

<b>Minutes:</b> NMEG meeting <b>Date:</b> Tuesday November 23 <sup>rd</sup> <b>Time:</b> 09:00 – 16:00 <b>Place:</b> Statnett December 9 <sup>th</sup> , 2021	 Nordic Market Expert Group
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**To (NMEG):** 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  
Hans Erik, Elhub  
Minna, Fingrid

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

**Appendix A:** Overview of Nordic memberships in international standardisation bodies

**Appendix B:** Overview of the usage of xml-schemas in the Nordic countries



NMEG-input 23 nov  
2021.pptx

**Attachment:** , presentations for item 9.4, 9.5 and 10.

## 1 Approval of agenda

The agenda was approved with the following additions:

- Exchange of settlement information between the Nordic TSOs, see item 9.5.
- Are there any changes to the NBS-BRS related to eSett changes from November 1<sup>st</sup>?, see item 9.6.
- New codes for IG: mFRR energy activation market – BSP, see item 9.7.
- Usage of Reason codes in NBS BRS for TSO-MO, see item 9.8.
- What term to use for the new Danish Datahub 3.0 xml- and json-schemas? See item 14.2.
- Addition of “attribute order” when generating json-schemas for CimSyntaxGen, see item 14.3.
- Usage of decimal seconds, see item 18.1 under AOB.
- Nordic view of how to handle different code lists, see item 18.2 under AOB.

## 2 Approval of previous meeting minutes

The minutes from previous meeting were approved.

### 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 there is no big news from NEX, but among others the routing between brokers for NBM have been tested.

### 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 asks 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?

Nothing new – the item was postponed.

### 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.

*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;
- NBM “Reserve Bid Market Document (Plan mFRR Bid)” will be added to the BRS for schedules, the BRS for Nordic Trading System or elsewhere – to be decided.

Nothing new – the item was postponed.

This will be a prioritised item in Copenhagen in January.

### 6.1 Status for NBM discussion related to MR for a new attribute for the Run ID.

Nothing new – postponed.

This will be a prioritised item in Copenhagen in January.

## 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.

NMEG MR	Request	ebIX® status
NMEG 2020/1 (180)	Request for: 1) “Regulation Type” to identify the origin of the energy (thermal, wind, hydro and consumption) 2) “Production Category”, currently called Production Type (normal, minor) 3) Aggregation-criteria for “Type of metered data”, currently implemented as ENTSO-E Business Types (production, consumption, losses, ....) (The request originates from NBS)	Waiting for ebIX® RtR project to review BRS for Measure for Imbalance Settlement
NMEG 2021/2	1) Add a “Supply Start Date” to the AP Administrative Characteristics class in Alignment of AP characteristics BRS.	Waiting for EBG to review BRS for Alignment of

	2) Submit a MR to IEC/TC57/WG16 for addition of association from the MktActivityRecord class to the DateAndOrTime class. (The request originates from the Swedish data hub)	Accounting Point characteristics
NMEG 2021/3	1) Add a new attribute Reporting Resolution to the AP Administrative characteristics class. 2) Add a new attribute Reporting Interval to the AP Administrative characteristics class. (The request originates from the Swedish data hub)	Waiting for EBG to review BRS for Alignment of Accounting Point characteristics

Nothing new – 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.

Status from NMEG meeting October 12<sup>th</sup>:

- The addition of Asset Types from NMEG 2020/188 is still pending.

### **Action:**

- Jon-Egil will follow up request for new Asset Types from NMEG 2020/188 in CIM-EG.

## 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

Status for a request to the OPC group to agree on how to implement the CIM version of the Outage Document.

Jon-Egil informed that he has got no feedback, hence the item was postponed.

### 9.2 *ENTSO-E: Best practice for version numbering*

- A Status for “ENTSO-E Best practice for version numbering” as reviewed and agreed at NMEG meeting March 12<sup>th</sup>.
- B If approved by CIM EG: Review of text for the revisionNumber in the NMEG BRSs, to see if we are in line with the proposed “ENTSO-E Best practice for version numbering”.

Jon-Egil informed that he expects the item to be discussed at a physical CIM-EG meeting in January, which is the first face-to-face meeting since outbreak of COVID19.

### 9.3 *Usage of Document Codes in the Activation Market Document*

At a previous NMEG meeting August 26<sup>th</sup> it was proposed having the information “Faster than standard FAT” (Z37), “Faster than standard deactivation time” (Z38) and “Slower than standard FAT” (Z39) as Business Types instead of Document types in the Activation Market Document.

Jon-Egil has contacted MARI experts and ask for their support and the response were OK, i.e. we will make MRs to CIM EG for these Business types.

