

<b>Minutes:</b> NMEG meeting <b>Date:</b> Thursday April 21 <sup>st</sup> , 2022 <b>Time:</b> 10:00 – 12:00 <b>Place:</b> GoToMeeting May 20 <sup>th</sup> , 2022	 Nordic Market Expert Group
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**Present (NMEG):** Antti, eSett, FI  
Christian, Energinet  
Jan (DK), Energinet  
Jan (SE), Svenska kraftnät (first day)  
Jon-Egil, Statnett (Convenor)  
Miika, Fingrid  
Ove, Edisys (Secretary)  
Tage, Energinet  
Teemu, Fingrid

**To (NMEG):** Anne Stine, Elhub  
Christian, Energinet  
Jan (DK), Energinet  
Jan (SE), Svenska kraftnät  
Jon-Egil, Statnett (Convenor)  
Miika, Fingrid  
Ove, Edisys (Secretary)  
Tage, Energinet  
Teemu, Fingrid

**CC:** Audun, Elhub  
Bent Atle, Statnett (NBM)  
Fedder, Energinet  
Fredrik Södö, Fingrid  
Hans Erik, Elhub

**To (Invited guests):** Antti, eSett, FI  
Tommy, eSett, FI  
Tuomas L, eSett, FI  
Tuomas P, eSett, FI

**Appendix A:** MR NMEG 2022/197 – Swedish Asset Types - mFRR bids/Flexibility platforms  
**Appendix B:** Possible new Asset Types used in Denmark  
**Appendix C:** Bidding Zone vs Scheduling Area  
**Appendix D:** Overview of Nordic memberships in international standardisation bodies  
**Appendix E:** Danish Datahub: Cardinality of billing master data in RSM-030 and RSM-031  
**Appendix F:** Overview of the usage of xml-schemas in the Nordic countries  
**Attachment:** None

## 1 Approval of agenda

The meeting planned on Wednesday April 20<sup>th</sup> was cancelled because Jon-Egil had to give priority to wage negotiations at Statnett,

The agenda was approved with the following additions:

- Request from ebIX®/EBG related to MR NMEG 2020/1, see item 7.1.
- MR for rename of Process Type **A58**, see item 8.1.

- New Message Type code for “Netted need”, see item 9.13.
- MR to WG 16 for new “inclusiveBidIdentification”, see item 17.1 under AOB
- New code for the Nordic synchronous area, see item 17.2 under AOB

Prioritised items:

- Item 6, Support to the NBM project – prioritised item.
- Item 9, Status and update of Nordic BRSs and other documents if needed

## 2 Approval of previous meeting minutes

The previous meeting minutes were approved after correction of some spelling errors from Jan (SE).

### **Action:**

- Ove will upload the approved minutes to [www.ediel.org](http://www.ediel.org).

## 3 Status from NEX (Nordic ECP/EDX Group)

**Background:** NIT has taken over the responsibility for NEX (Nordic ECP/EDX Group), former "ECP/EDX Centre of Excellence". However, the group is still below NMEG in the “formal hierarchy”. NMEG will be kept informed of progress in the group.

### **References (links):**

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

Miika informed that focus has been on making a centralised (common) Nordic on-boarding guide, based on support from NMEG (from previous meeting where NMEG agreed that we should have a common on-boarding guide).

## 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.

### *Ongoing task:*

- 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 Statnett’s eRoom

### 4.1 CNTC IG

Fedder has asked if NMEG can and will help the NORCAP project to create an implementation guide for the CNTC (Coordinated Net Transfer Capacity) process, including an information model that is consistent with the ESMP. However, we have not got any details from Fedder yet.

## 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 – prioritised item

**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.

*Pending list (to remember items):*

- NBM ACE OL documents and Measurement Value Market Documents will be added to the Nordic Operate BRS.
- NBM Capacity Market Documents will be added to the BRS for Determine Transfer Capacity.

Ove had as action updated the BRS for the Nordic Trading System and partly updated the BRS for Operate, based on the comments made during the review at previous meeting.

However, due to lack of time the item was postponed.

**Action:**

- Ove finalise the will addition of the “ACEOL\_MarketDocument” (a small Nordic document used for sending every 10 seconds) and the ACE OL Limits document (ESS document) to the BRS for Operate.

## 7 Status for MRs to ebIX®

**Background:** NMEG has sent several Maintenance Requests (MR) to ebIX and some of these have been postponed.

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

**What to decide, discuss or inform:** Status for MR to ETC and if needed making new MRs.

Due to lack of time the item was postponed.

### 7.1 Request from ebIX®/EBG related to MR NMEG 2020/1

NMEG is asked to re-review the MR NMEG 2020/1 (to ebIX®), e.g.:

- Rename the “Regulation Type” to “Technology Type” and rename the code Z07 to something else than “Consumption” (find a name that fits a Technology Type Code List).

