| | |
|---|---|
| **Minutes:** NMEG meeting<br>**Date:** Monday September 21st<br>**Time:** 10:00 – 11:00<br>**Place:** GoToMeeting | **NMEG**<br>Nordic Market Expert Group |
| September 22nd, 2020 | |

| | |
|---|---|
| **Present:** | Christian, Energinet<br>Jan (DK), Energinet<br>Jan (SE), Svenska kraftnät<br>Jon-Egil, Statnett (Convenor)<br>Ove, Edisys (Secretary)<br>Tage, Energinet<br>Teemu, Fingrid |
| **To (NMEG):** | Anne Stine, Elhub<br>Christian, Energinet<br>Jan (DK), Energinet<br>Jan (SE), Svenska kraftnät<br>Jon-Egil, Statnett (Convenor)<br>Ove, Edisys (Secretary)<br>Tage, Energinet<br>Teemu, Fingrid |
| **CC:** | Audun, Elhub<br>Fedder, Energinet<br>Hans Erik, Elhub<br>Minna, Fingrid |
| **To (Invited guests):** | Mika, eSett, FI<br>Tommy, eSett, FI<br>Tuomas L, eSett, FI<br>Tuomas P, eSett, FI |
| **Appendix A:** | Mail exchange related to Weather information to be sent to Svenska kraftnät |
| **Appendix B:** | Overview of Nordic memberships in international standardisation bodies |
| **Appendix C:** | Overview of the usage of xml-schemas in the Nordic countries |
| **Attachment:** | None |

## 1 Approval of agenda

The agenda was approved with the following additions:

- BRP responsible for a bid, see item 8.2.1.
- FDIS for My Energy Data, see item 14.1.
- Weather information to be sent to Svenska kraftnät, see item 17.1 under AOB.
- MR to ebIX® (EBG) for extended association between MktActivityRecord and DateAndOrTime, see item 17.2 under AOB.

## 2 Approval of previous meeting minutes

The previous meeting minutes were approved after correction of a spelling error.

## 3 Status from NMEG "ECP/EDX Centre of Excellence" subgroup

**Background:** NIT has taken over the responsibility for the "ECP/EDX Centre of Excellence group", which originally was proposed by NMEG.

**References (links):**

**What to decide, discuss or inform:** Status from "ECP/EDX Centre of Excellence group".

No news.

## 4 NMEG-NORCAP Project

**Background:** NORCAP is a project run by Nordic RSC that needs a set of new CIM based documents, such as the CRAC document and the SIPS document.

**References (links):** None.

**What to decide, discuss or inform:** Update of the NorCap BRS.

***Continued action:***

- Jon-Egil will inform Ove of which documents that will contain the new resolution (P1D)
- Thereafter Ove will update the BRS and upload it to eRoom

## 5 Status for a common meeting with NEAT

**Background:** NIT has taking over from MSC as "home" for NMEG and consequently we should have a common meeting with NEAT (Nordic Enterprise Architecture Team), e.g. half day (same time and place) to see how we can cooperate.

**References (links):** None.

**What to decide, discuss or inform:** Status for a common meeting with NEAT.

***Ongoing task:***

- Jon-Egil will check if it still is any interest for a common meeting with NEAT and if so, schedule a common meeting.

## 6 Support to the NBM project

**Background:** The NBM-project (Nordic Balancing Model) is going forward and there is a need for a number of new CIM based documents.

**References (links):** http://nordicbalancingmodel.net/

**What to decide, discuss or inform:** Status for the NBM project and possible task for NMEG.

### *6.1 Do we need a Nordic version of the ERRP Planned resource schedule market document?*

At the previous meeting a MR was sent to CIM EG for addition of a Reason Code at time series level and addition of MktPSRType (Asset Type), also at Time Series Level.

Jon-Egil reported that the changes were agreed at the latest CIM EG (Friday September 18th) and that it will be formally approved at the next CIM EG in October. Hence, there is no need to make a Nordic version of the ERRP Planned resource schedule market document.

***Action:***

- Ove will update the Scheduling BRS with addition of the Reason Code and addition of MktPSRType (Asset Type) at Time Series Level, based on the MR sent to CIM EG after NMEG meeting August 2020.

Item closed.

### *6.2 Shall we make a MR for a new ENTSO-E Asset Type "Thermal"?*

In the ENTSO-E Asset Type code list there are several codes used for different types of Thermal, such as Geothermal, Biomass, Fossil Brown coal/Lignite, Waist etc., but no general Thermal. In the NMEG CC library we have the Nordic code **Z04** Thermal, but this is deprecated with the note "Use "**B09** Geothermal" instead".

Now NBM needs a generic Asset type for "Thermal".

***Alternatives:***

1. Remove deprecated from the Nordic code "**Z04** Thermal"
2. Send a MR to CIM EG for e new Asset Type Code for Thermal

And, should we do the same with

**Z05** Wind
**Z06** Hydro – **Or,** is this:

| | | |
|---|---|---|
| **B12** | Hydro Water Reservoir | A resource using Hydro Water Reservoir for energy. |

These codes (**Z05** and **Z06**) are used in BRS for Master Data towards eSett.

Further, Fifty may need a code for Wave, hence the code **Z08** has been reserved in the NMEG code list.

Shall we make MRs to CIM EG for Wind, Thermal and Wave?

***Conclusion:***

- We remove deprecated for:
  **Z04** Thermal
  **Z05** Wind
- We add:
  **Z08** wave

***Action:***

- Ove will update the NMEG Code list with Asset type **Z04, Z05** and **Z08**, both pdf-document and code list schema.

Item closed.

## 7 Usage of Series class or TimeSeries class in CIM measure documents for APs

**Background:**

In ETC (ebIX® Technical Committee) there is an ongoing discussion if we shall use the Series class instead of the TimeSeries class for measure data for an Accounting Point (AP) when making CIM based documents (and maybe also for other documents, such as for aggregated measure data):

- The originator for the question is the Netherlands, that has decided to use the Series class. The usage of the Series class for measure data for an AP has also been endorsed by CIM EG (according to Kees).
- Advantages of using the Series class instead of the TimeSeries class:
    - The Series class inherits all attributes and relations from the TimeSeries Class; hence the Series class contains all the same information as the TimeSeries class, but in addition it has an associated to itself.
    - The association to itself may be used to send a reference to the mRID of an "original Transaction ID", such as used when responding to a request.
    - Further, the association to itself makes it possible to add an extra level in the document. I.e. identify an AP in one Series class and repeat the Series class below this AP level with several time series, such as with different Product Types (active/reactive) and Metering Point Types (production/consumption). I.e. to group all timeseries belonging to an AP in one document. This is intended used in the Netherlands.
- In most ENTSO-E based CIM documents the TimeSeries class is used today, however in some newer documents the Series class is used, such as in the Area Configuration Document.

**References (links):**

**What to decide, discuss or inform:** Shall we use the Series class or TimeSeries class in CIM measure documents for APs?

***Conclusion:***

- NMEG agreed using Series instead of TimeSeries.

***Action:***

- Ove will update the CIM based time series documents, i.e. use Series instead of TimeSeries.

Item closed.

## 8 Status and update of Nordic BRSs and other documents if needed

**Background:** NMEG is responsible for a set of BRSs that are published at www.ediel.org.

**References (links):** None.

**What to decide, discuss or inform:** Update of BRSs and other documents if needed.

### *8.1 urn-entsoe-eu-local-extension-types.xsd with annotations*

Ove had as action from previous meeting published a version with only the Nordic NMEG (Znn codes) at www.ediel.org.

***Continued actions:***

- Jan (DK) is asked to see if the Danish Dnn codes should be converted to Nordic Znn codes for the Datahub version 3.0.
- Bent Atle (Fifty) is asked to see if the Swedish and Norwegian codes could be converted to Nordic Znn codes.

