska kraftnät's offices in Sundbyberg (Stockholm).
- Tuesday and Wednesday June 23rd and 24th, 2020, to be agreed.

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

13 AOB

13.1 Redispatch

Vlatka explained that Germany from 2021 will get new regulations, requiring reporting of redispatch between the German DSOs. Vlatka's hypotheses is that the role sending forecasts and participates in the settlement is the Resource Provider. For small production units, such as households with a solar panel, a Resource Aggregator may aggregate APs (on behalf of the Resource Provider). Activation is done by System Operators (DSOs and/or TSOs).

Vlatka will keep ETC posted on the progress of making the business requirements in Germany.

Appendix A MRs for WG16

MR #	ebIX® element	To do	Definition	Status
MRs related to new class MarketEvaluationPointCharacteristic				
ebIX® 2019/1	Market Evaluation Point Characteristic	Add a new MarketEvaluationPointCharacteristic class	The relevant administrative characteristics of a Market Evaluation Point.	Submitted to WG16
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
ebIX® 2019/3	Metering Point Type	Add marketEvaluationPointType attribute (string) to the MarketEvaluationPointCharacteristic class	A code specifying the direction of the active energy flow in this Market Evaluation Point, such as consumption, production or combined.	Submitted to WG16
ebIX® 2019/4	Metering Method	Add new meteringMethod attribute (string) in the MarketEvaluationPointCharacteristic class [0..1]	A code specifying how the energy volumes are established for this Market Evaluation Point, such as continuous- non-continuous- or not-metered.	Submitted to WG16
ebIX® 2019/5	Settlement Method	Add new settlementMethod attribute (string) in the MarketEvaluationPointCharacteristic class [0..1]	A code specifying how the energy volumes are treated for settlement for this Market Evaluation Point, such as profiled or non-profiled.	Submitted to WG16
ebIX® 2019/6	Scheduled Meter Reading Date	Add new scheduledMeterReadingDate attribute (string) in the MarketEvaluationPointCharacteristic class [0..1]	The indication of when the regular meter reading is scheduled.	Submitted to WG16
ebIX® 2019/7	Meter Reading Periodicity	Add new meterReadingPeriodicity attribute (string) in the MarketEvaluationPointCharacteristic class [0..1]	The length of time between the regular meter readings.	Submitted to WG16

MR #	ebIX® element	To do	Definition	Status
MRs related to new class MarketEvaluationPointCharacteristic				
ebIX® 2019/8	Metered Data Collection Method	Add new meteredDataCollectionMethod attribute (string) in the MarketEvaluationPointCharacteristic class [0..1]	A code specifying how a Metered Data Collector collects data from the Meter for this Market Evaluation Point, such as Automatic or Manually.	Submitted to WG16
ebIX® 2019/9	Grid Agreement Type	Add new gridAgreementType attribute (string) in the MarketEvaluationPointCharacteristic 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
ebIX® 2019/10	Administrative Status	Add new administrativeStatus attribute (string) in the MarketEvaluationPointCharacteristic class [0..1]	A code specifying whether (or not) the Market Evaluation Point is part of the imbalance settlement.	Submitted to WG16
ebIX® 2019/11	Contracted Connection Capacity	Add new contractedConnectionCapacity attribute (string) in the MarketEvaluationPointCharacteristic class [0..1]	Quantitative information about the capacity of the connection that is contracted for the Market Evaluation Point.	Submitted to WG16
ebIX® 2019/12	Contracted Connection Capacity Measure Unit	Add new contractedConnectionCapacityMeasureUnit attribute (uncefactUnitCode) in the MarketEvaluationPointCharacteristic class [0..1]	The unit of measure used for the Contracted Connection Capacity.	Submitted to WG16
ebIX® 2019/13	Disconnection Contract	Add new disconnectionContract attribute (Boolean) in the MarketEvaluationPointCharacteristic 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 this Market Evaluation Point. The element is Boolean and used for both gas and electricity.	Submitted to WG16
ebIX® 2019/14	Energy Label	Add a new EnergyLabel class	A class indicating the origin of the energy produced at this Market Evaluation Point	Planned submitted to WG16 Q1/2020

MR #	ebIX® element	To do	Definition	Status
MRs related to new class MarketEvaluationPointCharacteristic				
ebIX® 2019/15	Energy Label	Add new association from MarketEvaluationPointCharacteristic class [0..1] to the EnergyLabel class [0..*]		Planned submitted to WG16 Q1/2020
ebIX® 2019/16	Technology	Add new technology attribute (string) in the EnergyLabel 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 this Market Evaluation Point. It is advised to use code from the AIB-EECS-FS05 code list.	Planned submitted to WG16 Q1/2020
ebIX® 2019/17	Fuel	Add new fuel attribute (string) in the EnergyLabel 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 this Market Evaluation Point. It is advised to use code from the AIB-EECS-FS05 code list.	Planned submitted to WG16 Q1/2020
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 Points) 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