- Rename the “Production Category” to “Metering Point Size” and maybe add a code for “Large” (in addition to the two existing “Normal” and “Minor”).
- Find a better solution for the Business Type Codes – It seems it should have been split into several code lists.

Due to lack of time the item was postponed.

## 8 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 CIM EG.

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

**What to decide, discuss or inform:** Review and update of statuses in NMEG MR Overview document.

Due to lack of time the item was postponed.

### 8.1 MR for rename of Process Type A58

Ove asked if we should send a MR for rename of Process Type **A58** to “mFRR capacity market”, which was agreed.

<b>A58</b>	Reserve option market	Processes related to the Reserve option market to assure that there are enough available reserves for the manual FRR market.
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**Action:**

- Ove will make a MR to CIM EG and forward it to Jon-Egil for submission to CIM EG.

Item closed.

## 9 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](http://www.ediel.org).

**References (links):** None.

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

### 9.1 BRS for Schedules: CIM version of Outage document

Due to lack of time the item was postponed.

### 9.2 ENTSO-E: Best practice for version numbering – prioritised item

Due to lack of time the item was postponed.

### 9.3 Review BRS for Schedules to see if changes are needed related to new flexibility projects – prioritised item

Due to lack of time the item was postponed.

### 9.4 Exchange of settlement information between the Nordic TSOs – prioritised item

**Background:** Svenska kraftnät is using an older ebIX® based xml document towards two TSOs and plan using a newer ebIX® and CIM based document towards a third TSO. The codes used for the two older xml exchanges are ebIX® codes, while the third TSO wants to use ENTSO-E codes.

An alternative is using the EAR (Energy Account Report) document, which among others is used between Energinet and TenneT and expect it to be used for the Viking-link.

**References (links):** None.

**What to decide, discuss or inform:** Assuming we (the Nordic countries) will use EAR (in a CIM version) for most of our exchanges of settlement information between the TSOs, can we agree upon some common codes and usages of that message, instead of having bilateral agreements? And since eSett also is using that message (a namespaced version of the ENTSO-E ESP Energy Account Report version 1.2) it would be relevant to get input from eSett regarding their possible updates and change to CIM.

Bilateral discussions between Denmark and Sweden have just started, perhaps that should be “part of” a more general Nordic discussion, and documentation, of how to exchange settlement information?

At the NMEG meeting in November, it was proposed to add an in\_Area and an out\_Area to the EAR document. Alternatively it may be an option using the ERRP Allocation Result Document.

Due to lack of time the item was postponed.

### 9.5 Discuss: Nordic view of how to handle different code lists – prioritised item

- How to combine code lists from ebIX®, ENTSO-E, UN/CEFACT etc.?
- How to harmonise between upstream and downstream?
- ...?

Jan (DK) had as action made a list over the code lists used in the Danish data hub where there is a mixture of several code lists, such as national (Danish), ebIX®, UN/CEFACT and/or ENTSO-E. The list was reviewed and the following comments were made:

#### Role codes:

DDK	Balance responsible party	Balance ansvarlig	<del>ebIX</del> -UN/CEFACT
DDM	Grid access provider	Netvirksomhed	<del>ebIX</del> -UN/CEFACT
DDQ	Energy Supplier	Elleverandør	<del>ebIX</del> -UN/CEFACT
DDX	Imbalance settlement responsible	Balanceafregningansvarlig	<del>ebIX</del> -UN/CEFACT
DDZ	Metering Point Administrator	Målepunkts administrator	<del>ebIX</del> -UN/CEFACT
DEA	Metered data aggregator	Måledata aggregator	<del>ebIX</del> -UN/CEFACT
EZ	System Operator	Systemansvarlig	<del>ebIX</del> -UN/CEFACT
MDR	Metered data responsible	Måledataansvarlig	<del>ebIX</del> -UN/CEFACT

STS	Energistyrelsen	Energistyrelsen	DK
DGL	Metering Data Administrator	Måledata administrator	DK

#### Document Name Code:

E67	Request regarding Cancellation	Notifikation om annullering	<del>DK</del> ebIX
E68	Response regarding Cancellation	Fejlrapport	<del>DK</del> ebIX
E78	Cancellation of notification	Annullering af notifikation	<del>DK</del> ebIX

#### Measurement codes:

AMP	Ampere	Ampere	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
H87	STK	Antal styk	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
		KiloVolt-Ampere	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
K3	kVArh	reactive hour	
KWH	kWh	Kilowatt-hour	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
KWT	kW	Kilowatt	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
MAW	MW	Megawatt	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
MWH	MWh	Megawatt-hour	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
TNE	Tonne	metric ton	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
		MegaVolt-Ampere	<del>ebIX</del> UN Recommendation 20 (UN Rec 20)
<del>Z03</del> MAR	MVAr	reactive power	
Z14	Danish Tariff code	KT Tarifkode	<del>ebIX</del> Ediel

#### Conclusion:

- On short term we must make sure that there are no overlapping codes between the codes used.
- The only long-term solution seems to be adding a code list responsible to all code lists.