### *8.2 BRS for Nordic Trading System*

All had as action from previous meeting to investigate how to handle more than one BRP behind a bid that the TSOs activates. Shall the Balancing Service Provider send information to eSett with information of the BRPs involved and their part of the bid? Or, how to make the settlement as correct as possible?

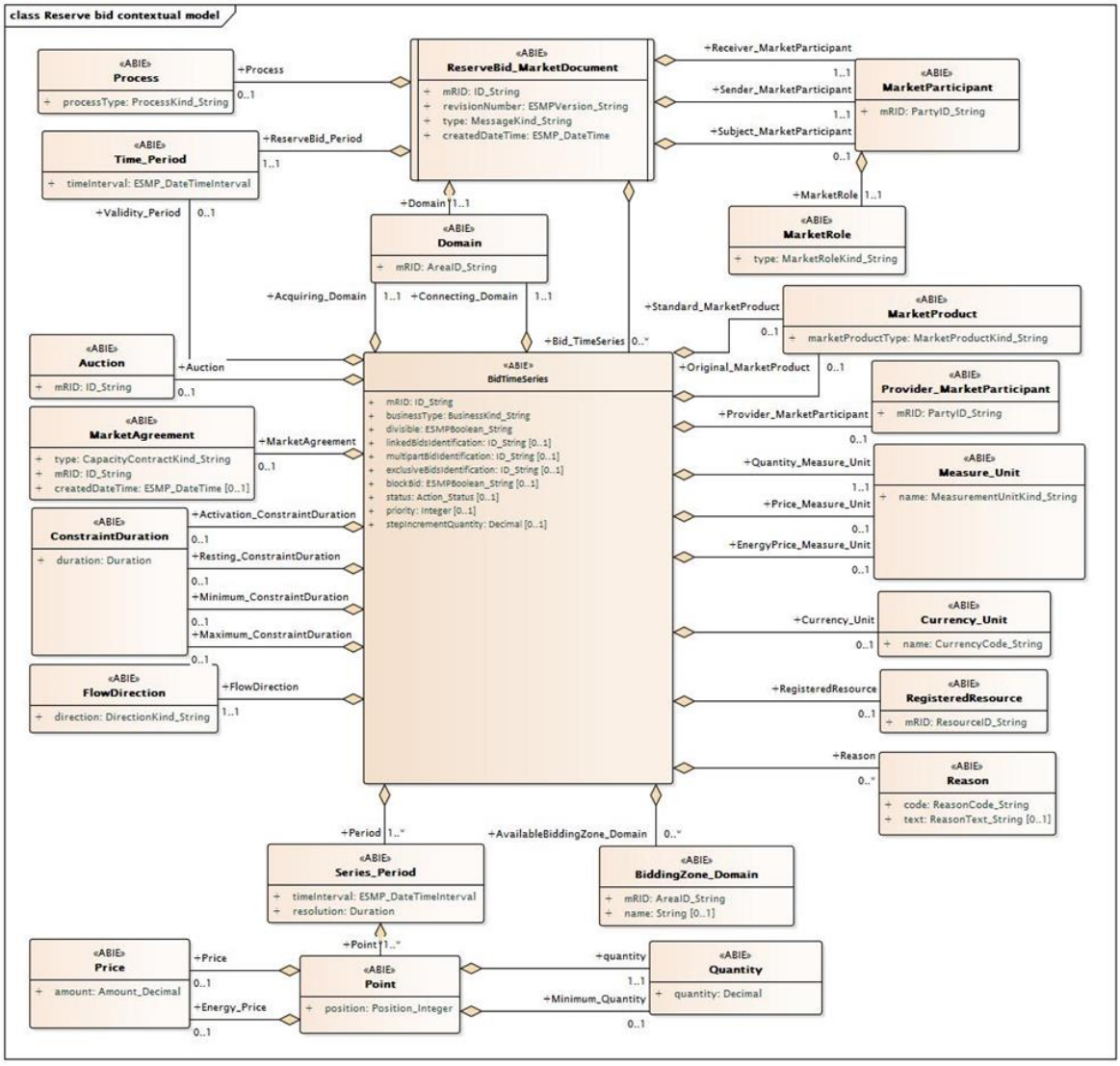
***Conclusion:***

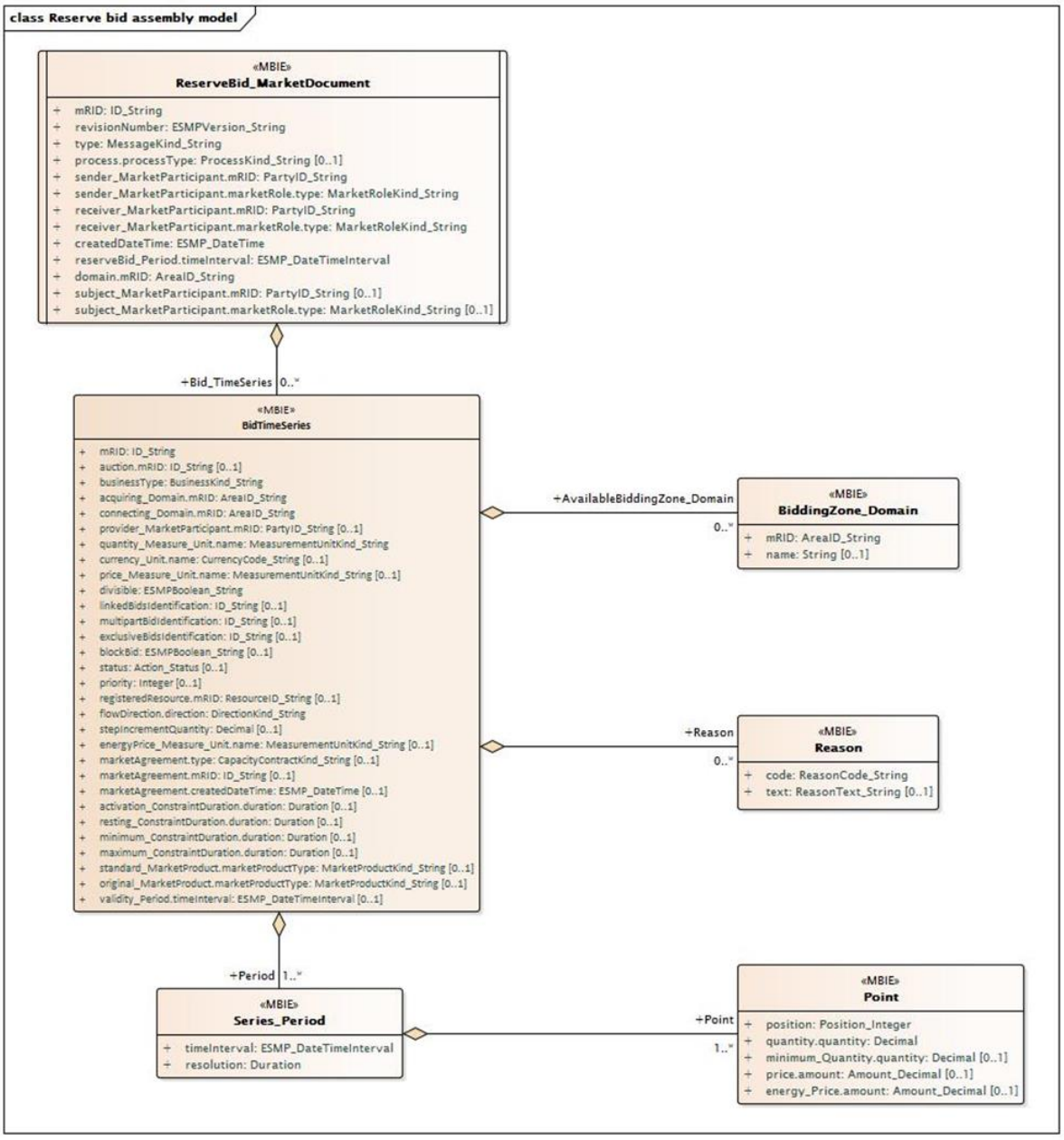
- For the time being, this is assumed to be handles bilaterally (master data) and not as information in the bid document.