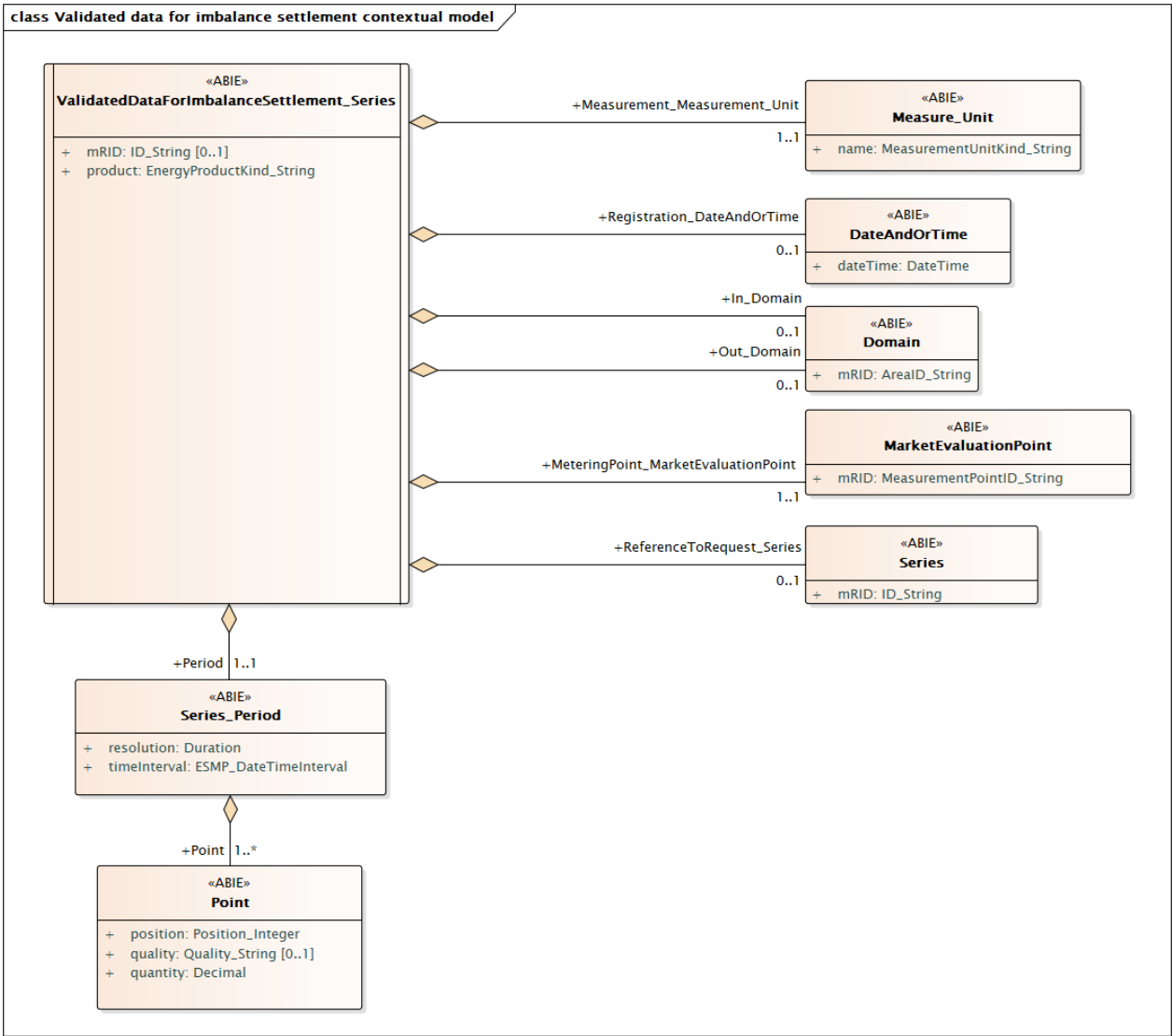
MR #	ebIX® element	To do	Definition	Status
MRs related to new class MarketEvaluationPointCharacteristic				
	Aggregated Reception Station	Add new association from MarketEvaluationPoint class [0..1] to the Domain class [0..1], where the association end name at the Domain side is AggregatedReceptionStation. 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.	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
	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

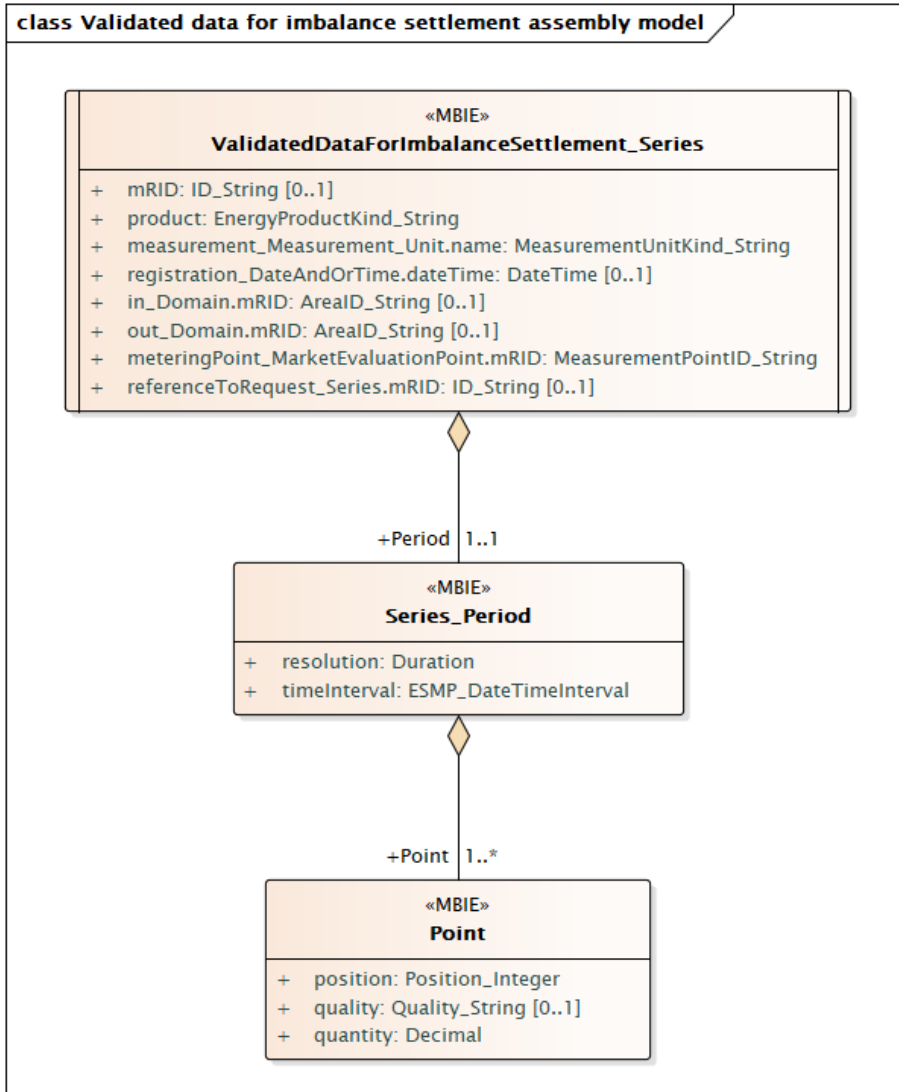
MR #	ebIX® element	To do	Definition	Status
MRs related to additions to the class Usage Point				
	Connection Status	Already there; Use connectionState attribute in UsagePoint	State of the usage point with respect to connection to the network.	Already approved

