

## Minutes ETC meeting, June 25th and 26th, 2019

- Date:** Tuesday and Wednesday June 25th and 26th, 2019  
**Time:** 09:00 – 17:00 and 09:00 – 15:30  
**Place:** Svenska kraftnät' offices in Sundbyberg (Stockholm)  
**Present:** Jan, Svenska kraftnät  
Kees, TenneT  
Ove, Edisys
- Appendices:** **Appendix A**, Proposed/agreed changes to the ebIX<sup>®</sup> Business Information Model 2019.A  
**Appendix B**, Update of ebIX<sup>®</sup> profile after meeting May 15<sup>th</sup>  
**Appendix C**, Suggestions for handling renaming MP-terms into AP-terms
- Attachment:** ETC workplan (see ebIX<sup>®</sup> file manager at <https://filemanager.ebix.org/#>):

### 1 Approval of agenda

Addition of:

- Update of Balance Supplier, see item 5.5;
- Area Administrator, see item 5.6;
- ENTSO-E CIM EG Role Model Subgroup Role Model Methodology based on ArchiMate, see item 5.7;
- Re-introduce of the Exchange Point, see item 5.8;
- Do we need new role codes after introduction of HRM version 2019-01?, see item 5.9;
- Approval process of HRM 2019-01, see item 5.10;
- Usage of states for Request/Response patterns in Measure BRSs, see item 6.4;
- Making a draft ebIX<sup>®</sup> module 2019.A, see item 6.5;
- Review of gas role model to prepare a harmonisation process, see item 11.1 under AOB;
- Comments to the ebIX<sup>®</sup> energy flexibility BRS, see item 11.2 under AOB.

### 2 Minutes from previous meeting

The minutes from previous face-to-face meeting, April 10<sup>th</sup> and 11<sup>th</sup>, and the set of minutes from GoToMeetings for update of the ebIX<sup>®</sup> model, were approved.

### 3 Review of ETC workplan

The ETC workplan was reviewed and updated.

**Action:**

- Ove will update the dates for making (finalising) BIMs and upload the work plan to the ebIX<sup>®</sup> File Manager.

## 4 Resolve ebIX®/IEC issues

### 4.1 Status My Energy Data

Comments to IEC/57/2087/CD has been sent from Sweden and Norway.

### 4.2 Status addition of Event class

The topic was discussed in a meeting in Paris June 11<sup>th</sup>. Using a special Event class has not yet been decided, i.e. both the option of adding MktActivityRecord or using the Series class are still open, but the discussions has shifted towards usage of the MktActivityRecord.

It was agreed to make diagrams to be used in a MR to be sent to Greta/WG16, i.e.:

- Diagrams in the BRS
- ABIEs in ebIX®
- ABIEs in CIM incl. new to be added
- MBIE version for ebIX® + MBIE version for CIM incl. flattened version

#### **Action:**

- Kees will make diagrams to be used in a MR to be sent to Greta/WG16. The diagrams will be reviewed at the next ETC meeting in September. The intention is to send the MR to Greta/WG16 after the meeting.

## 5 Resolve HG issues

### 5.1 Status: HG MR for “MP Gateway” (if the concept is finally defined in the German market)

Postponed until a decision is made in Germany or another country needs it.

Item closed.

### 5.2 Status: HG MR for “Party Administrator”

The definition of the Party Administrator was slightly changed at the latest HG meeting:

A party responsible for maintaining party characteristics ~~in a Party register~~ for the energy sector.

The new role Party Administrator was added to “Proposed changes to HRM 2020-01”

Comment from Gerrit (ebIX®): *I like the word “administrating” or “administering” better here, as it reflects the name better.*

The comment from Gerrit is added to the list of the HRM “Proposed changes to HRM 2020-01” and was supported by ETC.

### 5.3 Status: HG MR for “Metered Data Administrator (Distributor)”

The MR from ebIX® regarding the new role Metered Data Administrator was discussed at the latest HG meeting:

- In the EG1 report, the term Metered Data Dispatcher is used.
- The definition was changed from:

A party that registers and communicates validated measured data.

To

A party responsible for keeping and distributing validated measured data.

The new role Metered Data Administrator was added to “Proposed changes to HRM 2020-01”, with a comment that it should be discussed to rename the role to Metered Data Dispatcher (However, “Dispatcher” is a narrower definition than “Administrator”, not covering storage).

Comment from Gerrit (eBIX®): What is “keeping”? Registering is clearer. Or as for the Party Administrator, make it: *“Party responsible for administering validated measured data”*.

The comment from Gerrit is added to the list of the HRM “Proposed changes to HRM 2020-01”, but ETC thinks “keeping” is the best term.

#### 5.4 Status: Updated definition of Consent Administrator

eBIX® had sent a MR to the HG for update of the definition of the Consent Administrator and to change the cardinality at the AP side from [1..\*] to [0..\*]. Consents may be given also for other areas than Accounting Points (AP), such as for party (Customer) information not connected to a specific AP. The request originated from Gerda de Jong from ENTSO-E (TenneT), based on a discussion the ENTSO-E TSO/DSO project. eBIX® propose to rephrase the definition to:

“A party responsible for keeping a register of consents, ~~given for an Accounting Point by the Party Connected to the Grid~~. The Consent Administrator makes this information available on request for entitled parties in the sector.”

This resulted in a longer discussion in HG, where no one could find any examples of consents not linked to an AP. The conclusion was to change the definition to:

“A party responsible for keeping a register of consents for a domain. The Consent Administrator makes this information available on request for entitled parties in the sector.”

And keep the cardinality of [1..\*].

Comment from Gerrit (eBIX®): Note the difference with the other administrators above (maintain, keeping, keeping a register). Gerrit suggest rephrasing the definition to: *“A party responsible for administering consents for a domain.....”*. This gives quite synchronous definitions for parties. And we could state somewhere that administrator implies that effected and entitled roles are updated.

The comment from Gerrit is added to the list of the HRM “Proposed changes to HRM 2020-01” and was supported by ETC.

#### 5.5 Update of Balance Supplier

There are misunderstandings related to the Balance Supplier, e.g. mixed up with the Balancing Service Provider and Balance Responsible Party. Hence, eBIX® got an action to investigate if we can find a better name for the Balance Supplier, how to handle several “Suppliers” in a Metering point etc.’.