#### Action:

- Jan (SE) and Ove will ask ETC to try convincing the CIM EG Retail market subgroup and WG16 that we need a code list responsible attribute together with to all code list attributes.

Item closed.

#### 9.6 MRs for Asset Types and correction of Weather Process IG – prioritised item

Ove had as action drafted three MRs that have been sent to Jon-Egil for submission to CIM EG:

- Made a MR for removing the term “Thermal” from the code “**B45** Thermal fuel cell” in the Asset Type List.
- Made a MR for renaming **B25** to “Permanent energy storage” (A permanent resource that stores energy. It could be gas, electricity, etc.)
- Made a MR for a new **Bnn** “Temporary energy storage” (A temporary resource that stores energy. It could be gas, electricity, car battery etc.)

And published the updated Nordic code list.

#### Action:

- Jan (DK) will investigate how **D03**, **D15**, **D17** and **D18** are used and come up with proposals for MRs see Appendix A/Appendix B

Jan (DK) is still investigating how **D03**, **D15**, **D17** and **D18** are used , hence this part of the item was postponed.

*9.7 Update of Weather prognosis IG - from Jan (SE)*

Due to lack of time the item was postponed.

*9.8 Swedish Asset Type codes for mFRR bids*

Due to lack of time the item was postponed.

*9.9 Review of NMEG code list*

Due to lack of time the item was postponed.

*9.10 Usage of Reason codes in NBS BRS for TSO-MO– prioritised item*

Due to lack of time the item was postponed.

*9.11 Bidding Zone vs Scheduling Area*

Due to lack of time the item was postponed.

*9.12 Rename of Market Balance Area to Bidding Zone or Scheduling Area (to remember item)*

Due to lack of time the item was postponed.

*9.13 New Message Type code for “Netted need”*

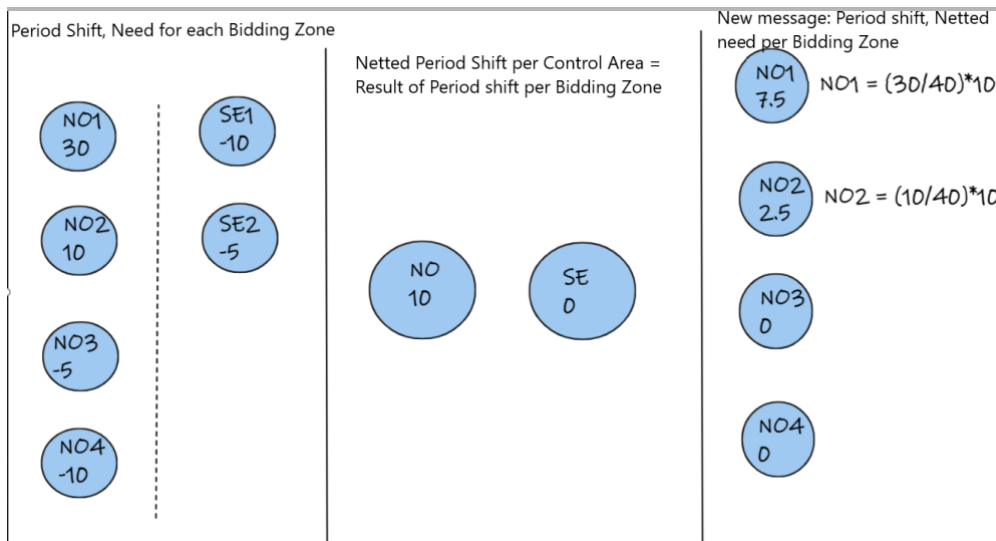
From Bent Atle:

Dear NMEG members,

Today we exchange Period Shift between Sweden and Norway. There is a need to also exchange result of netted Period Shift per Bidding Zone. This will minimize the need of activating bids.

We would like to have a Message Type: **ZXX- Netted Need**.

The process to find the absolute need/value of the Period shift for a Bidding Zone is tried explained below.



The Document Type code “**Z42** Netted need” is reserved.

Ove asked if a better name would be “Netted need for period-shift”? It was agreed that Ove will ask Bent Atle about the name and thereafter make publish the code as a Nordic code.

It was also noted that we are missing definitions of the two latest codes in the Document Type code list (“Production smoothing (applicable only in Norway)” and “Netted need”). Ove will ask Bent Atle also for proposals for these.

**Action:**

- Ove will ask Bent Atle for a definition of the Document Type codes “**Z41** Production smoothing (applicable only in Norway)” and “**Z42** Netted need” and ask if “Netted need for period-shift” is a better name for **Z42**.
- When definitions are found and eventually “**Z42** Netted need” is renamed to a more specific name, Ove will publish an updated Nordic Code List.

Item closed.

## 10 Status for Swedish Flexibility project

**Background:** Sweden has two ongoing “Flexibility projects” that now want to use CIM based messages for the exchanges to/from the flexibility platforms. Among others one called Stockholm flex where Vattenfall is candidate for making CIM documents for the project(s).