Jan and Jon-Egil has received a new xml schema, and contextual and assembly models for the ReserveBid_MarketDocument, with the following changes:

- The order of the attributes has been changed to be as close as possible the one of ERRP v7.1.
- The cim namespace has been deleted in the xsd.
- AvailableMBA_Domain replaced by AvailableBiddingZone_Domain.
- Changed cardinality of attributes Auction.mRID, subject_MarketParticipant.mRID, subject_MarketParticipant.marketRole.type.
- Changed cardinality for the Series_Period class were already present in the CDV, pursuant to modification requests from IEC members, or from CIM EG or ESMP subgroup. I.e. still required.

This preliminary version of the XML Schema for the ReserveBid_Marketdocumenwill be released by the beginning of October (FDIS due date).


class Reserve bid contextual model
«ABIE» Process
+ processType: ProcessKind_String
+Process
0..1
«ABIE» ReserveBid_MarketDocument
+ mRID: ID_String
+ revisionNumber: ESMPVersion_String
+ type: MessageKind_String
+ createdDateTime: ESMP_DateTime
+Receiver_MarketParticipant
1..1
+Sender_MarketParticipant
1..1
+Subject_MarketParticipant
0..1
«ABIE» MarketParticipant
+ mRID: PartyID_String
«ABIE» Time_Period
+ timeInterval: ESMP_DateTimeInterval
+ReserveBid_Period
1..1
+Validity_Period
0..1
+Domain
1..1
«ABIE» Domain
+ mRID: AreaID_String
+MarketRole
1..1
«ABIE» MarketRole
+ type: MarketRoleKind_String
+Acquiring_Domain
1..1
+Connecting_Domain
1..1
+Standard_MarketProduct
0..1
«ABIE» MarketProduct
+ marketProductType: MarketProductKind_String
«ABIE» Auction
+ mRID: ID_String
+Auction
0..1
+Bid_TimeSeries
0..*
«ABIE» BidTimeSeries
+ mRID: ID_String
+ businessType: BusinessKind_String
+ divisible: ESMPBoolean_String
+ linkedBidsIdentification: ID_String [0..1]
+ multipartBidIdentification: ID_String [0..1]
+ exclusiveBidsIdentification: ID_String [0..1]
+ blockBid: ESMPBoolean_String [0..1]
+ status: Action_Status [0..1]
+ priority: Integer [0..1]
+ stepIncrementQuantity: Decimal [0..1]
+Original_MarketProduct
0..1
«ABIE» Provider_MarketParticipant
+ mRID: PartyID_String
+Provider_MarketParticipant
0..1
«ABIE» MarketAgreement
+ type: CapacityContractKind_String
+ mRID: ID_String
+ createdDateTime: ESMP_DateTime [0..1]
+MarketAgreement
0..1
+Quantity_Measure_Unit
1..1
+Price_Measure_Unit
0..1
+EnergyPrice_Measure_Unit
0..1
«ABIE» Measure_Unit
+ name: MeasurementUnitKind_String
«ABIE» ConstraintDuration
+ duration: Duration
+Activation_ConstraintDuration
0..1
+Resting_ConstraintDuration
0..1
+Minimum_ConstraintDuration
0..1
+Maximum_ConstraintDuration
0..1
+Currency_Unit
0..1
«ABIE» Currency_Unit
+ name: CurrencyCode_String
«ABIE» FlowDirection
+ direction: DirectionKind_String
+FlowDirection
1..1
+RegisteredResource
0..1
«ABIE» RegisteredResource
+ mRID: ResourceID_String
+Reason
0..*
«ABIE» Reason
+ code: ReasonCode_String
+ text: ReasonText_String [0..1]
+Period
1..*
+AvailableBiddingZone_Domain
0..*
«ABIE» Series_Period
+ timeInterval: ESMP_DateTimeInterval
+ resolution: Duration
«ABIE» BiddingZone_Domain
+ mRID: AreaID_String
+ name: String [0..1]
+Point
1..*
«ABIE» Price
+ amount: Amount_Decimal
+Price
0..1
+Energy_Price
0..1
«ABIE» Point
+ position: Position_Integer
+quantity
1..1
+Minimum_Quantity
0..1
«ABIE» Quantity
+ quantity: Decimal




***New and continued actions:***

- Jan (SE) and Jon-Egil will continue discussion in CIM EG how to cancel a bid in the Reserve Bid Document. In the IEC document 57_2196e_CDV for 62325-451-7 it is stated that when cancelling a bid all the periods below the Time Series shall be removed, which is impossible as long as the Series_Period class is required.
- Ove will add **A46** Balancing Service Provider to all documents in the Nordic Trading System BRS where there is a BRP. Thereafter. Ove will send the BRS for Nordic Trading System on circulation for comments to NMEG for one week before publication at www.ediel.org.

### 8.2.1 BRP responsible for a bid

From Jan (SE):

> A question about ReserveBid_MarketDocument (also described in the BRS for Nordic Trading System). In the header there are two parties that can be specified, in addition to the receiver (e.g. Svenska krafnät, Statnett or Energinet). The sender_MarketParticipant.mRID may be a BSP submitting the bid, but may also be someone else reporting bids for the BSP (the BRS indicates BRP, which has been used so far) subject_MarketParticipant.mRID is the BSP (in IEC CDV = "The party for whom the bid is being submitted."), or as stated in the BRS ("The party responsible for the bid").
>
> For each time series, an additional party can be specified (missing from the BRS, Chapter 6.7.3, table 12) provider_MarketParticipant.mRID. In the IEC CDV = "The identification of a market participant associated with a TimeSeries, i.e. the provider offering the reserve". The latter may be the one that a flex platform like CordiNET or NODES knows who it is. But maybe also "regular BSP's". The one having the Resource may have a BRP other than the BSP. However, it is the BRP for the BSP that we will indicate in what we send to eSett. Thus, the settlement between the BRP involved may be handled bilaterally or by a new role.
>
> **My question is**: Has it been discussed to include the BRP in the bid document to include this information and not only the who is BSP?
>
> So, we can have two BRPs here:
>
> > BRP for subject_MarketParticipant.mRID
> > BRPfor provider_MarketParticipant.mRID
>
> Or more:
>
> > Each Resource has its provider_MarketParticipant.mRID, which has its own BRP.
>
> Since a BSP can change BRP as often as we change shirts and also have different BRPs for different Resources (?), it can be difficult to handle balance responsibility information as "Master data" – it may need to be reported.
>
> A more fundamental question might then be: Will a BSP be able to have multiple BRPs? Different for different Resources (within the same Bidding Zone)?

This item was handled above. Item closed.

## *8.3 Which message to use for amounts?*

And what about process type and direction in Publication Document?

From Jan (SE),

> In Sweden we are sending some time series with just amounts (Still with EDIFACT).
>
> When sending/receiving time series with prices, you may – when using CIM – use the Publication document. But when (just) sending amounts – typically related to settlement – it would be more relevant to use the message Energy Account Document. However, that is rather limited, and you MUST specify both “in” and “out” quantity but cannot specify in- and out-domain (area).
>
> But in this case, we just wanted to send/receive an amount and not any energy quantity.

Meanwhile (waiting for Energy Account Document to be updated), we could use the Publication document. But does that include what we need? Have we requested an addition of the Process type to that document? Then we could tell that this document will be used for some kind of settlement process. And what about the attribute Direction that we use next to the values in the Publication Document that we send to eSett, is there a change request for that?

I don't say that we would need both changes, and an attribute "flow direction" is probably more relevant at the time series level.

E.g. if we want to exchange the import as one time series and the export as another time series (not sending netted values). Then we could use the same business type, but use "flow direction" in order to specify the direction. And not have to use different business types for export and import.