The action point was triggered by a comment from Leslaw regarding the “Common rules for the internal market for electricity” that were approved March 26<sup>th</sup> 2019:

*Article 4 Free choice of supplier*

*Member States shall ensure that all customers are free to purchase electricity from the supplier of their choice and shall ensure that all customers are free to have more than one electricity supply contract at the same time, provided that the required connection and metering points are established.*

To be in line with the HRM, we interpret this as it can only be one Balance Supplier in an AP, but there may in addition be one or more Traders. Alternatively, it might be established more than one AP for a Customer that wants more than one Balance Supplier.

There are several ways to handle “several suppliers in an Accounting Point (AP):

- In Norway it is not possible to have more than one supplier. If there is both consumption and production in an AP, the same supplier must be used.
- In Denmark they have introduced “Sub Accounting Points” if there are different suppliers for consumption and production.
- In the Netherlands there are trial implementations where metered values are related to objects in the installation instead of to the AP. However, there can only be one BRP in an AP.
- In Sweden there are always two APs, if there is both consumption and production.

As for the name of the Balance Supplier, ETC see two alternatives; rename to “Energy Supplier” or just “Supplier”. However, “Energy Supplier” is favoured.

ETC also wants to do a review of all names and definitions in the HRM, including if we should rename the Metering Point (highest priority). This is today often mixed up with the physical Meter, e.g. would it be better with Delivery Point, Access Point, Contract Delivery Point.....?

## 5.6 Area Administrator

A Nordic BRS, where an Area Specification Document is defined, used for master data for areas, such as borders between MGAs, relations between MGAs and Scheduling Areas/Bidding Zones, relations between BRPs and BSs within an MGA etc., was presented at the latest HG meeting. It was also noted that there had been a discussion in CIM EG where the need for Area Master Data related to Nordic RSC was discussed.

It is not yet clear if we need a new role for an Area Administrator or if the responsibility for Area characteristics can be put to an existing role, such as the System Operator. ebIX® and/or CIM EG must prepare a MR for the new role, if found needed.

Kees and Ove has as action from EBG to contact Jon-Egil and propose a small common ENTSO-E and ebIX® project for looking into Area definitions and related topics, such as: do we need an Area Administrator?

**Conclusion:**

- We will make a presentation for the next HG meeting containing:
  - The Nordic Balance Settlement (NBS) Area Configuration Document layout;
  - A subset of the HRM showing only the «Harmonised Domains».

- A project plan for a common ebIX® and CIM EG project for making a BRS and an update proposal to the HRM was drafted. The intention is to present the proposal at the HG meeting August 13<sup>th</sup> and 14<sup>th</sup>.

**Action:**

- Ove will prepare the PowerPoint presentation.

### 5.7 ENTSO-E CIM EG Role Model Subgroup Role Model Methodology based on ArchiMate

We need a methodology for how to find and define roles and domains and ArchiMate is a candidate for the artefacts. However, ArchiMate is not suitable for a methodology for how to find and define roles and domains.

The ENTSO-E CIM EG Role Model Subgroup has made a draft for a methodology based on ArchiMate, see [https://docstore.entsoe.eu/Documents/EDI/Library/eemrmm/EEMRMMMethodology\\_V1.5.pdf](https://docstore.entsoe.eu/Documents/EDI/Library/eemrmm/EEMRMMMethodology_V1.5.pdf).

ebIX® had as action from latest HG meeting to review the draft CIM EG Role Model Subgroup Role Model Methodology based on ArchiMate. A short review ended in some questions:

- Does the methodology help to decide what is a Role?
- Can the methodology be used by ebIX® for downstream roles?
- Should we advise EASEEGas to use this methodology for the Gas Role Model?
- What kind of documentation (network codes/regulation) is needed to extract roles from?
- Are you happy with the methodology so far?
- How can the methodology be improved?
- Do you have any idea where the architecture stops, and process modelling starts?

### 5.8 Re-introduce of the Exchange Point

EBG had drafted a MR for addition of an Exchange Point to the HRM. The MR was updated and will be forwarded to the HG. The MR is also uploaded to the ebIX® File Manager.

**Conclusion:**

- We will await a decision in the HG before we rename Metering Point to Accounting Point and introduce Exchange Point in the ebIX® module. The topic will be put on the next ETC agenda.

**Action:**

- Ove will forward the MR to the HG.

### 5.9 Do we need new role codes after introduction of HRM version 2019-01?

The roles that are relevant for ebIX® were gone through and a list was made over new needed codes:

Roles relevant for ebIX®	Do we need a new CEFACT code?
Balancing Service Provider	New CEFACT role code needed
Capacity Trader	No current need from ebIX®
Consent Administrator	New CEFACT role code needed

Consumption Responsible Party	No current need from ebIX®
Data Provider	No current need from ebIX®
Energy Service Company (ESCO)	New CEFACT role code needed
Interconnection Trade Responsible	No current need from ebIX®
LFC Operator	No current need from ebIX®
Market Information Aggregator	No current need from ebIX®
Merit Order List Operator	No current need from ebIX®
Nominated Electricity Market Operator	No current need from ebIX®
Nomination Validator	No current need from ebIX®
Production Responsible Party	No current need from ebIX®
Reserve Allocator	No current need from ebIX®
Resource Aggregator	New CEFACT role code needed
Resource Provider	New CEFACT role code needed
Scheduling Agent	No current need from ebIX®
Scheduling Area Responsible	No current need from ebIX®
Trader	New CEFACT role code needed
Trade Responsible Party	New CEFACT role code needed

**Action:**

- Kees will make a set of DMRs to UN/CEFACT for codes for the roles where we need new codes. The DMRs will be reviewed at the coming ETC meeting.

### 5.10 Approval process of HRM 2019-01

The status for approval of HRM 2019-01 is:

- Sent on circulation for comments to ebIX® until June 19<sup>th</sup> – no comments received;
- Approved at the CIM EG meeting the week before and expected approved by the MC on Thursday June 27<sup>th</sup>.
- Approved by EFET in mail from Marko June 26<sup>th</sup>.

If approved by the MC June 27<sup>th</sup>, the HRM 2019-01 will be published at the ebIX® web site.

**Information from after the meeting:**

- The HRM 2019-01 has been approved by the MC and will shortly be published at ebIX® and ENTSO-E web sites.