To keep document exchanges as harmonised as possible in the Nordic countries, NMEG has offered them NMEGs help in making the needed CIM based xml schemas.

**References (links):** None.

**What to decide, discuss or inform:** Status report from Jan (SE).

Due to lack of time the item was postponed.



## 11 CIM EG and ebIX® Area project

**Background:** The proposed project plan for an ebIX® and CIM EG Area project was approved by ebIX® Forum at the forum meeting November 17<sup>th</sup>, 2020. ebIX® also agreed to pay for a secretary in such a project.

In the autumn 2021, ebIX® decided to also invite EASEE-gas and ENTSG.

**References (links):**

**What to decide,**

**discuss or inform:** Status from CIM EG if they can approve a common ebIX® and CIM EG project.

Due to lack of time the item was postponed.

## 12 XML schemas

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

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](http://www.ediel.org).

**References (links):**

**What to decide,**

**discuss or inform:** Verify the list of proposals for new schemas and/or sets of schemas, from the NMEG participants, which should be published at [www.ediel.org](http://www.ediel.org).

Due to lack of time the item was postponed.

## 13 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 Christian, Jan (DK), Jan (SE), Teemu and Ove.

**References (links):**

**What to decide,**

**discuss or inform:** Status.

Status for looking into making CIM based document to replace the ebIX® XML documents used towards eSett today.

### 13.1 Status for “CIM EG measurement document” and inclusion of NBS requirements

Due to lack of time the item was postponed.

### 13.2 Report from NMEG CIM-XML Subgroup; Teams meeting March 24<sup>th</sup>, 2022

- Participants: Jan (DK), Jan (SE) and Ove.
- The issue described in Appendix E was discussed and the following conclusion was agreed:
  - In Request change billing master data and Notify billing master data:
    - Remove DateAndOrTime
    - ChargeType cardinality = [1..\*] (only in Request change billing master data)
    - Add in ChargeType effectiveDate [0..1] and terminationDate [0..1]

Jan (DK) will discuss internally we shall do this update.

- Jan (DK) also took up the question: When to use “timeInterval : ESMP\_DateTimeInterval” over other date formats?
  - It was noted that timeInterval always is used in a time series, while DateAdnOrTime is used when start and end date/time is used with a MktActivityRecord.

## 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.

Due to lack of time the item was postponed.

## 15 Information (if any)

Jan (SE) informed that he may be interested in being the ENTSO-E representative based on the “Call for nominations of experts for the new Task Force Data Interoperability and Access by 5 May 2022 EOD” from ENTSO-E. The ENSTO-E task force will cooperate with the EU DSO Entity “expert group data interoperability”.

Jon-Egil informed that also he might be nominated as an ENTSO-E representative from Statnett.

Teemu informed that also Fingrid is discussing if they will nominate someone.

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

NMEG scheduled face-to-face meetings<sup>1</sup>:

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<sup>1</sup> 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.

- Wednesday June 1<sup>st</sup> and Thursday June 2<sup>nd</sup>, Fingrid's offices in Helsinki.  
(Ove has booked room at Radisson Blu Plaza Hotel, Mikonkatu 23, Kluuvi, Helsinki)

## 17 AOB

### 17.1 MR to WG 16 for new "inclusiveBidIdentification"

Jon-Egil informed that NMEG MR 2022/199 (new attribute "inclusiveBidsIdentification" to the BidTimeSeries class) has been approved by CIM EG, hence we need to make a MR for WG16 for addition of the attribute in Basic CIM – IWC 62325/301.

#### **Action:**

- Ove will draft a NMEG MR to WG16.
- Thereafter Jan (SE) will submit the MR to WG16.

### 17.2 New code for the Nordic synchronous area

John-Egil informed that he needs a new code for the Nordic synchronous area i.e., the whole Nordic Market without DK1. Hence, Jon-Egil asked if anyone had any problems with it – And, since no-one had problems with it, Jon-Egil will submit a request for the new code.

Item closed.

## Appendix A MR NMEG 2022/197 – Swedish Asset Types - mFRR bids/Flexibility platforms

This is a proposal for resending of NMEG 2020/188.

The MR originates from different kinds of offers Svenska kraftnät will get in the mFRR bids sent from “Flexibility platforms” starting in December 2020 in Sweden. These can be separate into six different categories (in Swedish):

1. Aggregerad kommersiell värmelast (värmepumpar i kontorsbyggnader)
2. Aggregerade elfordonsladdare (främst kommersiella men även privata)
3. Aggregerade privata värmepumpar
4. Reservkraft
5. Kraftvärme
6. Kommersiell last (industri)

<b>Date of submission:</b>	<i>nn/nn/2022</i>
<b>Submittor Name:</b>	Jon-Egil Nordvik
<b>Organisation:</b>	Statnett on behalf of the Nordic TSOs (Energinet, Fingrid, Statnett and Svenska kraftnät)
<b>E-mail:</b>	<a href="mailto:jon-egil.nordvik@statnett.no">jon-egil.nordvik@statnett.no</a>