But I don't find "flow direction" in the Publication document.

Response from Ove:

As far as I can see, there is no MR for addition of Process Type to the Publication Document. And neither a MR for addition of the Direction to the Interval class (Point class in CIM) – could you use the In-Area and Out-Area for that?

To be discussed:

- Shall we send an MR to CIM EG for addition of Process Type to the Publication Document?
- Shall we send an MR to CIM EG for addition of Direction to the Point class, also to the Publication Document? Or, can we use In-Area and Out Area for this?
- Shall we send an MR to CIM EG for addition of Process Type to the Energy Account Document?

***Conclusion:***

- Use the Publication Document.

***Action:***

- Ove will make an MR for a Process type in the Publication Document, needed to distinguish between the processes.

## 9 Status for MRs to ENTSO-E

**Background:** NMEG has sent several Maintenance Requests (MR) to ENTSO-E during the last years and some of these (about 10 MRs) has been postponed by WG-EDI.

**References (links):** The MRs can be downloaded from Statnett's eRoom.

**What to decide, discuss or inform:** Status for the MRs sent to WG-EDI.

Due to lack of time, the item was postponed.

## 10 BRS for schedules

**Background:** The latest version of the BRS for Schedules was published in February 2014. Since then the scheduling processes has changed and NMEG is working on updating the document.

**References (links):** The draft BRS can be downloaded from NMEG working documents.

**Action(s):**

**What to decide, discuss or inform:** Review of updated BRS.

Due to lack of time, the item was postponed.

## 11 XML schemas

**Background:** The NMEG set of schemas, including extended table with TSO columns, are shown in Appendix C.

**References (links):**

**Action(s):** When we start a project together with NBM (Nordic Balancing Model), everyone are asked to find what versions of xml-schemas are used to day in different projects and come up with proposals for new schemas and/or sets of schemas that should be published at www.ediel.org.

**What to decide, discuss or inform:** Verify the list of proposals for new schemas and/or sets of schemas, from the NMEG participants, that should be published at www.ediel.org.

Due to lack of time, the item was postponed.

## 12 NMEG CIM-XML Subgroup

**Background:** At the NMEG meeting November 2019, it was agreed to establish a NMEG CIM-XML Subgroup that will make Nordic CIM based XML documents. The following tasks are prioritised (updated at NMEG meeting March 2020):

a) Update the NMEG model with the latest ebIX® extension;
b) Make a road map for making CIM documents for the Danish Datahub version 3.0;
c) Continue with NBS documents:
    1. NBS ebIX® based documents;
    2. NBS documents based on older ENTSO-E schemas;
    3. NBS master data documents.

The members of NMEG CIM-XML Subgroup are Jan (DK), Jan (SE), Teemu and Ove.

**References (links):**

**What to decide, discuss or inform:** Status.

### *12.1 Report from NMEG CIM-XML Subgroup; GoToMeeting August 26th*

- Participants Christian, Jan (DK), Jan (SE) and Ove.

- At the meeting regarding a solution for merging ENTSO-E and ebIX® code lists without using the ENTSO-E namespace outside of the ENTSO-E code list, where Fedder, Jan (SE) and Ove participated, it was agreed to continue trying to find a solution. However, if we don't find a solution, we will use the current structure.
- Ove had as action:
    - Added a code list for mPConnectionType:

        **D01** Direct
        **D02** Installation

    - Made the productionObligation of datatype Boolean (ESMDP «Primitive») and investigate how it works:
        - Valid values for productionObligation of ESMDP «Primitive» datatype Boolean are: 0 or 1, or false and true.
    - Made physicalConnectionCapacity (MP Capacity) of type DecimalQuantity based on IEC 61970;
    - Made Energy Supplier and BRP of datatype PartyID_String;
    - Made Description (Location Description) of datatype string with Characters60_String – new ESDMP datatype;
    - Made a code list for UsagePointLocation/remark:

        **D01** Washable
        **D02** Not Washable

    - Made geoInfoReference (DAR Referance ) of type UUID36_String- new ESDMP datatype;
    - Made InMGA and OutMGA of datatype Area_ID_String and rename MGA to Metering Grid Area;
    - Made linked, parent and child MP/AP to be of MeasurementPointID_String;
    - Renamed "Energy label" to "EnergyTechnologyAndFuel" and used datatype AssetType;
    - Made Meter/mRID of datatype ID_String.
- There was a longer discussion if we shall use the Series class instead of the TimeSeries class for measure data for an Accounting Point – and maybe for aggregated data, see item 7

    ***Conclusion:***

    - We will ask NMEG to discuss whether we shall base the NMEG measure documents on AP level on the Series class or the TimeSeries class. Ove will also inform NMEG about the topic beforehand.
- Priorities for the coming meetings:
    - DK master data for Customer
    - Settlement documents (tariffs, subscriptions and fees)

***Action:***

- Ove will prepare a document for master data for Customer (RSM 28) for next meeting.

### *12.2 Report from NMEG CIM-XML Subgroup; GoToMeeting September 2nd*

- Participants Christian, Jan (DK), Jan (SE) and Ove.
- Ove had as action from previous meeting prepared a document for Master Data for Customer (RSM 28), which was reviewed:

- It was agreed to rename the document to “Characteristics of a Customer at an AP”, same as in the ebIX® model.
- Proposals for mapping to CIM was made for most of the attributes. However, not all the proposals were seen as “brilliant” (i.e. to be re-discussed).
- To be continued at next meeting.

***Actions:***

- Jan (SE) will see if he finds better solutions than what was suggested related to addresses, names, Attention etc.
- Ove will start to add what was proposed to the contextual model.
- Ove will send GoToMeeting invitations for the next agreed GoToMeetings.

### *12.3 Report from NMEG CIM-XML Subgroup; GoToMeeting September 11th*

- Participants Christian, Jan (DK), Jan (SE) and Ove.
- Ove had as action from previous meeting add what was proposed at the previous meeting to the Characteristics of a Customer at an AP contextual model (RSM 028). In addition, Ove had made a xml schema of the current content.
- Ove’s homework was reviewed, and some comments and questions were resolved.
- Most of the time was used to find a mapping of “Administrative Party MP Administrative Party”. The conclusion was to map the class to the CIM class AdministrativeParty_UsagePointLocation and sub-classes.

***Actions:***

- Ove will continue to add the agreed CIM classes to the contextual model.

### *12.4 Report from NMEG CIM-XML Subgroup; GoToMeeting September 18th*

- Participants Christian, Jan (DK), Jan (SE) and Ove.
- Christian and Jan (DK) informed that the Danish Datahub version 3 is expected to be based on CIM.
  - Further, Microsoft will have two teams participating in the development of the hub, with the intention to, at a later stage, offer a worldwide “green hub”.
- Ove had as action from previous meeting add what was proposed at the previous meeting to the Characteristics of a Customer at an AP contextual model (RSM 028), including:
  - Changed the enumeration literals in ServiceCategoryCode to:
    - **D01** Electrical heating
    - **D01** No electrical heating
  - Changed EletricalHeating_DateAndOrTime to EletricalHeating_Date;
  - Changed datatype from «Enumeration» to “Characters 10_String” (new data type) for Consumer Category (Dansk Energis branchekode);
  - Added the new «Enumeration» “Address type”:
    - **D01** Technical address
    - **D04** Juridical address
  - **Questions:**
    - Should we restrict the «Compounds» Status and TelephoneNumber?

- The second half of the meeting was used to solve some questions from Jan (DK) and Ove to the" Memo - Mapping of Danish downstream documents to CIM".

***Actions:***

- Ove will make CIM versions of Request, Confirm and Reject Change of Supplier based on the ebIX® model, but with all needed attributes from RSM 001 in the beginning of next week.
- Ove will continue to add the agreed CIM classes to the CIM based RSM 028 Characteristics of a Customer at an AP.