## 6 ebIX® Business Information Model 2019.A

### 6.1 Use of XOR in combination with cardinalities

Due to lack of time the item was postponed.

### 6.2 Continue review and update of version 2019.A

Proposed updates, with the status after latest GoToMeetings, are found in Appendix A.

#### **Agreed changes to the ebIX® module:**

- We rename Transaction Identifier Type to Simple Identifier Type, to have a generic Identifier Type to be used when we only need a content and no Responsible Agency or Code List Responsible Agency.
- The “Assembled ID Type” will inherit from “ebIX® Original” (E01, E02, E03), Reference code (UNCEFACT 1153) (AIG, ARR, VA), Responsible Agency (9, 260, 305) and Code List Responsible Agency (SVK, EBO...)
- The ABIE Contact was added, based on CCL “Contact. Detail”, including the “Contact. Type. Code” and the “Person. Name. Text”.

#### **Action:**

- Kees will as homework add the ID Scheme Type Code + the Reference code qualifier (CEFACT) + the Assembled ID Scheme Type Code.
- ETC propose to rename “ID Scheme : IDSchemeTypeCode” to “ID Type : IDTypeCode” – This will be verified with EBG.
- Kees will add tagged values to the Contact ABIE.

### 6.3 Should it be one «Business Partner» per UseCase?

Due to lack of time the item was postponed.

### 6.4 Usage of states for Request/Response patterns in Measure BRs

Due to lack of time the item was postponed.

### 6.5 Making a draft ebIX® module 2019.A

An updated draft version of the ebIX® module 2019, including the latest Measure and Structure modules was made.

## 7 Upgrade of MagicDraw from version 18.2 to 18.5 or 19.0

Due to lack of time the item was postponed.

## 8 EBG BIMs

Due to lack of time the item was postponed.

## 9 Code lists from Magic Draw model in Word format

Ove had as action from previous meeting published the code list, without an introduction, at the ebIX® Web site.

Ove had also made a proposal for an introduction, but due to lack of time the item was postponed.

## 10 Next meeting(s), including start and end time.

- Wednesday and Thursday September 25<sup>th</sup> and 26<sup>th</sup>, 2019, TenneT' offices in Brussels;
- Monday and Tuesday October 28<sup>th</sup> and 29<sup>th</sup>, 2019, Svenska kraftnät' offices in Sundbyberg (Stockholm);
- Wednesday and Thursday November 27<sup>th</sup> and 28<sup>th</sup>, 2019, Edisys' offices in Oslo.
- Wednesday and Thursday January 8<sup>th</sup> and 9<sup>th</sup>, 2020, TenneT's offices in Arnhem, the Netherlands.

## 11 AOB

### 11.1 Review of gas role model to prepare a harmonisation process

At the EBG meeting beginning of June it was agreed that Gerrit will ask Lucy to contact Mr. Sanchez, asking him to invite the gas and the electricity market to start a harmonisation process for the two role models. This had been done by Lucy and a meeting will take place after the summer holidays.

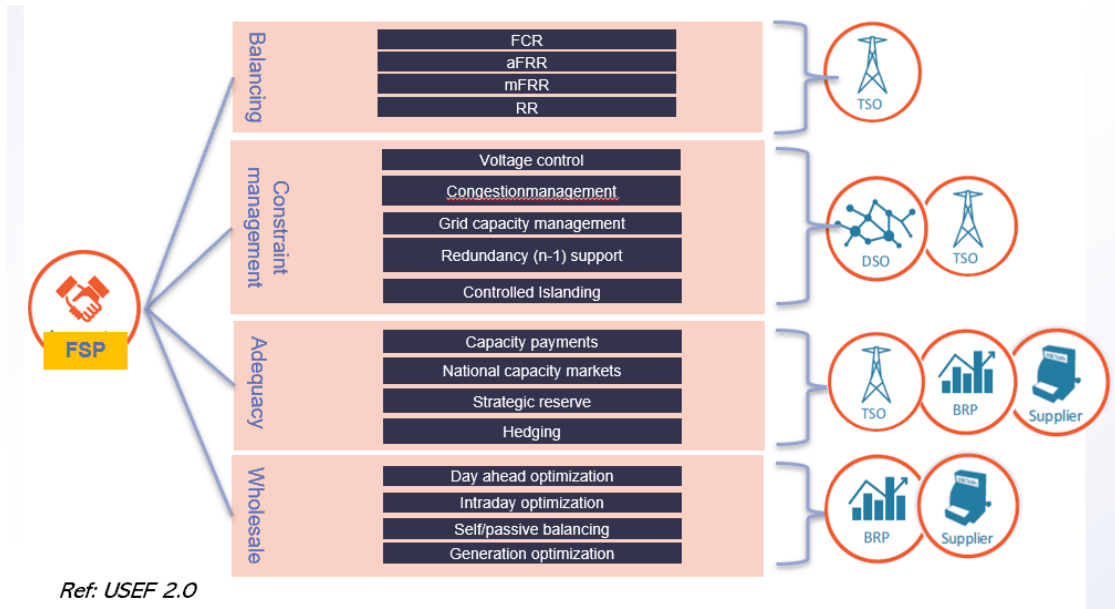
Some principles were noted:

- On short time it seems possible to harmonise the downstream part of the Gas and Electricity Role Models, i.e. the names and definitions shall be the same.
- Upstream it may be different roles, but if the same name is used, also the definition (meaning) should be the same.