	Disconnection Method	Already there; Use disconnectionMethod attribute in UsagePoint	Is an indication of how the usage point is physically connected or disconnected.	Already approved
	Capacity of the Accounting Point	Already there; Use physicalConnectionCapacity attribute in UsagePoint	Quantitative information about the maximum physical capacity of the connection for the UsagePoint.	Already approved
ebIX® 2020/23	Capacity of the Accounting Point Measure Unit	Add an association from the UsagePoint class [0..1] to the Unit class [0..1] where the association end name at the Unit side is CapacityUsagePointMeasure Unit	The measure unit used for the capacity of the UsagePoint. For gas the maximum capacity for the Accounting Point is given in m³/hour, usually determined by the physical constraints of the (nozzles in the) Meter.	
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.	
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.	
	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	Voltage Level	Add new voltageCategory attribute (string) in the UsagePoint class [0..1] Remark: In Europe a category (high, medium, low...) is used.	A code specifying the voltage category of the grid to which the installation of the UsagePoint is connected.	
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.	
ebIX® 2019/28	MarketEvaluationPointCharacteristic	Add new association from MarketEvaluationPoint class [0..*] to the MarketEvaluationPointCharacteristic class [0..*]		Submitted to WG16

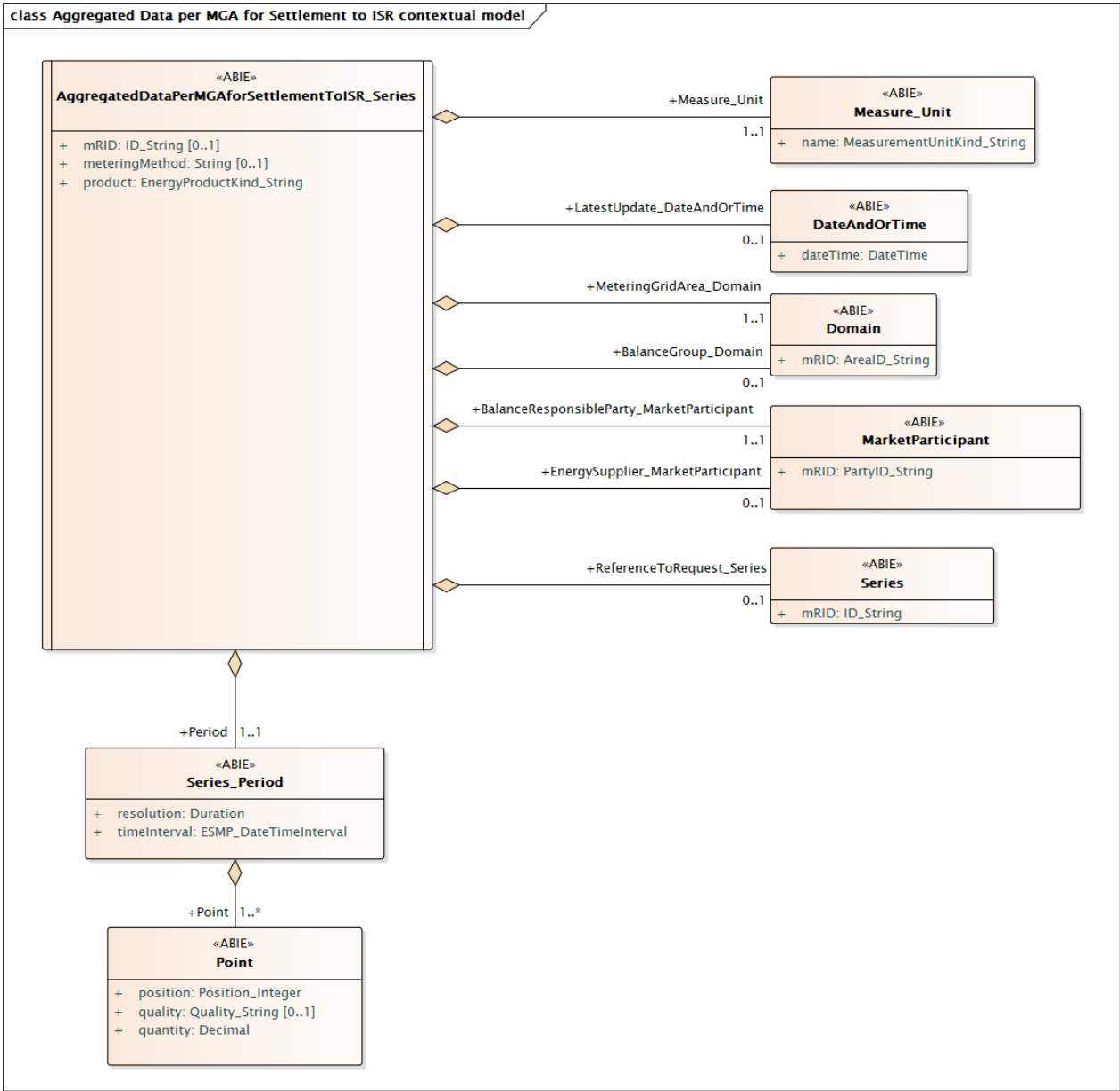
Appendix B CIM based Measure documents

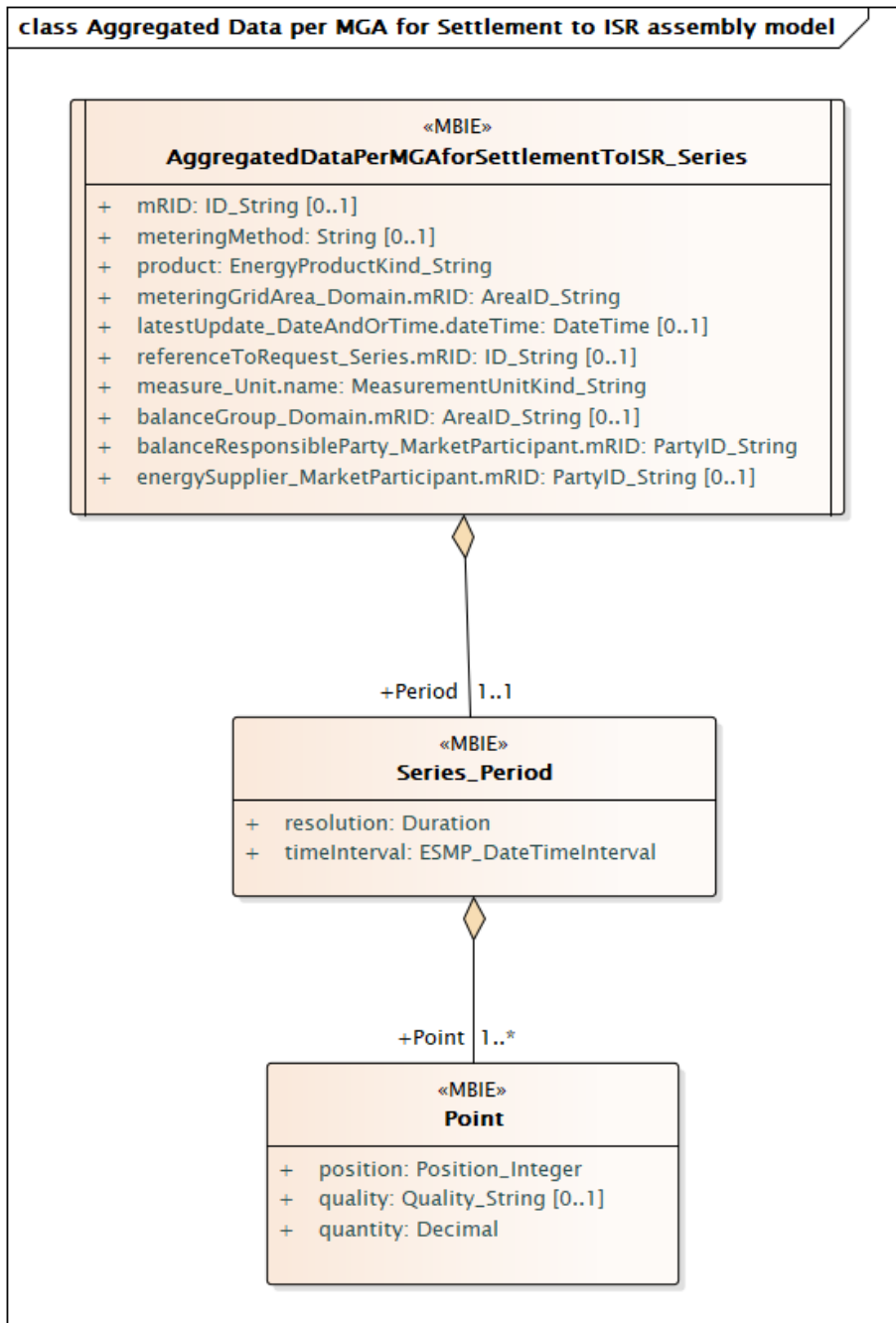
B.1 Validated data for imbalance settlement





B.2 Aggregated data per MGA for Settlement for ISR





Appendix C Comments to the HRM 2020-01 from EBG

1. Is it correct to use “metered” in Metered Data Administrator, but “measured” in the definition?

Metered Data Administrator:

A party responsible for storing and distributing validated measured data.

Conclusion:

- EBG will propose for ETC that ebIX® will suggest for the HG to keep “Metered” in role names, but change to “Measured” in all definitions, to be in line with the term used in the network codes.

2. Should we rephrase the definition of the Balance Responsible Party:

A Balance Responsible Party is responsible for its imbalances, meaning the difference between the energy volume physically injected to or withdrawn from the system **on behalf of the BRP** and the final nominated energy volume **by the BRP**, including any imbalance adjustment within a given imbalance settlement period.