#### **Action:**

- Ove will make a MR and sent it to Jon-Egil for forwarding to CIM EG.

### 9.4 *Migration from DELFOR to ERRP schedule documents*

Svenska kraftnät need to update the DELFOR documents based on new requirements from the network codes. Hence Jan (SE) has asked if other countries has started the migration to CIM documents for the planning and forecasts?

Miika informed that production plans still are sent by DELFOR, however there is an ongoing harmonisation project.

Tage informed that all exchanges are based on cim documents.

Jan (SE) presented the status in Sweden, see attached presentation.

#### **Conclusion:**

- At the next meeting we will review the BRS for Schedules to see if we need to do some changes related to the schedules and new flexibility projects.

Item closed.

### 9.5 *Exchange of settlement information between the Nordic TSOs*

**Background:** Svenska kraftnät is using an older ebIX<sup>®</sup> based xml document towards two TSOs and plan using a newer ebIX<sup>®</sup> and CIM based document towards a third TSO. The codes used for the two older xml exchanges are ebIX<sup>®</sup> 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?

Jan informed:

- Instead of using MSCONS we plan to use Energy Account Document for some information – but we would not prefer using that “for everything”.
- We will send six time series related to monthly settlement:
  - Bought and sold “Balanskraft”, business type = A21, Unintended energy
  - Bought and sold “Effektkraft”, business type = A46, System Operator redispatching
  - Swedish losses, business type = A15, Losses
  - Danish losses, business type = A15, Losses
- But how should sold and bought be described?
  - There is no “in-” and “out-area” nor “in-” and “out-price.amount”, nor a “flowdirection”
  - The losses could work, we can specify area\_Domain = Sweden and area\_Domain = Denmark in two different timeseries
    - But what should then be specified in domain? The same area, or the other area? Or the Nordic area?
  - Is it “Out\_quantity” and “In\_Quantity” that should be used depending on direction? (In = we “Buy”, Out = we “Sell”?) Or is it the Area that should be used? (“My area + In\_quantity” = I buy; “Your area + In\_quantity” = I sell)

The best solution may be 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.

**Action:**

- All are asked to investigate the need in each country. The item will be added for further discussion at the next meeting.

## 9.6 Are there any changes to the NBS-BRS related to eSett changes from November 1<sup>st</sup>?

From Jan (SE):

In the NBS-BRS, <https://ediel.org/wp-content/uploads/2019/12/NBS-BRS-v2r2A-20191213-1.pdf>, I for instance find the Business types

- A17** Settlement deviation
- B14** Production deviation
- B15** Consumption deviation
- B29** MGA imbalance

Are still B14 / B15 used in the same way for the settlement period after November 1<sup>st</sup>? Or are there any changes? If so, this could then affect not only the NBS-BRS but also the tests that are done by the BRPs.

From Tuomas P:

I didn't see anyone else to reply to this yet.

Business Types **B14** and **B15** are no longer valid for dates after 1 November in any way. However, eSett needs to be able to provide data to BRPs from period before 1 November (upon request) still quite a while, so I wouldn't yet remove these from the BRS.

What comes to testing with BRPs, I think that it's no longer relevant to test **B14** and **B15** anymore.

From Jan (SE):

Thanks, then I will change the usage of the codes **B14** and **B15** to **A17** "Settlement deviation" in the tests done of the **A12** document type at the Swedish Ediel portal.

### **Conclusion:**

- **B14** and **B15** will be deprecated (not to be used for data valid after November 1<sup>st</sup> 2021) in next version of the BRS.

Item closed.

## 9.7 New codes for IG: mFRR energy activation market – BSP

This is an information item.

The following new Document type code is added to the Nordic code list:

- Z41** Production smoothing (applicable only in Norway)

The following new Market Product Type code is added to the Nordic code list:

- Z01** Standalone period shift product.

To be used only when period shift is not combined with standard mFRR product (A05 or A07). Applicable only to bids in Norway.

Associated multipart and exclusive bids must have the same value.

### **Action:**

- Ove will publish the updated code list.

Item closed.

### 9.8 Usage of Reason codes in NBS BRS for TSO-MO

Reporting trades to imbalance settlement responsible.

At the moment we are separating special regulation and balancing power with a reason code (in ERRP Reserve Allocation Result Document):

Z35 = FRR-M, Special Regulation

Z31 = FRR-M, Balancing Power

How to report direct activation in 15 min period when energy is split into two separate 15 min period (the first when activation was requested and the next one). E.g., the price might be different in those two periods.