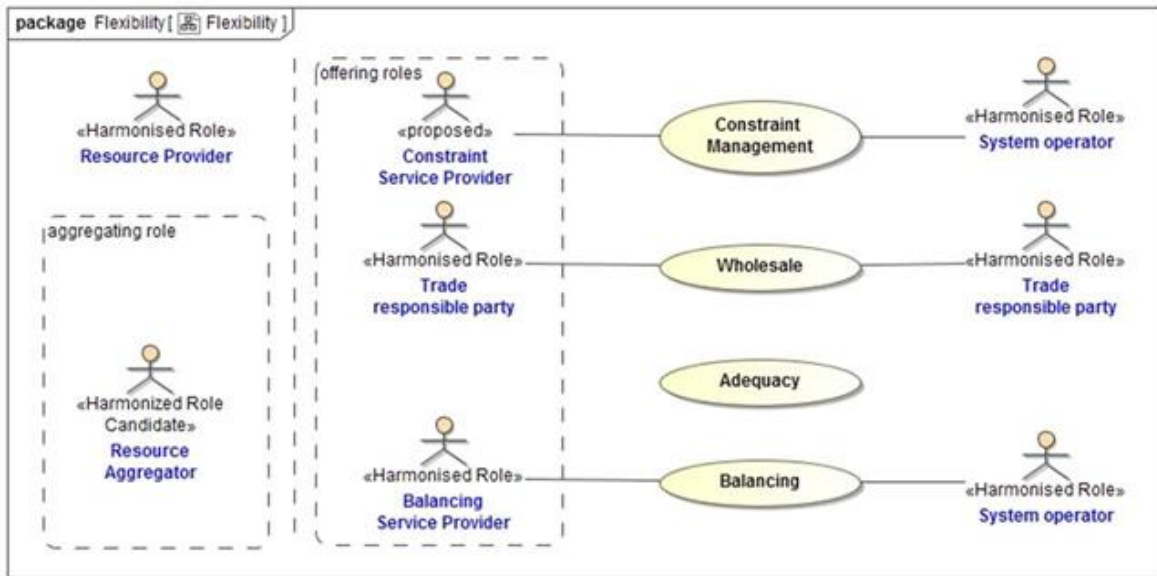
### 11.2 Comments to the ebIX® energy flexibility BRS

At the ebIX® Forum meeting April 9<sup>th</sup>, the HG was asked to make a mapping from the roles in the USEF figure in the ebIX® Distributed Flexibility presentation to HRM roles:





The following proposal was drafted at the ETC meeting April 10<sup>th</sup>:



**Conclusion:**

- The drawing above will be presented at the next ebIX® Forum meeting.

## Appendix A Proposed/agreed changes to the ebIX® Business Information Model 2019.A

### A.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

### A.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

### A.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.

### A.4 Requests from EMD

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

### A.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" ...
```

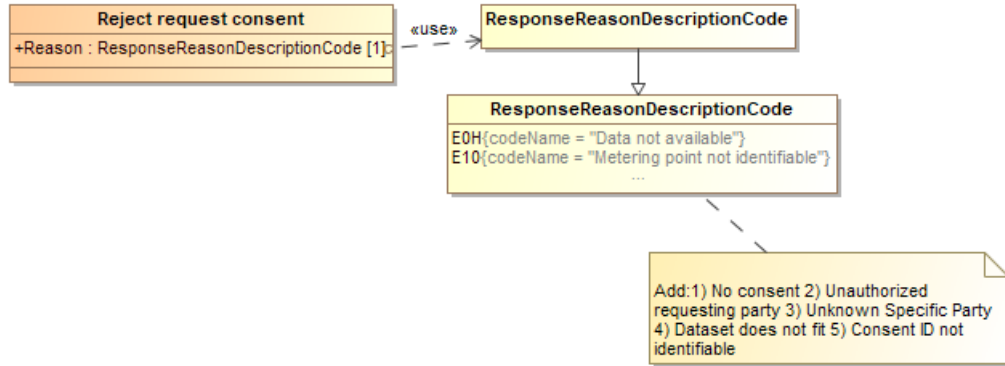
and later

```
<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.

## A.6 Code request from EBG

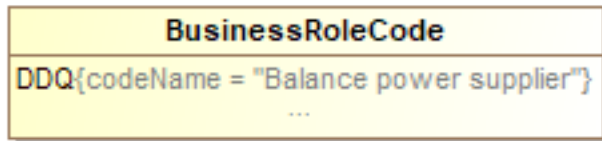
- 1) For all Reason codes, change (added at ETC meeting 20190212):
  - Balance Supplier to Energy Supplier;
  - Metering Point to Accounting Point.
- 2) Add remining Reason codes, ref BRS for Customer consent:
  - a. Dataset does not fit
  - b. Consent ID not identifiable



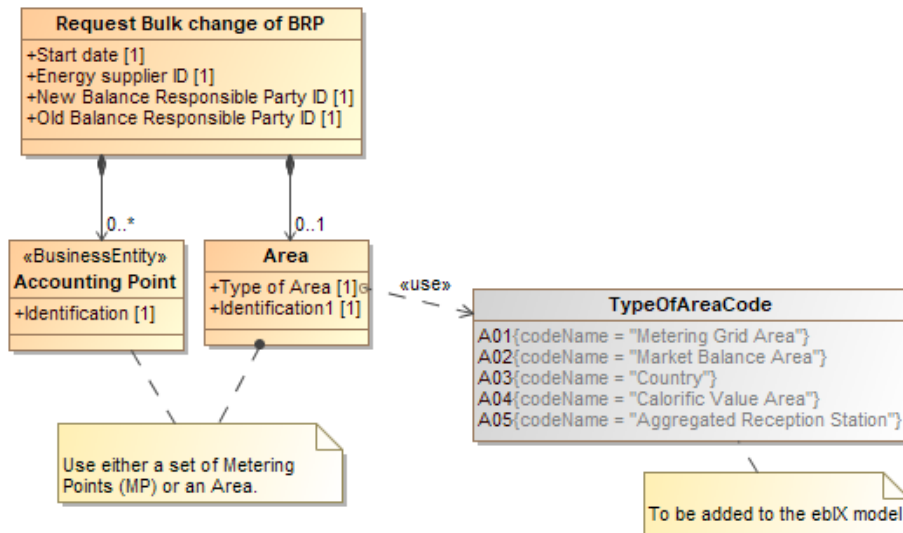
- 3) ETC will be asked to rename the following Response Reason Description Codes:
  - o E10: “Metering Point ...” to “Accounting Point ...”
  - o E16: “Unauthorised Balance Supplier” to “Unauthorised Energy Supplier”
  - o E18: “Unauthorised Balance Responsible” to “Unauthorised Balance Responsible Party”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