Conclusion:

- EBG will propose for ETC that ebIX® will suggest for the HG to review the definition based on Gerrit’s proposal above. As now, one could read that the BRP is responsible for any energy in the system.

3. Should we update the definition of Energy Supplier:

An Energy Supplier supplies electricity to or takes electricity from a Party Connected to the Grid at an Accounting Point.

Additional information:

~~There is only one Energy Supplier for each Accounting Point.~~ **An Accounting Point can only have one Energy Supplier at a point in time.** *(When this is written in HG/HR it should be rephrased, as this can be read as ‘only one supplier for all AP’s)*

In case there are additional suppliers, the Energy Supplier delivers/takes the difference between measured production/consumption and the (accumulated) contracts with other suppliers. *(This contradicts the previous statement: rephrase or skip - Rephrase could be: “When additional suppliers are needed the ES....” - But there are other solutions!?!)*

Conclusion:

- EBG will propose for ETC that ebIX® will suggest for the HG to review the definition based on Gerrit’s proposal above.

A proposal for a new definition of an AP was drafted at the latest EBG meeting:

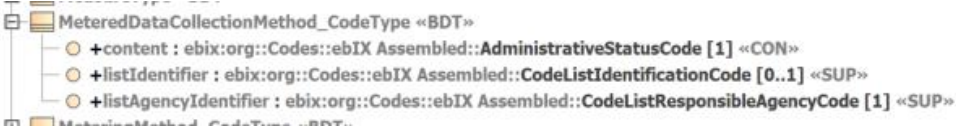
The administrative entity where responsibilities (roles) are linked to parties and energy exchange is established.

EBG action:

- Kees and Ove will forward the new proposal for AP definition to ETC for possible submission to HG.

Appendix D 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 should be MeteredDataCollectionMethodCode (from ebIX® Original) and not AdministrativeStatusCode (from ebIX® Subset)
 - 
 - 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:

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- 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).
- Manage Accounting Points:
 - 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 E Proposed/agreed changes to the ebIX® Business Information Model 2019.A

E.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:

- Postponed

E.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

E.3 BRS for Request Change grid responsibility

- a) ETC is asked to find Document Name codes for:
 - Request change grid responsibility;
 - Response change grid responsibility;
 - Notify change grid responsibility;
- b) And Business Reason codes for Change grid responsibility.