<b>Maintenance Request title:</b>	NMEG 2022/197		
<b>Impacted document/schema:</b>	ENTSO-E code list		
<b>Clause/Paragraph/Figure/Table:</b>	Asset Type code list		
<b>Description of issue:</b> (Business requirement, reason for request, documentation/schema change request or impact)			
Reserve bids in the Nordic mFRR market, from “Flexibility platforms”, are separated into six different categories:			
<ol style="list-style-type: none"><li>1. Aggregated commercial heat load (heat pumps in office buildings)</li><li>2. Aggregated electric vehicle chargers (mainly commercial but also private)</li><li>3. Aggregated private heat pumps</li><li>4. Reserve power</li><li>5. Cogeneration (Combined Heat and Power)</li><li>6. Commercial load (industry)</li></ol>			
Hence, new Asset Type codes are needed.			
<b>Proposed resolution:</b>			
<ol style="list-style-type: none"><li>1. Add the following Asset Type codes to the ENTSO-E code list.</li></ol>			
<b>ENTSO-E Code List change request</b>			
<b>Type of code</b>	<b>Code<sup>(2)</sup>:</b>	<b>Definition:</b>	<b>Description:</b>
Asset Type List		Aggregated commercial heat load	A resource using aggregated commercial heat load, including heat pumps in office buildings, for energy.
Asset Type List		Aggregated electric vehicle chargers	A resource using aggregated electric vehicle chargers, commercial and private, for energy.
Asset Type List		Aggregated private heat pumps	A resource using aggregated private heat pumps for energy.
Asset Type List		Reserve power	A resource using reserve power for energy.

<sup>2</sup> The “Code” field is to be completed in the case of modifications to existing codes.

Asset Type List		Cogeneration (Combined Heat and Power)	A resource using cogeneration, combined heat and power, for energy.
Asset Type List		Commercial load (industry)	A resource using commercial load (industry), for energy.

## Appendix B Possible new Asset Types used in Denmark

*The following Asset types are used in Denmark:*

Danish codes		ENTSO-E codes	
<b>D01</b>	Steam turbine with back-pressure mode	<b>B39</b>	Thermal steam turbine with back-pressure turbine (open cycle)
<b>D02</b>	Gas turbine	<b>B38</b>	Thermal combined cycle gas turbine with heat recovery
<b>D03</b>	Combined cycle		
<b>D04</b>	Combustion engine gas	<b>B04</b>	Fossil Gas
<b>D05</b>	Steam turbine with condensation / steam	<b>B40</b>	Thermal steam turbine with condensation turbine (closed cycle)
<b>D06</b>	Boiler	<b>B46</b>	Thermal steam engine
<b>D07</b>	Stirling engine	<b>B44</b>	Thermal Stirling engine
<b>D08</b>	Permanent connected electrical energy storage facilities		MR will be sent for renaming <b>B25</b> to "Permanent energy storage"
<b>D09</b>	Temporarily connected electrical energy storage facilities		MR for new code will be sent to CIM EG "Temporary energy storage"
<b>D10</b>	Fuel Cells	<b>B45</b>	Thermal fuel cell
<b>D11</b>	Photo voltaic cells	<b>B28</b>	Solar photovoltaic
<b>D12</b>	Wind turbines	<b>B30</b>	Wind unspecified
<b>D13</b>	Hydroelectric power	<b>B31</b>	Hydro-electric unspecified
<b>D14</b>	Wave power	<b>B34</b>	Marine wave
<b>D15</b>	Mixed production		
<b>D16</b>	Production with electrical energy storage facilities		
<b>D17</b>	Power-to-X		
<b>D18</b>	Regenerative demand facility		
<b>D19</b>	Combustion engine – diesel	<b>B06</b>	Fossil Oil
<b>D20</b>	Combustion engine - bio	<b>B01</b>	Biomass
<b>D99</b>	Unknown technology	<b>B20</b>	Other unspecified

## Appendix C Bidding Zone vs Scheduling Area

From Jan (SE):

In the past, we had a "Market Balance Area", then it was easier to know that our Nordic "prisområden", "budområden", "snittområden"... It was a Market Balance Area.

But:

With "Bidding Zone" and "Scheduling Area", my spontaneous opinion is that:

- a) What we in Swedish call "prisområden", "budområden", "snittområden", these are the areas for which you bid for the balance regulation (unless the whole country is the area), i.e. a "Bidding Zone". Or: if you send a bid for a "stasjonsgruppe", a "reglerobjekt", that object – even if it consists of several "stasjoner", can only be in a single "elområde": Bidding zone.

**From Jon-Egil:** In Norway, one "reglerobjekt" can reside in multiple Bidding Zones. It is indicated in the bid which area it belongs to.