## 13 Picture at the front page of www.ediel.org

**Background:** At the NMEG meeting March 2020, it was agreed to add a picture to the front page of www.ediel.org.

**References (links):** www.ediel.org.

**What to decide, discuss or inform:** Status.

Due to lack of time, the item was postponed.

## 14 Review of documents from CIM EG subgroups and IEC groups

**Background:** At the NMEG meeting August 2020 it was agreed that NMEG needs to be more proactive regarding commenting on new ENTSO-E and IEC documents. Hence it is added a fixed item on the NMEG agenda for review of documents from CIM EG subgroups and IEC groups that is of interest for the Nordic market.

**References (links):**

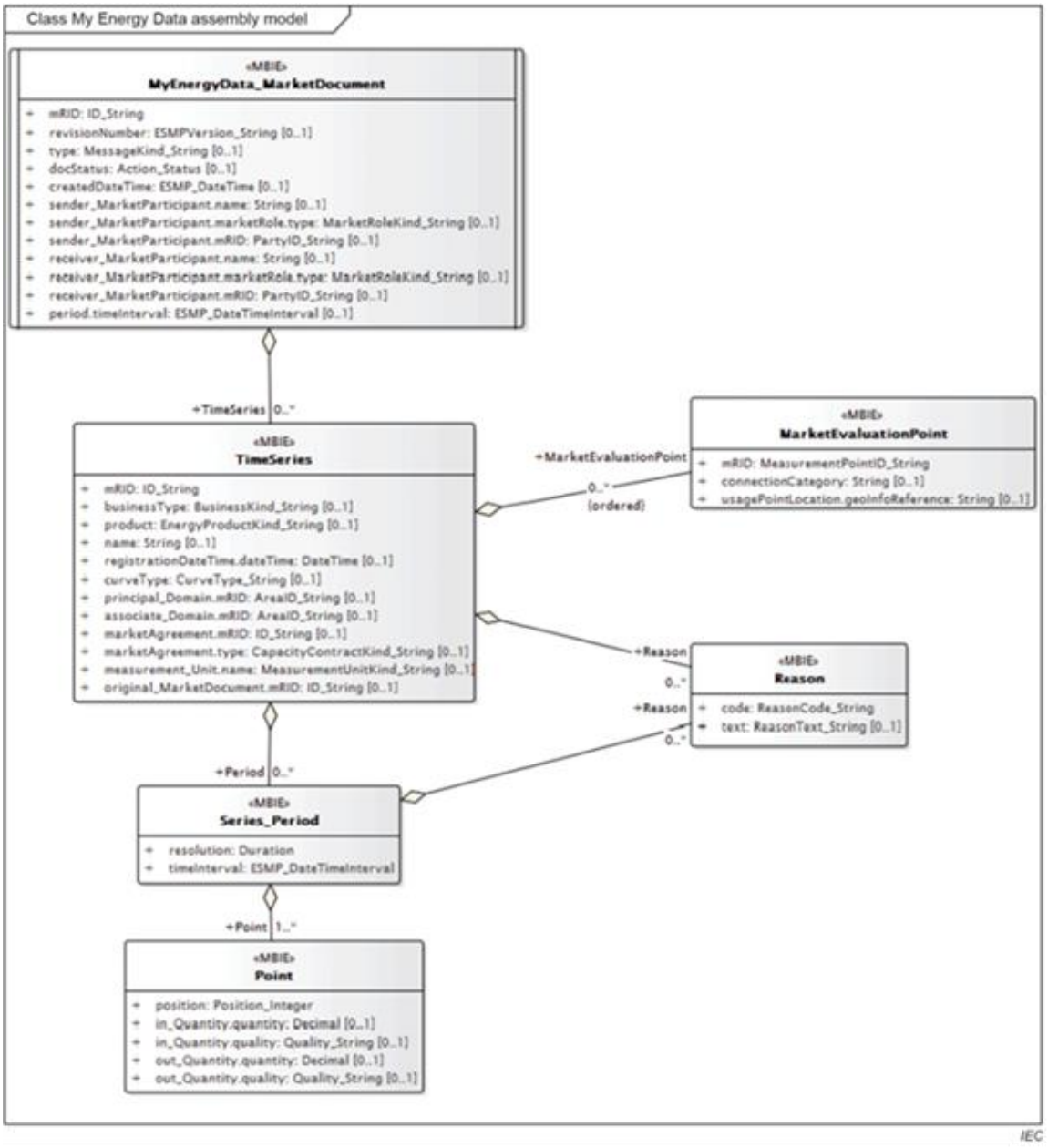
**What to decide, discuss or inform:** Review of documents from CIM EG subgroups that is of interest for the Nordic market.

### *14.1 FDIS for My Energy Data*

From Jan (SE):

> IEC 62325-451-10 is now out as FDIS (Final Draft International Standard). This future international standard, called "My Energy Data", is supposed to cover parts of what is the processes after what is described in the BRS for Measure validated measured data, e.g. the distribution of validated data to consented parties.
>
> The voting of this FDIS (by the national IEC TC57 committees) will end in a month from now (mid-October). And after that we can expect the international standard to be published by the end of this year.
>
> I don't think we in Sweden will implement this version of the standard, but rather wait until CIM covers more of our needs. Perhaps when commenting the FDIS we (that are members of national IEC TC57 groups) can suggest improvements for a future edition of the standard. I will myself

compare (once again) the picture here (see below) with the current (suggested) content of what the Swedish datahub will send to ESCOs. And if I find things missing not already commented, I will add that to the list of Swedish comments.




Also, from Jan (SE) Sept. 17th:

> Sweden, Norway and the Netherlands voted against the CDV. The question I have been asked is whether we should vote 'no' to the FDIS as well – and perhaps get more countries with us this time.
>
> You can also vote "Abstain". But still leave comments, if I understood correctly.

Right now, I do not know whether we should vote 'no' or abstain – voting 'yes', is surely also a possibility, but why do it if we cannot put the standard in use anyway? (And then not because it only includes XML and not JSON, but because the standard doesn't include everything we're going to send to an ESCO.)

Whatever that, I think we will make comments, at least if we have new ones in addition to the ones we pointed out in the CDV.

How are your thoughts going in Norway?

When do you decide in the Norwegian TC57 Group how to vote?

***From Ove:*** Next meeting in NK57 is November 4th.

Theoretically, the comments could propose a new model that covers the needs we have – but it will probably be too much work, especially if we are to reconcile it within ebIX® and with Energinet before we submit the comments.

***Conclusion:***

- Norway, and probably Sweden, will wote abstain to the FDIS.

## 15 Information (if any)

None.

## 16 Next meetings and decide if next meeting will be a face-to-face meeting or GoToMeeting

NMEG Corona GoToMeetings:

- GoToMeeting: Thursday October 8th, 13:00 – 14:00;
- GoToMeeting: Tuesday and Wednesday October 27th and 28th, 10:00 – 12:00 and 13:00 – 15:00 both days.

NMEG scheduled face-to-face meetings[1]:

- December 15th and 16th, Edisys' offices in Oslo
- February 2nd and 3rd, Energinet's offices in Erritsø (?)

NMEG CIM-XML subgroup GoToMeetings:

- Wednesday September 30th 10:00 – 11:30 (CET);
- Wednesday October 7th 10:00 – 11:30 (CET);
- Monday October 19th 10:00 – 11:30 (CET);

## 17 AOB

[1] Unless otherwise explicitly stated, the face-to-face meetings start at 09:00 (CET) the first day and end 16:00 (CET) the second day.

### *17.1 Weather information to be sent to Svenska kraftnät*

Due to lack of time, the item was postponed.

The relevant mail exchange is shown in Appendix A.