E.4 Requests from EMD

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

E.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
 - Check what is agreed with IEC in the TR
 - Check what is the significance of “Time of Use”/“Meter Time Frame” in the proposal from Atrias
 - 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:

- 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

«ABIE» AdministrativeMeteringPoint_Characteristic	
«BBIE»+MeteringPoint_Type	: ebix.org::BDT::MeteringPointType_CodeType
«BBIE»+MeteringMethod_Type	: ebix.org::BDT::MeteringMethod_CodeType
«BBIE»+SettlementMethod_Type	: ebix.org::BDT::SettlementMethod_CodeType
«BBIE»+GridConnectionContract_Type	: ebix.org::BDT::GridAgreementTypeDescription_CodeType [0..1]
«BBIE»+Tax_Type	: ebix.org::BDT::CodeType [0..1]
«BBIE»+AdministrativeStatus_Type	: ebix.org::BDT::Administrative_Status_CodeType [0..1]
«BBIE»+ContractedConnectionCapacity_Value	: ebix.org::BDT::MeasureType [0..1]
«BBIE»+ScheduledMeterReading_Date	: ebix.org::BDT::DateTimeType [0..1]
«BBIE»+MeterReadingFrequency_Duration	: ebix.org::BDT::DurationType [0..1]
«BBIE»+StandardLoadProfile_Type	: ebix.org::BDT::StandardLoadProfile_CodeType [0..1]
«BBIE»+MeteredDataCollectionMethodCode_Type	: ebix.org::BDT::MeteredDataCollectionMethod_CodeType [0..1]
+MeteringGridArea_Used	: ebix.org::ABIE::Domain_Location [0..1]
+BalanceGroup_Used	: ebix.org::ABIE::Domain_Location [0..1]
+ContractedConnectionCapacity_Included	: ebix.org::ABIE::Product_Characteristic [0..1]
+AggregatedReceptionStation_Used	: ebix.org::ABIE::Domain_Location [0..1]
+CalorificValueArea_Used	: ebix.org::ABIE::Domain_Location [0..1]
+Labelling_Included	: ebix.org::ABIE::Generation_Characteristic [0..*]
«BBIE»+PhysicalStatus_Type	
«BBIE»+VoltageLevel_Type	
«BBIE»+PressureLevel_Type	

- 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

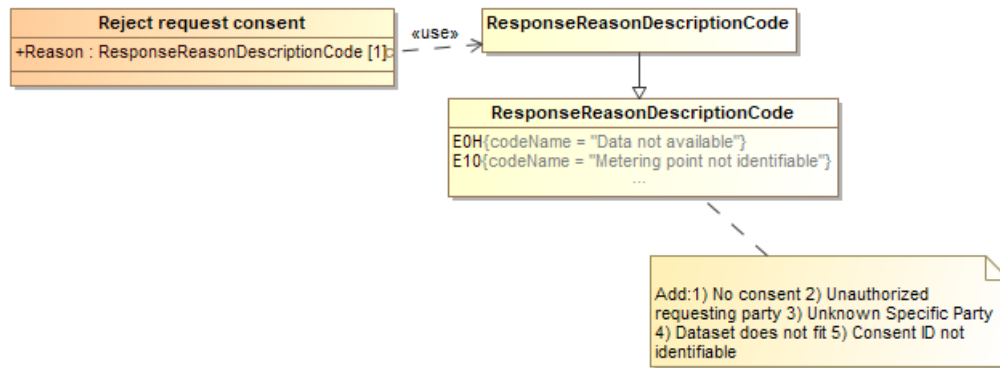
```
<xsd:element name="ValidatedDataForBillingEnergy"
type="crs:ValidatedDataForBillingEnergyType"/>...
<xsd:element ref="crs:Header" minOccurs="0" maxOccurs="1"/>
```

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

E.6 Code request from EBG

- 1) For all Reason codes, change (added at ETC meeting 20190212):
 - Balance Supplier to Energy Supplier;
 - 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

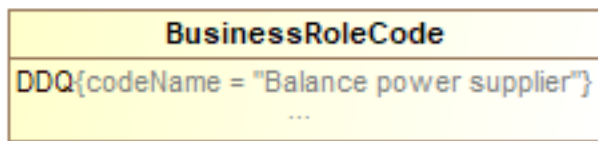
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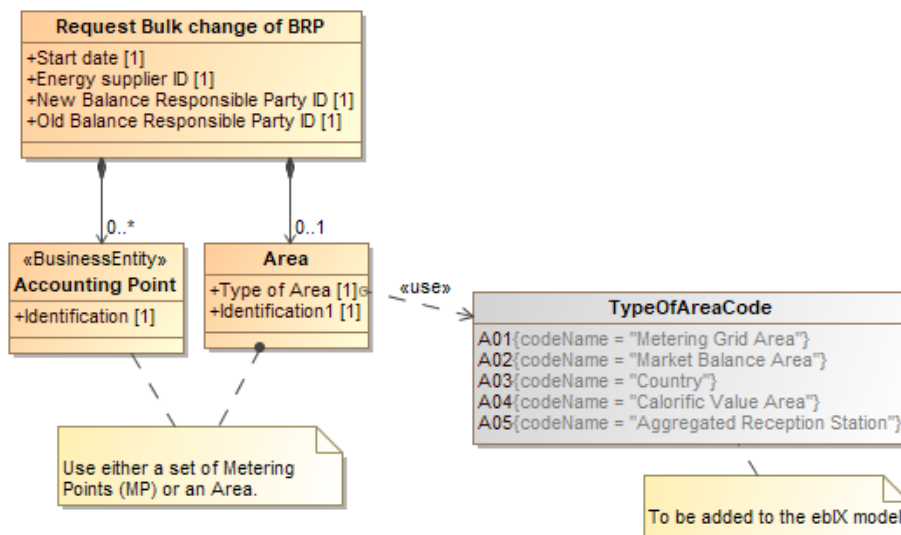
- 3) ETC will be asked to rename the following Response Reason Description Codes:
 - E10: "Metering Point ..." to "Accounting Point"
 - E16: "Unauthorised Balance Supplier" to "Unauthorised Energy Supplier"
 - E18: "Unauthorised Balance Responsible" to "Unauthorised Balance Responsible Party"
- 4) ETC 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:



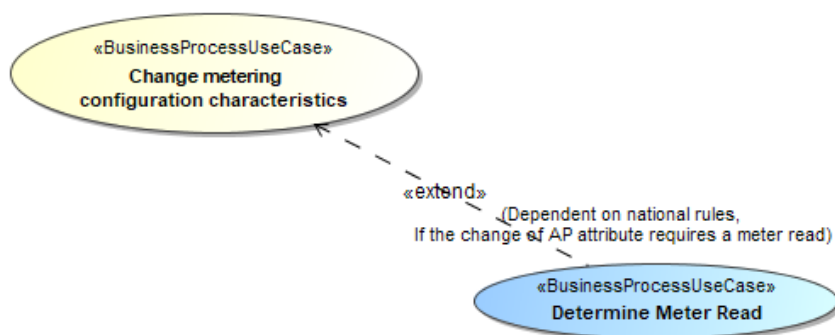
- 7) New Document Name Codes
 - a. Request consent
 - b. Response request consent

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- 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
- 8) New Business Reason Codes
- a. Consent administration
 - b. Change of Shipper
- 9) New Document Name Codes
- a. Specific Party

E.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”.



E.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.)

E.9 Codes without a code name

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

Appendix F Update of ebIX® profile after meeting May 15th

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package BDT [w] work diagram BDTs 201921

«BDTs»
EnergyGenerationTechnologyType_CodeType
«CO2»-content: EnergyGenerationTechnologyTypeCode [1]
«EUP»-identifier: CodeIdentificationCode [0..1]
«EUP»-agencyIdentifier: CodeReferenceAgencyCode [1]

«BDTs»
EnergyLabelFuelType_CodeType
«CO2»-content: EnergyLabelFuelTypeCode [0..1]
«EUP»-identifier: CodeIdentificationCode [0..1]
«EUP»-agencyIdentifier: CodeReferenceAgencyCode [1]

«ENUs»
«Subsets»
EnergyGenerationTechnologyTypeCode
[codeAgencyIdentifier = "20"] codeScheme = "EnergyGenerationTechnologyCode", origin = EnergyGenerationTechnologyTypeCode, status = "draft", uniqueIdentifier = "00000", versionIdentifier = "0.1.1"
T01[codeName = "Solar"]
T02[codeName = "Wind"]
T03[codeName = "Hydro"]
T04[codeName = "Marine"]
T05[codeName = "Thermal"]
T01000[codeName = "Solar - Unspecified - Unspecified"]
T010100[codeName = "Solar - Photovoltaic - Unspecified"]
T010101[codeName = "Solar - Photovoltaic - Cassia solar"]
T010102[codeName = "Solar - Photovoltaic - Thin film"]
T010200[codeName = "Solar - Concentration - Unspecified"]
T020000[codeName = "Wind - Unspecified - Unspecified"]
T020001[codeName = "Wind - Unspecified - Unspecified"]
T020002[codeName = "Wind - Unspecified - Offshore"]
T030000[codeName = "Hydro-electric head installations - Unspecified - Unspecified"]
T030100[codeName = "Hydro-electric head installations - Run-of-river head installation - Unspecified"]
T030200[codeName = "Hydro-electric head installations - Storage head installation - Unspecified"]
T030300[codeName = "Hydro-electric head installations - Pure pumped storage head installation - Unspecified"]
T030400[codeName = "Hydro-electric head installations - Wind pumped storage head installation - Unspecified"]
T040000[codeName = "Marine - Unspecified - Unspecified"]
T040100[codeName = "Marine - Tidal - Onshore"]
T040101[codeName = "Marine - Tidal - Onshore"]
T040102[codeName = "Marine - Tidal - Offshore"]
T040200[codeName = "Marine - Wave - Unspecified"]
T040201[codeName = "Marine - Wave - Onshore"]
T040202[codeName = "Marine - Wave - Offshore"]
T040300[codeName = "Marine - Currents - Unspecified"]
T040400[codeName = "Marine - Pressure - Unspecified"]
T050000[codeName = "Thermal - Unspecified - Unspecified"]
T050001[codeName = "Thermal - Unspecified - Non CHP"]
T050002[codeName = "Thermal - Unspecified - CHP"]
T050100[codeName = "Thermal - Combined cycle gas turbine with heat recovery - Unspecified"]
T050101[codeName = "Thermal - Combined cycle gas turbine with heat recovery - Non CHP"]
T050102[codeName = "Thermal - Combined cycle gas turbine with heat recovery - CHP"]
T050200[codeName = "Thermal - Steam turbine with back-pressure turbine (open cycle) - Unspecified"]
T050201[codeName = "Thermal - Steam turbine with back-pressure turbine (open cycle) - Non CHP"]
T050202[codeName = "Thermal - Steam turbine with back-pressure turbine (open cycle) - CHP"]
T050300[codeName = "Thermal - Steam turbine with condensation turbine (closed cycle) - Unspecified"]
T050301[codeName = "Thermal - Steam turbine with condensation turbine (closed cycle) - Non CHP"]
T050302[codeName = "Thermal - Steam turbine with condensation turbine (closed cycle) - CHP"]
T050400[codeName = "Thermal - Gas turbine with heat recovery - Unspecified"]
T050401[codeName = "Thermal - Gas turbine with heat recovery - Non CHP"]
T050402[codeName = "Thermal - Gas turbine with heat recovery - CHP"]
T050500[codeName = "Thermal - Internal combustion engine - Unspecified"]
T050501[codeName = "Thermal - Internal combustion engine - Non CHP"]
T050502[codeName = "Thermal - Internal combustion engine - CHP"]
T050600[codeName = "Thermal - Micro-turbine - Unspecified"]
T050601[codeName = "Thermal - Micro-turbine - Non CHP"]
T050602[codeName = "Thermal - Micro-turbine - CHP"]
T050700[codeName = "Thermal - Stirling engine - Unspecified"]
T050701[codeName = "Thermal - Stirling engine - Non CHP"]
T050702[codeName = "Thermal - Stirling engine - CHP"]
T050800[codeName = "Thermal - Fuel cell - Unspecified"]
T050801[codeName = "Thermal - Fuel cell - Non CHP"]
T050802[codeName = "Thermal - Fuel cell - CHP"]
T050900[codeName = "Thermal - Steam engine - Unspecified"]
T050901[codeName = "Thermal - Steam engine - Non CHP"]
T050902[codeName = "Thermal - Steam engine - CHP"]
T051000[codeName = "Thermal - Organic Rankine cycle - Unspecified"]
T051001[codeName = "Thermal - Organic Rankine cycle - Non CHP"]
T051002[codeName = "Thermal - Organic Rankine cycle - CHP"]
T060000[codeName = "Nuclear - Unspecified - Unspecified"]
T060100[codeName = "Nuclear - Heavy water reactor - Unspecified"]
T060200[codeName = "Nuclear - Light water reactor - Unspecified"]
T060300[codeName = "Nuclear - Breeder - Unspecified"]
T060400[codeName = "Nuclear - Graphite reactor - Unspecified"]
T070000[codeName = "Other - Unspecified - Unspecified"]