- b) What we in Swedish call the "snittområde", these are the areas where the actors submit production and consumption plans (today "balansansvariga"), i.e. a "Scheduling Area" (a "planeringsområde"). Or: when you send a plan for a "stasjonsgruppe", a "reglerobjekt", that object – even if it consists of several "stasjoner", can only be in a single "snittområde": Scheduling Area.

**From Jon-Egil:** In Norway, one "reglerobjekt" can reside in multiple Bidding Zones. It is indicated in the plan which area it belongs to.

- c) If two actors trade energy with each other, then it does this in a "elområde", i.e. a "Bidding Zone" according to what I say under a). If they trade on the electricity exchange, well then it can be trading across "elområdesgränser".

**From Jon-Egil:** Correct.

How do these areas get into the settlement? And what would happen if we have different "Bidding Zone" and "Scheduling Area"?

The definition of the Scheduling Area in the Harmonised Electricity Market Role Model (HEMRM) is:

"An area within which the TSOs' obligations regarding scheduling apply due to operational or organisational needs.

This area consists of one or more Metering Grid Areas with common market rules for which the settlement responsible party carries out an imbalance settlement and which has the same price for imbalance."

This is the area with a single price for the "imbalance".

**From Jon-Egil:** In practice, the areas must probably be the same, the one must be a sum of the others or one must require that the "reglerobjektene" must only be inside the areas.

Then say that area "ABC" will no longer be both a Bidding Zone and a Scheduling Area, for example that we are introducing several new Scheduling Areas within a Bidding Zone. According to what I thought under c) above, two actors would still be able to trade within the same Bidding Zone without going to the power exchange. But there may be different prices for the imbalance as there are now several "planområden" within the "budområdet". What price from which area would be used for trading?

**From Jon-Egil:** As far as I remember, there should only be one imbalance price for one Bidding Zone.

**From Bent Atle:** It's another term that's being talked about here, **uncongested areas**. It will reflect the marginal price of one or more Bidding Zones.

**Definition from [Explanatory document \(entsoe.eu\)](http://entsoe.eu):**

*uncongested area:*

*means the widest area, constituted by bidding zones and/or LFC areas, where the exchange of balancing energy and the netting of demands is not restricted by the cross-border capacity limits calculated in accordance with the implementation frameworks for the exchange of balancing energy from replacement reserves, from frequency restoration reserves with manual and automatic activation as well as for the imbalance netting process.*

The definition of the Bidding Zone in HEMRM is:

“The largest geographical area within which market participants are able to exchange energy without capacity allocation.”

If in the future we redo our “elområden” so that the “Bidding Zone” is not (as today) the same as the “Scheduling Area”, what will it be like? Is what I said under a), b) and c) still valid? Or have I thought wrong? Before we introduced “elområden” in Sweden, we had four “snittområden” that were the areas where plans were submitted (= “Scheduling Area”), although on the other hand we did not have different prices in these four different areas...

Or is it the role model that needs to be updated?

Say that after an “elområdesöversyn” (Bidding Zone review), we in the Nordic region introduce several Bidding Zones per “planeringsområde” (Scheduling Area), then there would still be the same imbalance price in these particular Bidding Zones. That shouldn't be the case, should it? Or for what type of area should the settlement take place?

I also address these issues internally.

So far, bids for aFRR are submitted to Svenska kraftnät for the whole of Sweden, i.e. Sweden is a “budområde” (Bidding Zone). But not really a Bidding Zone because there are limitations in the grid. But I guess the aFRR bids going forward will be submitted per Bidding Zone?

**From Jon-Egil:** In Norway, Bidding Zone and Scheduling Area are the same geographic region, so they use the same code.

#### **Questions from Ove:**

- Should we explain the difference between Bidding Zones and Scheduling Areas in a Nordic document, such as in the introduction in relevant BRSs or in the “Ediel Common XML rules and recommendations”?
- And maybe introduce a dictionary somewhere?



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

Name	Member of
Anders (SE)	CGMES, ESMP
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, ESMP
Jon-Egil	NMEG, CIM EG, IEC/WG16, ESMP, CCC, CIO/LIO, TPC
Martin (SE)	CCC
Miika	CIM EG, NEX
Moustafa (SE)	CGMES
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