### *17.2 MR to ebIX® (EBG) for extended association between MktActivityRecord and DateAndOrTime*

Jan (SE) and Ove reported that the request for addition of an association for a "Supply Start Date" related to the Energy Supplier in an AP in the Alignment of AP characteristics process was discussed in ETC Tuesday September 15th.

- It was agreed that the requirement should be sent to EBG and added to the ebIX® BRS(s) before a MR is sent to IEC.
- It was also noted that there already is a need for more than one association between MktActivityRecord and DateAndOrTime, according to the latest BRS for Alignment of AP characteristics. I.e. a Snapshot Date and a Validity Start Date.
- Hence, Jan (SE) and Ove got the following action:
    - Jan (SE) and Ove will investigate why we need the Supply Start Date and write a MR to EBG. The MR will include the text:

        *"In the Nordic countries we need the start date for the current supplier in addition to the Validity Start Date for the set of AP characteristics".*

Due to lack of time, the item was postponed.

## Appendix A Mail exchange related to Weather information to be sent to Svenska kraftnät

From Jan (SE) September 10th, 2019:

I got this list (the first column) from a colleague working with SMHI (Sveriges meteorologiska och hydrologiska institut).

Let me just comment some of the items. The agreement what to get from SMHI is not yet finalized, so the list may be updated. I have asked my colleague to get definitions (or links to definitions), and some background (reasons) in order to be able to send in MRs.

| Parameter | ENTSO-E code | Title |
|---|---|---|
| Temperatur | B49 | Air temperature |
| Vindhastighet (vektorbeskrivning) | | |
| Vindriktning (vektorbeskrivning) | | |
| Byvind | | |
| Wind Chill Index | | |
| Global instrålning | B48 | Solar irradiance |
| Cloud cover eller Cloud area fraction (high, medium, low) | (B50) | Cloudiness |
| Luftfuktighet | B51 | Air humidity |
| Lufttryck | B52 | Atmospheric pressure |
| Regn | | |
| Snö | | |
| Snödjup/nysnö ([…]) | | |
| Molnvatten | | |
| Molnis | | |
| Graupel (nedisning, [...]) | | |

Currently I find the following Business types in the ENTSO-E list (could be more codes), from B46–B53 (see also above):

Wind speed
Wind direction
Solar irradiance
Air temperature
Cloudiness
Air humidity
Atmospheric pressure
Precipitation

From Jan (SE) September 3rd, 2020:

A year ago I sent the mail above related to weather information.

There is an implementation guide for Weather data (the web page would now be https://www.entsoe.eu/publications/electronic-data-interchange-edi-library/)

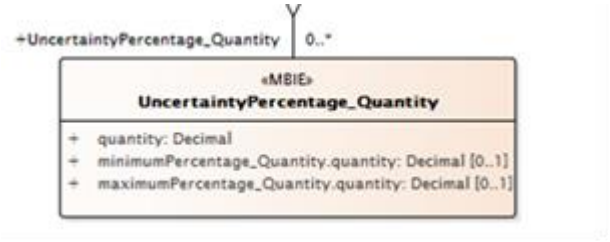
However, is that really based on the Environmental part of IEC CIM?

What we now would like to exchange is three values:

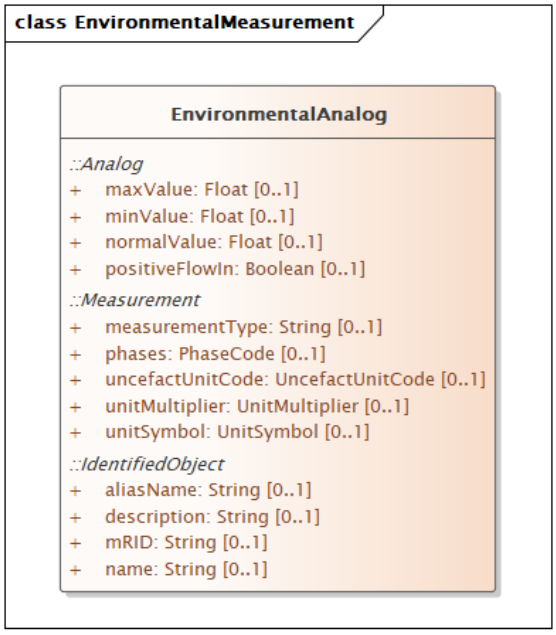
- The average value
- The extreme value (highest)
- The extreme value (lowest)

That I can find in the CIM class EnvironmentalAnalog with a set of attributes like maxValue, minValue and normalValue, see picture later.

But I don't find this exactly in the ENTSO-E implementation guide. There I find:




How should that be used to provide (together with the Point class) the three values we would like to exchange?




BR Jan

From Jan (SE) September 8th:

> Now I have got more background on this issue.
>
> It is not environmental information, but since it was information from a system that we mainly use for wind prognosis, I thought the data to be exchanged was wind values telling the average, the minimum and the maximum. But it is just (partly) about wind. One timeseries is a weekly load prognosis (MW) per area, resolution hour. Another timeseries is a weekly windproduction prognosis (MW) per area and hour. We want to base this exchange on CIM even if it is just sent internally within Svenska kraftnät.
>
> And for each hour there are three values: one normal value and two extreme values. And these extreme values can be expressed as 5 and 95 percentile values.
>
> Looking at some of the ENTSO-E implementation guides I found two more interesting than others, that is:
>
> > Energy prognosis document and Short Medium Term Adequacy Results Document.
>
> Let me now just look at the latter. In the "SMTA_ImplementationGuide_V1.0.pdf" document I find table 6 and table 7 (dependency tables). Well, the receiver will not be RSC, otherwise table 6 looks ok. In table 7 we would use A38 (Available generation) for the windproduction and A13 (Load Profile) for the load prognosis (- to me a "load profile" sounds like something else, i.e. something we use for reconciliation…) (Domain will tell the area – however, I would not have called it "Control area" as in the table..). mktPSRType.psrType would tell the "Asset type". Probably we will here use the old Nordic code Z05 for Wind, I don't think we will distinguish between Wind onshore and Wind offshore. Looking at table 10 we will use type "05" and type "95". (But I note that those types are not part of the XML schema, it is just a string that could have any kind of value.)
>
> So, we think Short Medium Term Adequacy Results Document will fit our needs. Have you any experience of using that document?

From Jan (SE), Thursday September 10th, 11:26:

> …. Let us not discuss this specific (internal) exchange within Svenska kraftnät, but rather let us look at the "ENTSO-E packages" and see: which are relevant for us in the Nordic area?
>
> I.e. among:
>
> - IEC62325-451-7
> - IEC62325-451-8
> - Area Configuration Document
> - CRAC Document
> - CriticalNetworkElement Document
> - FlowBasedDomain Document
> - Coding schemes mapping
> - CGMA
> - SIPS Document
> - OPC
> - SMTA
> - GLSK document

- RGCE process
- Weather process
- TERRE

Perhaps some are already in use or will be used soon in the Nordic area.

Do we need specific Nordic BRS:s for some of them?
Nordic codes?

And who are following the work with these packages/documents? Perhaps it is enough to know that we do have people that are part of the work or follow the work.

However, looking again at "Short Medium Term Adequacy Results Document" (within SMTA in the list above). This is a sort of energy prognosis. There is also an Energy prognosis document within the Weather process. And then we have the Schedule document (ESS) within IEC62325-451-2 Ed.1

What are actually the needs when exchanging schedules/prognosis?
Do we need to distinguish them as several different documents?
Or will there be a work to "join" them?
Or can at least the used ABIE:s and MBIE:s be more similar?

I don't say that we must use the same XML schema for all. But it is bad quality not having the same order of the attributes in the current different schemas.