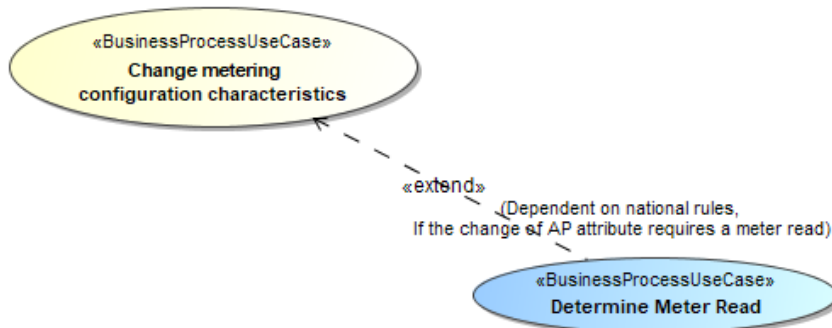


- 7) New Document Name Codes
  - a. Request consent

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

#### A.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”.



#### A.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.)

# Appendix B Update of ebIX® profile after meeting May 15<sup>th</sup>

package B0T   work diagram B0Ts 20190211	
<b>EnergyGenerationTechnologyType_CodeType</b> <small>                     &lt;Code&gt; = &lt;subset&gt; EnergyGenerationTechnologyTypeCode [1]                      &lt;SUP&gt; = &lt;idIdentifier&gt; Code.IdentificationCode [0..1]                      &lt;SUP&gt; = &lt;idAgencyIdentifier&gt; Code.IdentificationAgencyCode [1]                 </small>	<b>EnergyLabelFuelType_CodeType</b> <small>                     &lt;Code&gt; = &lt;subset&gt; EnergyLabelFuelTypeCode [1]                      &lt;SUP&gt; = &lt;idIdentifier&gt; Code.IdentificationCode [0..1]                      &lt;SUP&gt; = &lt;idAgencyIdentifier&gt; Code.IdentificationAgencyCode [1]                 </small>
<b>EnergyGenerationTechnologyTypeCode</b> <small>                     &lt;idAgencyIdentifier&gt; = "20"                      &lt;idLabelName&gt; = "EnergyGenerationTechnologyTypeCode"                      &lt;idOrigin&gt; = "EnergyGeneratorTechnologyTypeCode"                      &lt;idStatus&gt; = "19M"                      &lt;idUnitIdentifier&gt; = "00000"                      &lt;idVersionIdentifier&gt; = "0.1.A"                 </small>	<b>EnergyLabelFuelTypeCode</b> <small>                     &lt;idAgencyIdentifier&gt; = "20"                      &lt;idLabelName&gt; = "EnergyLabelFuelTypeCode"                      &lt;idOrigin&gt; = "EnergyLabelFuelTypeCode"                      &lt;idStatus&gt; = "19M"                      &lt;idUnitIdentifier&gt; = "00000"                      &lt;idVersionIdentifier&gt; = "0.1.A"                 </small>
T01 codeName = "Coal" T02 codeName = "Wood" T03 codeName = "Hydro" T04 codeName = "Marine" T05 codeName = "Thermal" T05000 codeName = "Solar - Unspecified - Unspecified" T050100 codeName = "Solar - Photovoltaic - Class A/B/C" T050101 codeName = "Solar - Photovoltaic - Class A/B/C" T050102 codeName = "Solar - Photovoltaic - Thin Film" T050200 codeName = "Solar - Concentrator - Unspecified" T050300 codeName = "Wind - Unspecified - Unspecified" T050400 codeName = "Wind - Unspecified - Onshore" T050500 codeName = "Wind - Unspecified - Offshore" T050600 codeName = "Hydro-electric head installations - Run-of-river (head installation - Unspecified)" T050700 codeName = "Hydro-electric head installations - Storage head installation - Unspecified" T050800 codeName = "Hydro-electric head installations - Pure pumped storage head installation - Unspecified" T050900 codeName = "Hydro-electric head installations - Mixed pumped storage head - Unspecified" T051000 codeName = "Marine - Tidal - Unspecified" T051100 codeName = "Marine - Tidal - Onshore" T051200 codeName = "Marine - Tidal - Offshore" T051300 codeName = "Marine - Wave - Unspecified" T051400 codeName = "Marine - Wave - Onshore" T051500 codeName = "Marine - Wave - Offshore" T051600 codeName = "Marine - Currents - Unspecified" T051700 codeName = "Marine - Pressure - Unspecified" T051800 codeName = "Thermal - Unspecified - Non CHP" T051900 codeName = "Thermal - Unspecified - CHP" T052000 codeName = "Thermal - Combined cycle gas turbine with heat recovery - Unspecified" T052100 codeName = "Thermal - Combined cycle gas turbine with heat recovery - Non CHP" T052200 codeName = "Thermal - Combined cycle gas turbine with heat recovery - CHP" T052300 codeName = "Thermal - Steam turbine with back-pressure turbine (open cycle) - Unspecified" T052400 codeName = "Thermal - Steam turbine with back-pressure turbine (open cycle) - Non CHP" T052500 codeName = "Thermal - Steam turbine with back-pressure turbine (open cycle) - CHP" T052600 codeName = "Thermal - Steam turbine with condensation turbine (closed cycle) - Unspecified" T052700 codeName = "Thermal - Steam turbine with condensation turbine (closed cycle) - Non CHP" T052800 codeName = "Thermal - Steam turbine with condensation turbine (closed cycle) - CHP" T052900 codeName = "Thermal - Gas turbine with heat recovery - Unspecified" T053000 codeName = "Thermal - Gas turbine with heat recovery - Non CHP" T053100 codeName = "Thermal - Gas turbine with heat recovery - CHP" T053200 codeName = "Thermal - Internal combustion engine - Unspecified" T053300 codeName = "Thermal - Internal combustion engine - Non CHP" T053400 codeName = "Thermal - Internal combustion engine - CHP" T053500 codeName = "Thermal - Micro-turbine - Unspecified" T053600 codeName = "Thermal - Micro-turbine - Non CHP" T053700 codeName = "Thermal - Micro-turbine - CHP" T053800 codeName = "Thermal - Stirling engine - Unspecified" T053900 codeName = "Thermal - Stirling engine - Non CHP" T054000 codeName = "Thermal - Stirling engine - CHP" T054100 codeName = "Thermal - Fuel cell - Unspecified" T054200 codeName = "Thermal - Fuel cell - Non CHP" T054300 codeName = "Thermal - Fuel cell - CHP" T054400 codeName = "Thermal - Steam engine - Unspecified" T054500 codeName = "Thermal - Steam engine - Non CHP" T054600 codeName = "Thermal - Steam engine - CHP" T054700 codeName = "Thermal - Organic Rankine cycle - Unspecified" T054800 codeName = "Thermal - Organic Rankine cycle - Non CHP" T054900 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"	F0000000 codeName = "Unspecified - Unspecified - Unspecified" F0101000 codeName = "Renewables - Solid - Unspecified - Unspecified" F0101010 codeName = "Renewables - Solid - Biogenic waste - Biogenic" F0101020 codeName = "Renewables - Solid - Industrial and commercial waste - Biogenic" F0101030 codeName = "Renewables - Solid - Wood - Unspecified" F0101031 codeName = "Renewables - Solid - Wood - Forestry products" F0101032 codeName = "Renewables - Solid - Wood - Forestry by-products & waste" F0101040 codeName = "Renewables - Solid - Animal fats - Unspecified" F0101050 codeName = "Renewables - Solid - Biomass from agriculture - Unspecified" F0101051 codeName = "Renewables - Solid - Biomass from agriculture - Agricultural products" F0101052 codeName = "Renewables - Solid - Biomass from agriculture - Agricultural by-products & waste" F0102000 codeName = "Renewables - Liquid - Unspecified - Unspecified" F0102010 codeName = "Renewables - Liquid - Municipal biodegradable waste - Unspecified" F0102020 codeName = "Renewables - Liquid - Black liquor - Unspecified" F0102030 codeName = "Renewables - Liquid - Pure plant oil - Unspecified" F0102031 codeName = "Renewables - Liquid - Pure plant oil - Rapeseed (Brassica napus L.)" F0102032 codeName = "Renewables - Liquid - Pure plant oil - Sunflower (Helianthus annuus L.)" F0102033 codeName = "Renewables - Liquid - Pure plant oil - Colza (Brassica napus ssp.)" F0102034 codeName = "Renewables - Liquid - Pure plant oil - Coconut (Cocos nucifera L.)" F0102035 codeName = "Renewables - Liquid - Pure plant oil - Ylang-ylang" F0102040 codeName = "Renewables - Liquid - Waste plant oil - Unspecified" F0102050 codeName = "Renewables - Liquid - Refined vegetable oil - Unspecified" F0102051 codeName = "Renewables - Liquid - Refined vegetable oil - Soya-bean (Glycine max.)" F0102052 codeName = "Renewables - Liquid - Refined vegetable oil - Bigola (Coffea arabica)" F0103000 codeName = "Renewables - Gaseous - Unspecified - Unspecified" F0103010 codeName = "Renewables - Gaseous - Landfill gas - Unspecified" F0103020 codeName = "Renewables - Gaseous - Sewage gas - Unspecified" F0103030 codeName = "Renewables - Gaseous - Agricultural gas - Unspecified" F0103031 codeName = "Renewables - Gaseous - Agricultural gas - Pig manure" F0103032 codeName = "Renewables - Gaseous - Agricultural gas - Cow manure" F0103033 codeName = "Renewables - Gaseous - Agricultural gas - Chicken manure" F0103034 codeName = "Renewables - Gaseous - Agricultural gas - Unspecified manure" F0103035 codeName = "Renewables - Gaseous - Agricultural gas - Energy crops" F0103040 codeName = "Renewables - Gaseous - Gas from organic waste digestion - Unspecified" F0103051 codeName = "Renewables - Gaseous - Process gas - Biogenic" F0104000 codeName = "Renewables - Heat - Solar - Unspecified" F0104001 codeName = "Renewables - Heat - Geothermal - Unspecified" F0104002 codeName = "Renewables - Heat - Geothermal - Convolution geothermal heat" F0104003 codeName = "Renewables - Heat - Geothermal - Enhanced dry geo geothermal heat" F0104004 codeName = "Renewables - Heat - Geothermal - Acid thermal - Unspecified" F0104005 codeName = "Renewables - Heat - Hydrothermal - Unspecified" F0104006 codeName = "Renewables - Heat - Process heat - Biogenic" F0105000 codeName = "Renewables - Mechanical source or other - Water - Unspecified - Unspecified" F0105001 codeName = "Renewables - Mechanical source or other - Hydro & marine - Unspecified" F02010000 codeName = "Fossil - Solid - Unspecified - Unspecified" F02010001 codeName = "Fossil - Solid - Hard coal - Anthracite" F02010100 codeName = "Fossil - Solid - Hard coal - Bituminous coal" F02010101 codeName = "Fossil - Solid - Hard coal - Caking coal" F02010102 codeName = "Fossil - Solid - Hard coal - Caking coal" F02010103 codeName = "Fossil - Solid - Hard coal - Lignite coal" F02010104 codeName = "Fossil - Solid - Brown coal - Unspecified" F02010105 codeName = "Fossil - Solid - Brown coal - Sub-bituminous coal" F02010106 codeName = "Fossil - Solid - Brown coal - Lignite" F02010107 codeName = "Fossil - Solid - Brown coal - Brown coal (petroleum)" F02010108 codeName = "Fossil - Solid - Brown coal - Peat (torque)" F02010109 codeName = "Fossil - Solid - Peat - Unspecified" F02010110 codeName = "Fossil - Solid - Municipal waste - Unspecified" F02010111 codeName = "Fossil - Solid - Industrial and commercial waste - Non-renewable" F02010112 codeName = "Fossil - Liquid - Crude oil - Unspecified" F02010113 codeName = "Fossil - Liquid - Crude oil - Shale oil" F02020000 codeName = "Fossil - Liquid - Natural gas liquids (NGL) - Unspecified" F02020001 codeName = "Fossil - Liquid - Petroleum products - Unspecified" F02020002 codeName = "Fossil - Liquid - Petroleum products - Ethane" F02020003 codeName = "Fossil - Liquid - Petroleum products - Naphtha" F02020004 codeName = "Fossil - Liquid - Petroleum products - Aviation gasoline" F02020005 codeName = "Fossil - Liquid - Petroleum products - Aviation turbine fuel" F02020006 codeName = "Fossil - Liquid - Petroleum products - Other kerosene" F02020007 codeName = "Fossil - Liquid - Petroleum products - Gas-diesel oil" F02020008 codeName = "Fossil - Liquid - Petroleum products - Fuel oil low-sulphur" F02020009 codeName = "Fossil - Liquid - Petroleum products - Fuel oil high-sulphur" F02020010 codeName = "Fossil - Liquid - Petroleum products - Liquid Petroleum Gas" F02020011 codeName = "Fossil - Liquid - Petroleum products - Crude oil" F02020012 codeName = "Fossil - Liquid - Petroleum products - Bitumen" F02020013 codeName = "Fossil - Liquid - Petroleum products - Lubricants" F02020014 codeName = "Fossil - Liquid - Petroleum products - Petroleum coke" F02020015 codeName = "Fossil - Liquid - Petroleum products - Refinery Feedstocks" F02030000 codeName = "Fossil - Gaseous - Unspecified - Unspecified" F02030001 codeName = "Fossil - Gaseous - Natural gas - Unspecified" F02030002 codeName = "Fossil - Gaseous - Coal-derived gas - Unspecified" F02030003 codeName = "Fossil - Gaseous - Coal-derived gas - Blast furnace gas" F02030004 codeName = "Fossil - Gaseous - Coal-derived gas - Coke-oven gas" F02030005 codeName = "Fossil - Gaseous - Petroleum products - Unspecified" F02030006 codeName = "Fossil - Gaseous - Petroleum products - Propane" F02030007 codeName = "Fossil - Gaseous - Petroleum products - Butane" F02030008 codeName = "Fossil - Gaseous - Petroleum products - Refinery gas" F02030009 codeName = "Fossil - Gaseous - Petroleum products - Chemical waste gas" F02030010 codeName = "Fossil - Gaseous - Municipal gas plant - Unspecified" F02030011 codeName = "Fossil - Gaseous - Process gas - Unspecified" F02030012 codeName = "Fossil - Gaseous - Process gas - Carbon monoxide" F02030013 codeName = "Fossil - Gaseous - Process gas - Methane" F02030014 codeName = "Fossil - Gaseous - Process gas - Hydrogen (coal sourced)" F02030015 codeName = "Fossil - Gaseous - Process gas - Phosphor gas" F02030016 codeName = "Fossil - Gaseous - Process gas - Dry gas" F02040000 codeName = "Fossil - Heat - Unspecified - Unspecified" F02040001 codeName = "Fossil - Heat - Unspecified - Non-renewable" F02040002 codeName = "Fossil - Heat - Process heat - Unspecified" F02040003 codeName = "Fossil - Heat - Process heat - Non-renewable" F02040004 codeName = "Nuclear - Solid - nuclear fuel - Unspecified" F02040005 codeName = "Nuclear - Solid - nuclear fuel - UOX" F02040006 codeName = "Nuclear - Solid - nuclear fuel - AGR" F02040007 codeName = "Nuclear - Solid - nuclear fuel - MOX"