There are reason codes for direct activation and scheduled activation, (Z58 + Z59) but we are already using those for separating Special Regulation/Balancing Power. Usage of Z58 and Z59 is not mentioned in:

<https://ediel.org/wp-content/uploads/2021/07/NBS-BRS-for-TSO-MO-v2r4H-20210702.pdf>

New codes scheduled/direct:

<https://ediel.org/wp-content/uploads/2021/10/NMEG-Code-List-Library-1r6C-20211012.pdf>

Can we e.g., use some document level codes, like document type / business type to separate Special Regulation and Balancing Power?

*From discussion:*

- The Reason codes Z58 and Z59 are currently missing in the Ediel ERRP Reserve Allocation Result Document. Further, the Reason class is restricted to [1] in the BRS. However, in the ENTSO-E version of the ERRP Reserve Allocation Result Document, the Reason class can be repeated.
- 

**Proposal from NMEG:**

- Adding **Z58** (Scheduled activation) and **Z59** (Direct activation) to the NBS BRS for TSO-MO and changing the cardinality for the association from the Time Series class to the Reason class to [0..\*].

*From Miika after the meeting:*

Why Special Regulation would be anything else than Direct Activation:

In many cases Special/system Regulations (**Z35**) can be scheduled since they are known early. In those cases, the activation is scheduled activation (**Z58**). If the special/system regulation need comes suddenly, then the activation will be direct activation (**Z59**)

Similarly Balancing power (**Z31**) can be direct activation (**Z59**) in case forecasted need for Balancing Power is not correct.

Is there perhaps some conflict here on how Special Regulation is used in different countries?



Please inform Miika if you have some comments on this – or would like a quick call help to make sure we are at the same page.

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).

*Jan (SE) informed:*

- Swedish Flexibility project – status.
  - All needed attributes are mapped (by consultants) to basic CIM.
  - However, not to IEC 62325-451-x-standards.
  - This week I am working with comments to the suggested mappings.
  - In general, I refer to ESMP, like using Point + Quantity and not Analog + AnalogValue.
  - But it is an interesting exercise, learning more about other parts of CIM.
- Flexibility mappings – some suggestions (under work)
  - For Reference line (“baseline”): use ESMP structure (and probably Planned Resource Schedule).
  - For Bids: use Reserve Bid Document.
  - For Trade (the matched Sell and Buy order): use Activation Document?
    - but that can’t tell the “seller” and the “buyer” quantity, and that can’t specify both the “gridNode” and the “assetPortfolio” – just the RegisteredResource. And in CIM there is a SchedulingCoordinator – but not in ESMP (will then be two MarketParticipants).
    - I will check the “ReserveAllocationResult” document.
- Flexibility mappings – what to do with the following?
  - Dispatch Notification (A notification to a seller that a traded volume is to be delivered):
    - may the “ReserveAllocationResult” document be used?
  - Metering (A measurement value of MW or MWh) – here they look at IEC 61968...
  - Flexibility Volume (The volume specified in a sell or buy order – the delivered volume) .
    - Looking now at the Energy account document; but there is no RegisteredResource.
  - Price (The price limit specified in a sell or buy order – the payment) – I looked at Publication document, but there you can’t specify a RegisteredResource  
Next step will be to look at the Energy account document.

Two relevant links:

<http://flexhub.energy/swagger/>  
<http://test.flexhub.no/swagger/>

## 11 Question from Svenska kraftnät via Alvaro (ENTSO-E)

**Background:** Alvaro has asked Jon-Egil for his wise advice on which kind of area Nicolas from Svenska kraftnät is referring in a question (should this be a kind of virtual bidding zone?):

*“We need to issue new codes for two areas but I’m not sure what kind of Area type (Balance Group, Bidding zone etc) to choose. The areas concern a bottleneck on the west coast of Sweden which consists of multiple lines going from north to south. We need to describe capacity in both south going and north going direction for this bottle neck in CIM Capacity\_MarketDocument. What kind of Area/Y type should we issue the code as?”*

At the NMEG meeting June 23<sup>rd</sup> it was suggested to be a “Cut area”, which is something smaller than a Bidding Zone (Scheduling Area) and bigger than a Metering Grid Area. Since a Cut Area is not an option for EIC codes, the best solution is probably to define it as a Bidding Zone.

**References (links):**

**What to decide, discuss or inform:** Status – what area type was finally chosen?

Jon-Egil informed that NOIS has started to create Swedish virtual Bidding Zones, such as SE3A.

Item closed.

## 12 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>. ebIX® also agreed to pay for a secretary in such a project.

**References (links):**

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

*Continued action:*

- Jon-Egil will investigate if CIM EG is interested in a common project with ebIX®.

## 13 XML schemas

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

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).

*Ongoing task:*

- All 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 added to Appendix B and be published at [www.ediel.org](http://www.ediel.org).
- Ove will update the table based on NBM documentation received from Bent Atle (NBM/Fifty), when the NMEG BRSs are updated with NBM documents.