From Jan (SE) September 16th:

I noted in the implementation guide for Weather data:

https://docstore.entsoe.eu/Documents/EDI/Library/cim_based/Weather_IG_V1r2.pdf

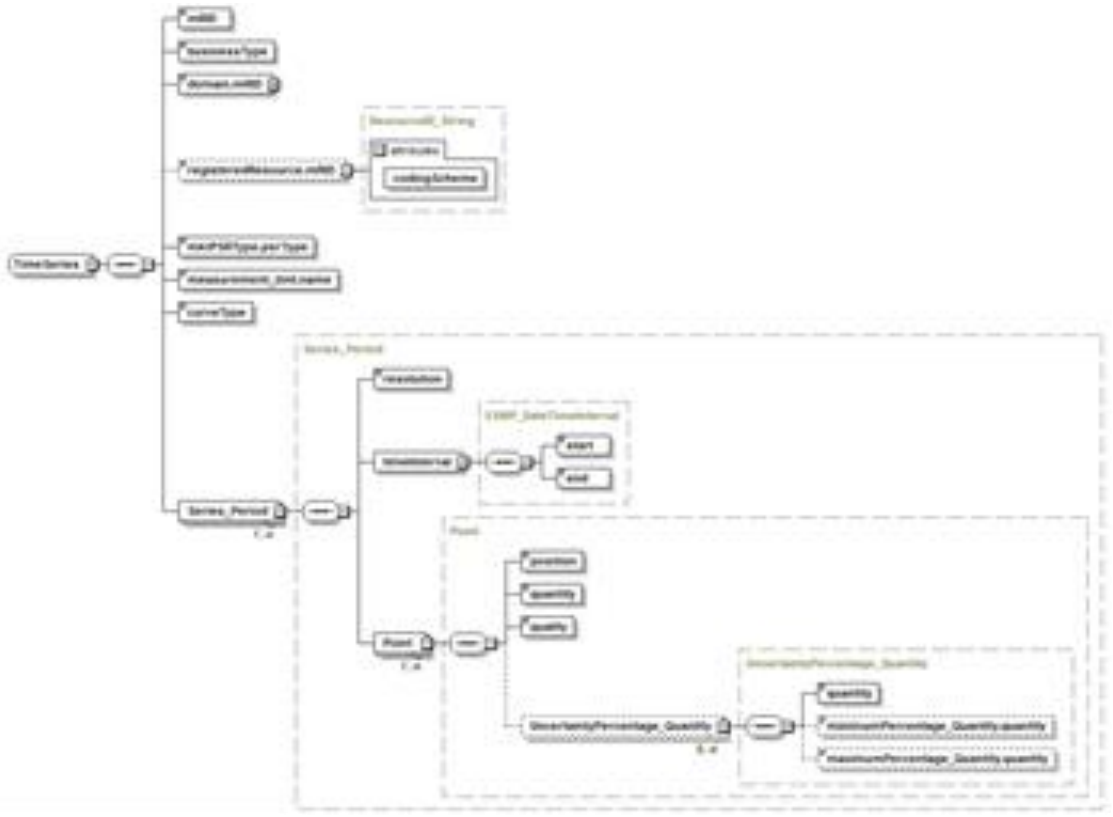
that there are also three other Business Type codes, not in my list below:

**B78** = Global radiation
**B79** = Diffuse radiation
**B80** = Direct solar radiation

But, what is the unit? I think it is the same as for "Solar irradiance", if so, the text "Solar Irradiance" in the ENTSO-E implementation guide for unit codes should be changed to include "radiation" or "radiant energy" or something like that. And probably then also in the ebIX® list of unit codes. But, that should be verified by someone that knows more about solar power.

Response from Jon-Egil, Thursday September 10th, 11:55:

I would assume that the Energy Prognosis document is the more fitting document in this case:

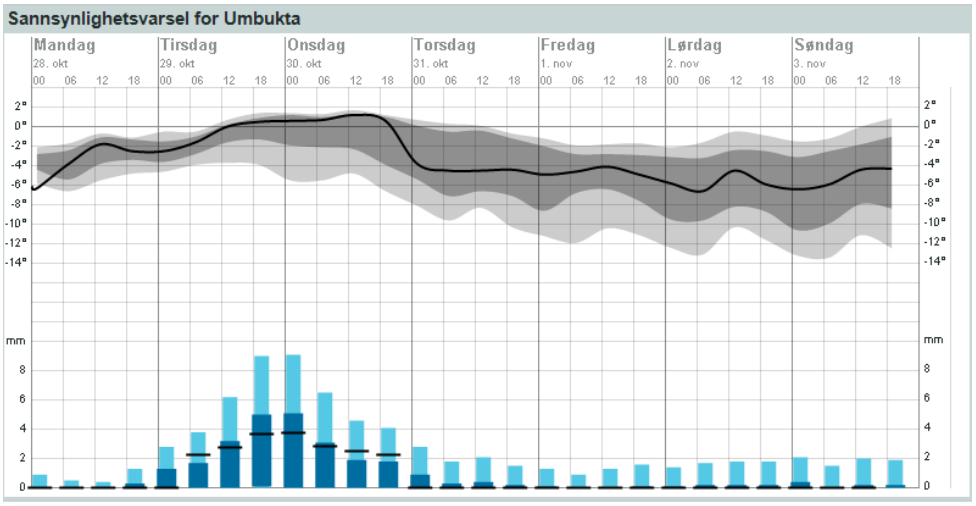


Response from Jan (SE), Thursday September 10th Thu 12:27:

> Regardless if it is, I would suggest that we consider writing a Maintenance request where the order of attributes is updated in this and similar documents so that the order would be more in line with other documents.
>
> For instance, the order within Series_Period should be timeInterval & resolution, not the opposite as here.

Response from Jon-Egil, Thursday September 10th Thu 14:09:

> The intended use is to describe data ala this curve:



In this case the point Thursday at 00:00 will look like this in the xml:

```
<Point>
  <position>1</position>
  <quantity>3.8</quantity>
  <quality>A03</quality>
  <UncertaintyPercentage_Quantity>
    <quantity>30</quantity>
    <minimumPercentage_Quantity.quantity>-
    8.0</minimumPercentage_Quantity.quantity>
    <maximumPercentage_Quantity.quantity>0.5</maximumPercentage_Quantity
    .quantity>
  </UncertaintyPercentage_Quantity>
  <UncertaintyPercentage_Quantity>
    <quantity>80</quantity>
    <minimumPercentage_Quantity.quantity>-
    5.0</minimumPercentage_Quantity.quantity>
    <maximumPercentage_Quantity.quantity>0.0</maximumPercentage_Quantity
    .quantity>
  </UncertaintyPercentage_Quantity>
</Point>
<Point>
```

So, what you're sending is a confidence interval. If you want to send the 5th and 95th percentile the values would be in the <minimumPercentage_Quantity.quantity> and the <maximumPercentage_Quantity.quantity> of the 90 percent confidence interval, and the <quantity> element would be 90.

Response from Jan (SE) , Thursday September 11th, 16:58:

Regardless if it is, I would suggest that we consider writing a Maintenance request where the order of attributes is updated in this and similar documents so that the order would be more in line with other documents.

For instance, the order within Series_Period should be timeInterval & resolution, not the opposite as here.

Further response from Jan (SE), Thursday September 11th, 16:58:

Thanks Jon-Egil for giving an example of the usage of UncertaintyPercentage_Quantity. I will use this, if making an example based on the Energy prognosis Document. However, there are some things that suggest using Short Medium Term Adequacy Results Document:

1) The users of this talks about “P05”, “P50” and “P95” values. The type codes “05” and “95” would be specified in the Short Medium Term Adequacy Results Document, not in the Energy prognosis Document where you instead would specify “90”.
2) The resolution is 60 minutes. That is possible to use according to the implementation guide for Short Medium Term Adequacy Results Document. But according to Energy prognosis Document the resolution should be 1 minute (However: I have not compared this with the possible usage of curveType).

3) We will send load and wind forecast information for a week, and since the *Short Medium Term Adequacy Results Document* is intended for e.g. Week Ahead PXX Load Forecast and Week Ahead PXX Wind Offshore/Onshore Forecast, it seems to fit. PXX in the implementation guide describes the "P05" and "P95" that we want to exchange.