«ENUs»
«Subsets»
EnergyLabelFuelTypeCode
[codeAgencyIdentifier = "20"] codeScheme = "EnergyLabelFuelTypeCode", origin = EnergyLabelFuelTypeCode, status = "draft", uniqueIdentifier = "00000", versionIdentifier = "0.1.1"
F00000000[codeName = "Unspecified - Unspecified - Unspecified"]
F01010000[codeName = "Renewables - Solid - Unspecified - Unspecified"]
F01010101[codeName = "Renewables - Solid - Municipal waste (Biogenic)"]
F01010201[codeName = "Renewables - Solid - Industrial and commercial waste (Biogenic)"]
F01010300[codeName = "Renewables - Solid - Wood - Unspecified"]
F01010301[codeName = "Renewables - Solid - Wood - Forestry products"]
F01010302[codeName = "Renewables - Solid - Wood - Forestry by-products & waste"]
F01010400[codeName = "Renewables - Solid - Animal fats - Unspecified"]
F01010500[codeName = "Renewables - Solid - Biomass from agriculture - Unspecified"]
F01010501[codeName = "Renewables - Solid - Biomass from agriculture - Agricultural products"]
F01010502[codeName = "Renewables - Solid - Biomass from agriculture - Agricultural by-products & waste"]
F01020000[codeName = "Renewables - Liquid - Unspecified - Unspecified"]
F01020100[codeName = "Renewables - Liquid - Pure plant oil - Sunflower (Helianthus annuus L.)"]
F01020200[codeName = "Renewables - Liquid - Pure plant oil - Rapeseed (Brassica napus L.)"]
F01020300[codeName = "Renewables - Liquid - Pure plant oil - Oil palm (Elaeis guineensis Jacq.)"]
F01020400[codeName = "Renewables - Liquid - Pure plant oil - Coconut (Cocos nucifera L.)"]
F01020500[codeName = "Renewables - Liquid - Pure plant oil - Vegetable"]
F01020600[codeName = "Renewables - Liquid - Pure plant oil - Unspecified"]
F01020700[codeName = "Renewables - Liquid - Refined vegetable oil - Unspecified"]
F01020800[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01020900[codeName = "Renewables - Liquid - Refined vegetable oil - Sunflower (Helianthus annuus L.)"]
F01021000[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021100[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021200[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021300[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021400[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021500[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021600[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021700[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021800[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01021900[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01022000[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01022100[codeName = "Renewables - Liquid - Refined vegetable oil - Rapeseed (Brassica napus L.)"]
F01022200[codeName = "Renewables - Liquid -