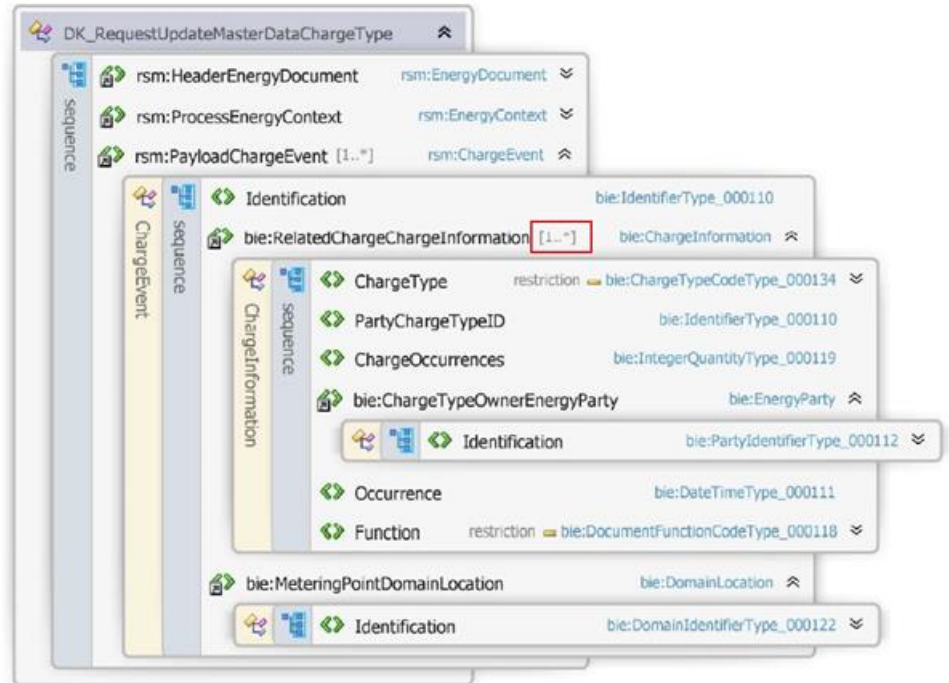
### Abbreviations:

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)
NEX	Nordic ECP/EDX Group
TPC	Transparency Platform Coordinators (subgroup under MIT)

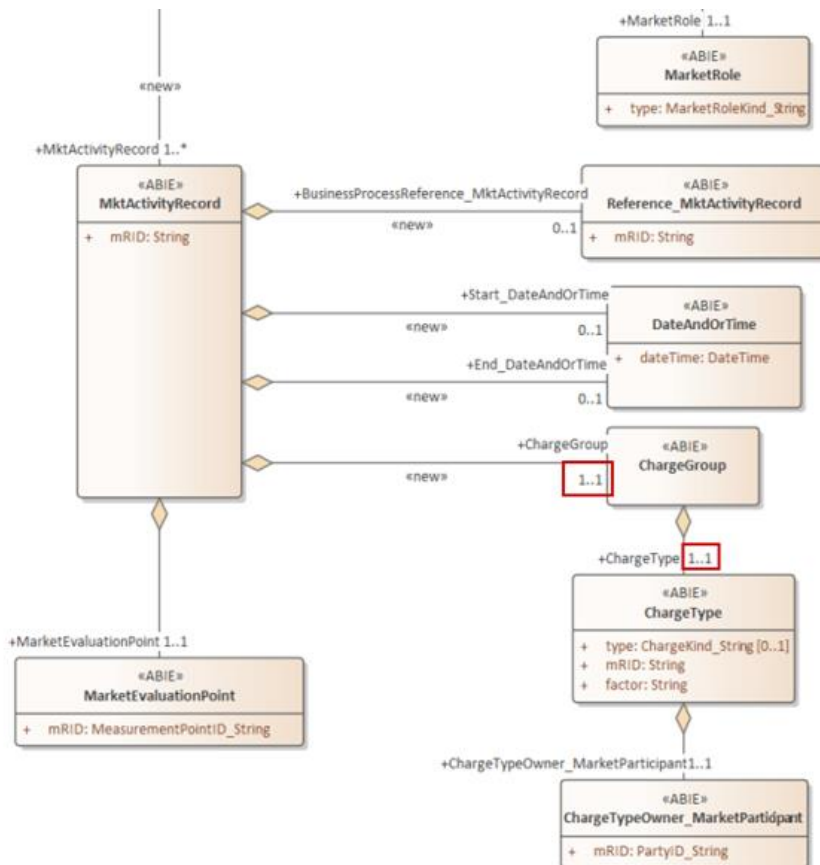
## Appendix E Danish Datahub: Cardinality of billing master data in RSM-030 and RSM-031

We are in the process of implementing billing master data (e.g., BRS-037) and has gone in depth with RSM-030 and RSM-031. In this regard, there is a detail in the new RSM-030 that we have not paid attention to and that provides a greater number of messages in our systems.