language codes

«Origin» «EN» LanguageCode	«Origin» «EN» LanguageCode
<pre> linkAgencyIdentifier = '1' linkName = 'LanguageCode' link = 'link' UNCL = '1001' versionIdentifier = '1002' versionIdentifier = '1.1.A' </pre>	<pre> linkAgencyIdentifier = '201' linkName = 'LanguageCode' link = 'PartyFunderCode' linkAgencyIdentifier = '1' link = 'link' versionIdentifier = '10000' versionIdentifier = '1.1.A' </pre>
<pre> 001[codeName = 'Gaul'] 002[codeName = 'German'] 003[codeName = 'Danish'] 004[codeName = 'Dutch'] 005[codeName = 'Finnish'] 006[codeName = 'French'] 007[codeName = 'German'] 008[codeName = 'Greek'] 009[codeName = 'Hungarian'] 010[codeName = 'Italian'] 011[codeName = 'Japanese'] 012[codeName = 'Korean'] 013[codeName = 'Latin'] 014[codeName = 'Norwegian'] 015[codeName = 'Polish'] 016[codeName = 'Portuguese'] 017[codeName = 'Romanian'] 018[codeName = 'Russian'] 019[codeName = 'Spanish'] 020[codeName = 'Swedish'] 021[codeName = 'Turkish'] 022[codeName = 'Ukrainian'] 023[codeName = 'Vietnamese'] 024[codeName = 'Yiddish'] 025[codeName = 'Zulu'] </pre>	<pre> 001[codeName = 'Gaul'] 002[codeName = 'German'] 003[codeName = 'Danish'] 004[codeName = 'Dutch'] 005[codeName = 'Finnish'] 006[codeName = 'French'] 007[codeName = 'German'] 008[codeName = 'Greek'] 009[codeName = 'Hungarian'] 010[codeName = 'Italian'] 011[codeName = 'Japanese'] 012[codeName = 'Korean'] 013[codeName = 'Latin'] 014[codeName = 'Norwegian'] 015[codeName = 'Polish'] 016[codeName = 'Portuguese'] 017[codeName = 'Romanian'] 018[codeName = 'Russian'] 019[codeName = 'Spanish'] 020[codeName = 'Swedish'] 021[codeName = 'Turkish'] 022[codeName = 'Ukrainian'] 023[codeName = 'Vietnamese'] 024[codeName = 'Yiddish'] 025[codeName = 'Zulu'] </pre>

quantity

«Origin» «EN» QuantityQualityCode	«Origin» «EN» QuantityQualityCode
<pre> linkAgencyIdentifier = '201' linkName = 'QuantityQualityCode' link = 'link' UNCL = '1001' versionIdentifier = '10000' versionIdentifier = '1.1.A' </pre>	<pre> linkAgencyIdentifier = '201' linkName = 'QuantityQualityCode' link = 'link' UNCL = '1001' versionIdentifier = '10000' versionIdentifier = '1.1.A' </pre>
<pre> 001[codeName = 'As used'] 002[codeName = 'Normalised to zero degrees Celsius and 101.325 kPa'] 003[status = deprecated] 004[codeName = 'Normalised to zero degrees Celsius and 101.325 kPa and corrected for scientific value to (Groningen quality)'] 005[codeName = 'Automatically required'] 006[codeName = 'Copied from previous version'] 007[codeName = 'Registered between parties'] </pre>	<pre> linkAgencyIdentifier = '201' linkName = 'QuantityQualityCode' link = 'link' UNCL = '1001' versionIdentifier = '10000' versionIdentifier = '1.1.A' </pre>