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package etbx [Original] [work diagram codes 20160521]	
Language codes	
<p>xOriginal xENUM LanguageCode</p> <p>role.xLanguageIdentifier = "1" role.xName = "LanguageCode" status = "draft" URL = "" xLanguageIdentifier = "10000" xLanguageIdentifier = "10000"</p> <p>001:codeName = "Czech" 002:codeName = "Danish" 003:codeName = "German" 004:codeName = "Dutch" 005:codeName = "French" 006:codeName = "Finnish" 007:codeName = "Norwegian" 008:codeName = "Polish" 009:codeName = "Swedish" 010:codeName = "Danish" 011:codeName = "Danish" 012:codeName = "Danish" 013:codeName = "Danish" 014:codeName = "Danish" 015:codeName = "Danish" 016:codeName = "Danish" 017:codeName = "Danish"</p>	<p>xSubsidiary xENUM LanguageCode</p> <p>role.xLanguageIdentifier = "20" role.xName = "LanguageCode" origin = PartyFunctionCode originalContract.xLanguageIdentifier = "1" status = "draft" URL = "" xLanguageIdentifier = "10000" xLanguageIdentifier = "10000"</p> <p>001:codeName = "Czech" 002:codeName = "Danish" 003:codeName = "German" 004:codeName = "Dutch" 005:codeName = "French" 006:codeName = "Finnish" 007:codeName = "Norwegian" 008:codeName = "Polish" 009:codeName = "Swedish" 010:codeName = "Danish" 011:codeName = "Danish" 012:codeName = "Danish" 013:codeName = "Danish" 014:codeName = "Danish" 015:codeName = "Danish" 016:codeName = "Danish" 017:codeName = "Danish"</p>
Deprecated	
<p>xOriginal xENUM QuantityQualityCode</p> <p>role.xLanguageIdentifier = "20" role.xName = "QuantityQualityCode" status = "draft" URL = "" xLanguageIdentifier = "10000" xLanguageIdentifier = "10000"</p> <p>001:codeName = "No result" 002:codeName = "Normalized to zero degrees Celsius and 1013,25 mbar" 003:codeName = "Normalized to zero degrees Celsius and 1013,25 mbar and corrected for salinity value to Seawater quality" 004:codeName = "Automatically rejected" 005:codeName = "Copied from previous period" 006:codeName = "Regulated between parties"</p>	
<p>xOriginal xENUM DocumentNameCode</p> <p>role.xLanguageIdentifier = "20" role.xName = "DocumentNameCode" status = "draft" URL = "" xLanguageIdentifier = "10000" xLanguageIdentifier = "10000"</p> <p>001:codeName = "Start of supply", only used by + 200 002:codeName = "Cancellation of supply", only used by + 200 003:codeName = "Notice of meter data change", only used by + 200 004:codeName = "Overview of all locations", only used by + 200 005:codeName = "Overview of new locations", only used by + 200 006:codeName = "Overview of active locations", resp. role = DCC, only used by + 200 007:codeName = "Master data metering point", resp. role = DCC 008:codeName = "Master data meter", resp. role = RAD, status = deprecated 009:codeName = "Master data, balance responsibility", resp. role = DCC, only used by + 200 010:codeName = "Request for Master data, Metering point", resp. role = DCC 011:codeName = "Validated Metered Data from Grid Company to Balance supplier", resp. role = HCR, only used by + 200, EBC 012:codeName = "Validated Metered Data (line series), quantity per period", resp. role = HCR, only used by + 200, EBC 013:codeName = "Validated Metered Data (line series), quantity per period", resp. role = HCR, only used by + 200, EBC 014:codeName = "Validated Metered Data (line series), quantity per period", resp. role = HCR, only used by + 200, EBC 015:codeName = "Validated Metered Data (line series), quantity per period", resp. role = HCR, only used by + 200, EBC 016:codeName = "Request for validated data", resp. role = HCR, only used by + 200, EBC 017:codeName = "Schedule", resp. role = E2, only used by + 200 018:codeName = "Response to schedule", resp. role = E2, only used by + 200 019:codeName = "Response to schedule", resp. role = E2, only used by + 200 020:codeName = "Response to schedule", resp. role = E2, only used by + 200 021:codeName = "Master data Customer" 022:codeName = "Master data Customer" 023:codeName = "Master data for profiling", resp. role = HCR, only used by + 200 024:codeName = "Aggregated metered data for profile metering points to Balance responsible party", resp. role = DCA, only used by + 200 025:codeName = "Aggregated metered data for profile metering points to the Reconciliation responsible party", resp. role = DCA, only used by + 200 026:codeName = "Reconciliation volume", resp. role = DCC 027:codeName = "Request according to German market rules", only used by + 200 028:codeName = "Cancellation of contract for profile meter", resp. role = DCC, only used by + 200 029:codeName = "Aggregated metered data for verification of reconciliation", resp. role = DCC, only used by + 200 030:codeName = "Cancellation of contract for profile meter", resp. role = DCC 031:codeName = "Cancellation of contract for profile meter", resp. role = DCC 032:codeName = "Aggregated metered data to Balance supplier", resp. role = DCA, only used by + 200 033:codeName = "Aggregated metered data to Balance supplier", resp. role = DCA, only used by + 200 034:codeName = "End of a contract according to German market rules", only used by + 200 035:codeName = "End of a contract according to German market rules", only used by + 200 036:codeName = "Master data, transport responsibility", resp. role = DCC, only used by + 200 037:codeName = "Master data, transport responsibility", resp. role = DCC, only used by + 200 038:codeName = "Request meter data Metering configuration", resp. role = RAD 039:codeName = "Request metered data", resp. role = HCR, only used by + 200 040:codeName = "List of all allocated to Balance Responsible", resp. role = DCC, only used by + 200 041:codeName = "Request to Meter administrator (RA) for change in Meter-ID", resp. role = RAD 042:codeName = "Response from Meter administrator (RA) for change in Meter-ID", resp. role = RAD 043:codeName = "Master data Metering configuration", resp. role = RAD 044:codeName = "Notification from the Metering point administrator", resp. role = DCC 045:codeName = "Request to Grid access provider for changes in Grid access contract-ID", resp. role = DCC 046:codeName = "Response from Grid access provider for changes in Grid access contract-ID", resp. role = DCC 047:codeName = "Notification from Grid access provider to Reconciliation parties for changes in Grid access contract-ID", resp. role = DCC 048:codeName = "Start of providing a supply in the name of the new balance supplier", resp. role = DCC, only used by + 200 049:codeName = "Start of providing a supply in the name of the new balance supplier", resp. role = DCC, only used by + 200 050:codeName = "End of providing a supply in the name of the new balance supplier", resp. role = DCC 051:codeName = "End of providing a supply in the name of the new balance supplier", resp. role = DCC 052:codeName = "End of providing a supply in the name of the new balance supplier", resp. role = DCC 053:codeName = "End of providing a supply in the name of the new balance supplier", resp. role = DCC 054:codeName = "End of providing a supply in the name of the new balance supplier", resp. role = DCC 055:codeName = "End of providing a supply in the name of the new balance supplier", resp. role = DCC 056:codeName = "Request regarding planned quantities", resp. role = E2, only used by + 200 057:codeName = "Response regarding planned quantities (Confirmation/Rejection)", resp. role = E2, only used by + 200 058:codeName = "Request change SP characteristics", resp. role = DCC 059:codeName = "Response request change SP characteristics", resp. role = DCC 060:codeName = "Change request Meter-Attribute", resp. role = RAD 061:codeName = "Confirmation/Rejection of change meter attributes", resp. role = RAD 062:codeName = "Change request Field bus attributes", resp. role = DCC, only used by + 200 063:codeName = "Confirmation/Rejection of change Field bus attributes", resp. role = DCC, only used by + 200 064:codeName = "Master data Field bus", resp. role = DCC, only used by + 200 065:codeName = "Validated metered data, meter status", resp. role = HCR 066:codeName = "Validated metered data, line series", resp. role = DCC 067:codeName = "Request regarding Cancellation (Confirmation/Rejection)", resp. role = DCC 068:codeName = "Response regarding Cancellation (Confirmation/Rejection)", resp. role = DCC 069:codeName = "Request for information", resp. role = MCP 070:codeName = "Information for BSC", resp. role = B 071:codeName = "Master Data Metering Grid Area" 072:codeName = "Request for Validated Data", resp. role = DCC 073:codeName = "Request for Validated Metered Data", resp. role = HCR 074:codeName = "Request for Aggregated Metered Data", resp. role = DCA 075:codeName = "Notification from Reconciliation Settlement Responsible", resp. role = DCC 076:codeName = "Notification from Reconciliation Settlement Responsible" 077:codeName = "Request for Cancellation, Value" 078:codeName = "Cancellation of notification" 079:codeName = "Request meter data customer" 080:codeName = "Request update SP characteristics", resp. role = DCC 081:codeName = "Response request update SP characteristics", resp. role = DCC</p>	

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Appendix G Suggestions for handling renaming MP-terms into AP-terms