But still, the two documents are so similar that they should have been more equal than they actually are (looking at the order of the attributes). And perhaps they might be joined in the future.

Even more response from Jan (SE), Tuesday September 15th, 17:00:

Based on input from e.g. Jon-Egil, we will now use an updated version of the Energy Prognosis Document (version 1.1) when exchanging percentile values. There are three changes in the XSD you get here, compared with the original one from ENTSO-E. Beside namespace and name of the xsd (that probably could be something else).

1) Added ProcessType to the header
2) Changed the order of resolution & timeInterval in the SeriesPeriod class
3) Added an optional Percentile_Quantity class in parallel with UncertaintyPercentage_Quantity

   The Percentile_Quantity class includes three attributes:

   a) quantity (i.e. the energy value)
   b) percentage_Quantity.quantity (i.e. the percentage level)
   c) percentage_Quantity.type (i.e. the unit of this latter percentage quantity – default P1 = %).

The idea is that you are having (zero), one or more percentile values. It could be the 5% value, the 30%, the 50%, the 80%, the 95% or "whatever". Sent together or sent separately.

Examples:

- If you only are interested in the average expected value and the 90% percentile ($P_{90}$), you can send two values and use Percentile_Quantity once.
- If you also are interested in the 10% percentile ($P_{10}$), you can use Percentile_Quantity once more, but may then also use UncertaintyPercentage_Quantity. Using the latter option, you will specify the confidence interval as 80 and the two values as minimum + maximum.

One advantage of having a Percentile_Quantity, as suggested in what you get here, is that you express the percentile with its level. That would not be the case when using UncertaintyPercentage_Quantity where you instead specify the confidence interval.

Let me now look at the attached (draft) xml example.

messageType = B14 = Energy prognosis document
processType = A14 = Forecast
businessType = A04 = Consumption
mktPSRType.psrType = A05 = Load
domain = SE3 (Swedish elområde 3)

So, this is a load forecast within the area SE3. The quantity is 67. Within UncertaintyPercentage_Quantity, the confidence interval is 90, and then the values for 5% and

95% are 53 and 98 respectively. Within Percentile_Quantity the same information is expressed, the $P_5$ value is 53 and the $P_{95}$ value is 98.

Of course you will not send the information in both ways – the example is just showing that you can express the values in both ways, and using Percentile_Quantity you explicitly specify the percentile (5 and 95 in the example), while you with UncertaintyPercentage_Quantity instead would specify the confidence interval (90 in the example).

Is there any interest by you others of sending percentiles? If so, we can make a Nordic version of the Energy prognosis document. Making it possible to send (single or more) percentiles.

And at least we should suggest some updates to the ENTSO-E version of that document.

## Appendix B Overview of Nordic memberships in international standardisation bodies

| Name | Member of |
|---|---|
| Anne Stine | NMEG, ebIX® |
| Bertil (SE) | EBG |
| Christian | NMEG, ebIX® observer (?) |
| Fedder | NMEG, CIM EG, IEC/WG16, CSSG, EEAT, ENTSO-E CIM tools, CIO/LIO |
| Jan (SE) | NMEG, HG, ebIX®, IEC/WG16+14 |
| Jari | NMEG, CIM EG |
| Jon-Egil | NMEG, CIM EG, IEC/WG16, ESMP, CCC, CIO/LIO, TPC |
| Martin (SE) | CCC |
| Oscar | CIO/LIO, ebIX®, CIM EG |
| Ove | NMEG, HG, ebIX®, IEC/WG16 |
| Svein (NO) | IEC/WG14+13, CGMES |
| Teemu | NMEG, CIM EG, EBG, ETC, CIO/LIO |

***Abbreviations:***

| | |
|---|---|
| CCC | Coordinated Capacity Calculation (project under CIM EG) |
| CGMES | Common Grid Model Exchange Standard (subgroup under CIM EG) |
| CIO/LIO | Central Issuing Office / Local Issuing Office |
| CSSG | Communication Standards (subgroup under CIM EG) |
| Dc | ENTSO-E Digital committee |
| EBG | ebIX® Business Group |
| EEAT | ENTSO-E Enterprise Architecture Team (subgroup under Dc) |
| ESMP | European Style Market Profile (subgroup under CIM EG) |
| ETC | ebIX® Technical Committee |
| HG | ebIX®, EFET and ENTSO-E Harmonisation Group |
| MC | ENTSO-E Market Committee |
| MIT | Market Integration and Transparency (subgroup under MC) |
| TPC | Transparency Platform Coordinators (subgroup under MIT) |

## Appendix C Overview of the usage of xml-schemas in the Nordic countries

| # | XML schema | BRS | Version used by | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | NBS | NMA | Energinet | Fingrid | Statnett | Svk |
| 1. | NEG ECAN publication document | NBS BRS for TSO/MO | **1.0** | | | | | |
| 2. | NEG ERRP Reserve Allocation Result Document | a) NBS BRS for TSO/MO<br>b) BRS for Trade | **1.0** | | | | | |
| 3. | NEG Area Specification Document | a) NBS BRS for Master Data<br>b) BRS for Trade | **1.0**[2] | **2.0 (CIM)** | | | | |
| 4. | NEG Bilateral Trade Structure Document | NBS BRS for Master Data | **1.0** | | | | | |
| 5. | NEG Party Master Data Document | NBS BRS for Master Data | **1.0** | | | | | |
| 6. | NEG Resource Object Master Data Document | NBS BRS for Master Data | **1.1** | | | | | |
| 7. | ENTSO-E Acknowledgement Document | NEG Common XML rules and … | **6.0** | | | | | |
| 8. | ENTSO-E ERRP Planned Resource Schedule Document | NBS BRS for TSO/MO | **5.0** | | | | | |
| 9. | NEG ERRP Planned Resource Schedule Document | BRS for Schedules | | | | | | |
| 10. | ENTSO-E ERRP Resource Schedule Confirmation Report | BRS for Schedules | **No NEG version** | | | | | |
| 11. | ENTSO-E ESS Anomaly Report | BRS for Schedules | **No NEG version** | | | | | |
| 12. | ENTSO-E Outage document | BRS for Schedules | **No NEG version** | | | | | |
| 13. | NEG ESP Energy Account Report Document | NBS BRS | **1.0** | | | | | |
| 14. | ENTSO-E ESS Confirmation Report | NBS BRS | **4.1** | | | | | |
| 15. | ENTSO-E ESS Schedule Document | a) NBS BRS<br>b) NBS BRS for TSO/MO | **4.1** | | | | | |
| 16. | ebIX® Aggregated Data per MGA for Settlement for Settlement Responsible | NBS BRS | **2013pA** | | | | | |
| 17. | ebIX® Aggregated Data per Neighbouring Grid for Settlement for Settlement Responsible | NBS BRS | **2013pA** | | | | | |
| 18. | ebIX® NEG Confirmation of Aggregated Data per Neighbouring Grid for ISR | NBS BRS | **2013pA** | | | | | |
| 19. | ebIX® Validated Data for Settlement for Aggregator | NBS BRS | **2013pA** | | | | | |
| 20. | NEG ECAN Allocation Result Document | BRS for Trade | | | | | | |
| 21. | NEG Currency Exchange Rate Document | BRS for Trade | | | | | | |
| 22. | NEG Auction Specification | BRS for Trade | | | | | | |
| 23. | NEG Spot Market Bid Document | BRS for Trade | | | | | | |
| 24. | ENTSO-E ERRP Reserve Bid Document | BRS for Trade | | | | | | |
| 25. | ENTSO-E ERRP Activation Document | BRS for Operate | | | | | | |

[2] The NBS version 1.0 is using dateTimeType for Validity Start/End (error correction), while the MO version 1.0 is using dateType. dateTimeType will be used from version 2.0.