«Origin» «EN» DocumentNameCode	«Origin» «EN» DocumentNameCode
<pre> linkAgencyIdentifier = '201' linkName = 'DocumentNameCode' link = 'link' UNCL = '1001' versionIdentifier = '10000' versionIdentifier = '1.1.A' </pre>	<pre> linkAgencyIdentifier = '201' linkName = 'DocumentNameCode' link = 'link' UNCL = '1001' versionIdentifier = '10000' versionIdentifier = '1.1.A' </pre>
<pre> 001[codeName = 'Start of supply', only used by = 200] 002[codeName = 'Cancellation of supply', only used by = 200] 003[codeName = 'Notice of master data change', only used by = 200] 004[codeName = 'Overview of final locations', only used by = 200] 005[codeName = 'Overview of new locations', only used by = 200] 006[codeName = 'Overview of active locations', resp. role = 200, only used by = 200] 007[codeName = 'Master data entering point', resp. role = 200] 008[codeName = 'Master data, data', resp. role = 200, status = deprecated] 009[codeName = 'Master data, balance responsibility', resp. role = 200, only used by = 200] 010[codeName = 'Request for Master data, entering point', resp. role = 200] 011[codeName = 'Updated Master Data from Grid Company to Balance supplier', resp. role = 200, only used by = 200, 201, 202] 012[status = deprecated] 013[codeName = 'Updated Master Data from supplier, quantity per period', resp. role = 200, only used by = 200, 201, 202] 014[status = deprecated] 015[status = deprecated] 016[codeName = 'Request for Master Data', resp. role = 200, only used by = 200, 201, 202] 017[codeName = 'Schedule', resp. role = 200, only used by = 200] 018[codeName = 'Response to schedule', resp. role = 200, only used by = 200] 019[status = deprecated] 020[status = deprecated] 021[codeName = 'Master data Customer'] 022[status = deprecated] 023[codeName = 'Master data for profiling', resp. role = 200, only used by = 200] 024[codeName = 'Aggregated Master Data for profiled entering points to Balance responsible party', resp. role = 200, only used by = 200] 025[codeName = 'Aggregated Master Data for reconciliation for profiled entering points to the Reconciliation responsible party', resp. role = 200, only used by = 200] 026[codeName = 'Reconciliation volume', resp. role = 200] 027[codeName = 'Request according to German market rules', only used by = 200] 028[codeName = 'Exchange of contract factor for profiled plant', resp. role = 200, only used by = 200] 029[codeName = 'Aggregated Master Data for verification of reconciliation', resp. role = 200, only used by = 200] 030[codeName = 'Contract data from Master data collector', resp. role = 200] 031[codeName = 'Aggregated Master Data from the Master data Aggregator', resp. role = 200] 032[codeName = 'Aggregated Master Data to Balance supplier', resp. role = 200, only used by = 200] 033[status = deprecated] 034[codeName = 'Start 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 = 200, only used by = 200] 037[status = deprecated] 038[codeName = 'Request master data entering configuration', resp. role = 200] 039[codeName = 'Request Master Data', resp. role = 200, only used by = 200] 040[codeName = 'List of IP allocated to Balance Responsible', resp. role = 200, only used by = 200] 041[codeName = 'Request to Master administrator (MA) for change in Meter-IP', resp. role = 200] 042[codeName = 'Response from Master administrator (MA) for change in Meter-IP', resp. role = 200] 043[codeName = 'Master data entering configuration', resp. role = 200] 044[codeName = 'Notification from the Metering point administrator', resp. role = 200] 045[codeName = 'Request to Grid access provider for change in Grid access metering-IP', resp. role = 200] 046[codeName = 'Response from Grid access provider for change in Grid access metering-IP', resp. role = 200] 047[codeName = 'Notification from Grid access provider to concerned parties for changes in Grid access metering-IP', resp. role = 200] 048[codeName = 'Start of providing a supply in the name of the new balance supplier', resp. role = 200, only used by = 200] 049[status = deprecated] 050[codeName = 'End of providing a supply in the name of the new balance supplier', resp. role = 200] 051[status = deprecated] 052[status = deprecated] 053[status = deprecated] 054[status = deprecated] 055[status = deprecated] 056[codeName = 'Processability Error Report'] 057[codeName = 'Request regarding planned quantities', resp. role = 200, only used by = 200] 058[codeName = 'Response regarding planned quantities (Confirmation/Request)', resp. role = 200, only used by = 200] 059[codeName = 'Request change IP characteristics', resp. role = 200] 060[codeName = 'Response request change IP characteristics', resp. role = 200] 061[codeName = 'Change request Meter-Attribute', resp. role = 200] 062[codeName = 'Confirmation/Request of change meter attributes', resp. role = 200] 063[codeName = 'Change request Feed bus attributes', resp. role = 200, only used by = 200] 064[codeName = 'Confirmation/Request of change Feed bus attributes', resp. role = 200, only used by = 200] 065[codeName = 'Master Data Feed bus', resp. role = 200, only used by = 200] 066[codeName = 'Updated Master Data, meter status', resp. role = 200] 067[codeName = 'Updated Master Data, line status', resp. role = 200] 068[codeName = 'Request regarding Cancellation (Confirmation/Request)', resp. role = 200] 069[codeName = 'Response regarding Cancellation (Confirmation/Request)', resp. role = 200] 070[codeName = 'Data Information', resp. role = 200] 071[codeName = 'Information for Data', resp. role = 200] 072[codeName = 'Master Data Entering Grid Area'] 073[codeName = 'Request for Deleted Data', resp. role = 200] 074[codeName = 'Request for Validated Master Data', resp. role = 200] 075[codeName = 'Request for Aggregated Master Data', resp. role = 200] 076[codeName = 'Notification from Imbalance Settlement Responsible', resp. role = 200] 077[codeName = 'Notification from Imbalance Settlement Responsible', resp. role = 200] 078[codeName = 'Request for Capacity Value'] 079[codeName = 'Cancellation of notification'] 080[codeName = 'Request master data customer'] 081[codeName = 'Request update IP characteristics', resp. role = 200] 082[codeName = 'Response request update IP characteristics', resp. role = 200] </pre>	<pre> linkAgencyIdentifier = '201' linkName = 'DocumentNameCode' link = 'link' UNCL = '1001' versionIdentifier = '10000' versionIdentifier = '1.1.A' </pre>