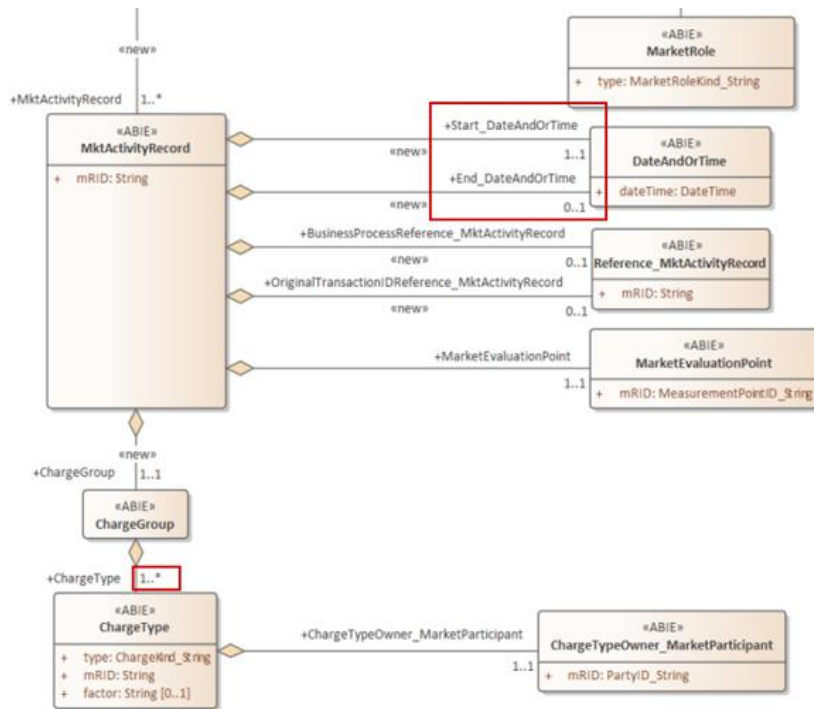
In the old RSM-030 in ebIX®, in a single message transaction (a ChargeEvent), we could send several different associations. So, we could send one message transaction, for example, removing C tariff and C subscription, and associating a B tariff and a B subscription instead.



In the new RSM-030 in CIM, we can only send a single association for each transaction (a MarketActivityRecord).



When DataHub sends RSM-031 to the actors, a little more has been opened so that more billing master data can be sent, but they must have the same start and end dates, as these dates are at the MarketActivityRecord level.

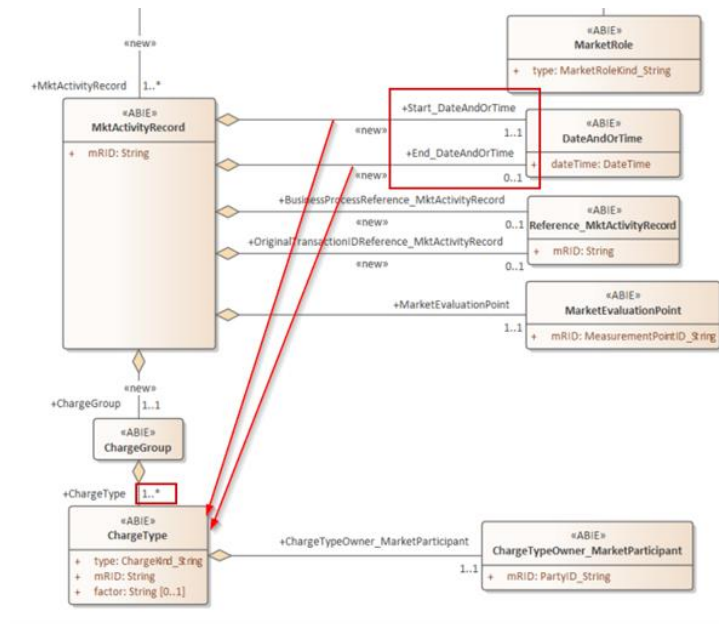


This means for us, and I think a lot of other, bigger changes as well. As a grid company, it is a lot more outgoing message transactions when we make changes, and as an electricity supplier, it is a lot more incoming message transactions. For example, in the event of a change of supplier, we get a message today with typically 6-7 price elements at the Metering Point. Going forward, it will be up to 6-7 separate MarketActivityRecords from DataHub (I'm well aware that in a message we can have multiple repetitions, by forming more MarketActivityRecords, but it is with us a MarketActivityRecords that constitutes a message, because that is the level where we define the Metering Point, the level RSM-009 is working at, etc.).

My question is, is there any way to adjust this, at this point, so that it's going to look more like ebIX®?

As I immediately see it, it could be solved by applying cardinality 1..\* to ChargeType in both RSM-030 and RSM-031, and by moving Start\_DateAndOrTime and End\_DateAndOrTime down under Charge Type, as illustrated below.

I would think that other players like us will see such a change as an advantage, and to the extent that it can be incorporated into the common standards and into DataHub 3.0, I think that would be a good idea.



## Appendix F 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					1.0, 7.0
2.	NEG ERRP Reserve Allocation Result Document	a) NBS BRS for TSO/MO b) BRS for Trade	1.0					1.0
3.	NEG Area Specification Document	a) NBS BRS for Master Data b) BRS for Trade	1.0 <sup>3</sup>	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					7.0 (not complete)
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					5.0
15.	ENTSO-E ESS Schedule Document	a) NBS BRS b) NBS BRS for TSO/MO	4.1					5.0
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						1.0

<sup>3</sup> 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.

25.	ENTSO-E ERRP Activation Document	BRS for Operate							5.0 (not complete)
26.	Capacity Market Document	???							7.1, 8.0