## 14 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<sup>®</sup> 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<sup>®</sup> 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.

### 14.1 *Report from NMEG CIM-XML Subgroup; Teams meeting October 6<sup>th</sup>*

- Participants Christian, Jan (DK), Jan (SE) and Ove.
- There are some issues with CimSyntaxGen, i.e. when generating JSON schemas, the sequence is different from the sequence in the xml schemas.
- Jan (DK) asked what we shall call the “standard” the xml- and json-schemas is based on. Ove suggested using the term “Extended CIM/ESMP” or “Nordic extension to CIM/ESMP”, where ESMP = European Style Market Profile. The question will be raised at the next NMEG meeting in November.

**Action:**

- Ove will contact Zamiren (Andre and Jean-Luc) asking for a solution to the attribute order issue.

#### 14.2 What term to use for the new Danish Datahub 3.0 xml- and json-schemas?

What term shall we use for the “standard” the new Danish xml- and json-schemas is based on, such as: “Extended CIM/ESMP” or “Nordic extension to CIM/ESMP”?

The item was postponed.

#### 14.3 Addition of “attribute order” when generating json-schemas for CimSyntaxGen

In the Danish Datahub 3.0 project that is under development, the plan is to use CIM based xml documents internally in the Datahub. For the users of the Datahub, including all Danish grid companies and electricity suppliers, they will offer the possibility to choose between xml and json. Currently more than fifty CIM-messages have been generated as both xml and json schemas.

For the xml schemas we use the "attribute order" function to change the sequence of attributes according to the sequence we are used to from ENTSO-E documents, such as the ESS-documents. Since the "attribute order" function not is implemented for generation of json-schemas, the only option we see is using XMLspy to manually change the attribute order for json-schemas - i.e. after having generated the json-schemas using CimSyntaxGen.

There was a meeting Thursday November 18<sup>th</sup> where the issue was expected discussed. However, the item was not discussed. Currently we are awaiting an answer from Andre (Zamiren).

Item closed.

### 15 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.

Nothing discussed.

### 16 Information (if any)

The Danish DataHub 3.0 is planned launched in September 2022.

Jon-Egil informed:

- `measure_Unit.Name` will be renamed to `measurement_Unit.Name` in all ENTSO-E documents when new revisions are made available.
- The EIC codes of type A is currently used to identify substations, but will in the future also be used for topological nodes and grid elements belonging to substations.

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

NMEG scheduled GoToMeetings:

- Tuesday 11<sup>th</sup> and Wednesday 12<sup>th</sup> of January 2022, 10:00 - 12:00 and 13:00 – 15:00, both days.

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

- Wednesday 1<sup>st</sup> and Thursday 2<sup>nd</sup> of March 2022, Stockholm
- Wednesday 1<sup>st</sup> and Thursday 2<sup>nd</sup> of June 2022, Fingrid's offices in Helsinki

## 18 AOB

### 18.1 Usage of decimal seconds

From ISO 8601:

#### 5.3.1.3 Representation of decimal fractions

If necessary for a particular application a decimal fraction of hour, minute or second may be included. If a decimal fraction is included, lower order components (if any) shall be omitted and the decimal fraction shall be divided from the integer part by the decimal sign specified in ISO 31-0: i.e. the comma [,] or full stop [·]. Of these, the comma is the preferred sign. If the magnitude of the number is less than unity, the decimal sign shall be preceded by two zeros in accordance with 4.8.

The number of digits in the decimal fraction shall be determined by the interchange parties, dependent upon the application. The format shall be [hhmmss,ss], [hhmm,mm] or [hh,hh] as appropriate (hour minute second, hour minute and hour, respectively), with as many digits as necessary following the decimal sign. A decimal fraction shall have at least one digit. In the examples below it has been agreed to expand the smallest time element with one digit.

a) A specific hour, minute and second and a decimal fraction of the second

*Basic format:* hhmmss,ss EXAMPLE 232050,5

*Extended format:* hh:mm:ss,ss EXAMPLE 23:20:50,5

b) A specific hour and minute and a decimal fraction of the minute

*Basic format:* hhmm,mm EXAMPLE 2320,8

*Extended format:* hh:mm,mm EXAMPLE 23:20,8

c) A specific hour and a decimal fraction of the hour

*Basic format:* hh,hh EXAMPLE 23,3

*Extended format:* not applicable

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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.

NOTE 5.3.1.3 includes the definition of representations that have both reduced precision and a decimal fraction.

However, in XML and JSON a full stop must be used (comma is not allowed). It doesn't seem to be any limit to the number of decimals used.

**Action:**

- Ove will update the "Ediel Common XML rules and recommendations". We do not add any restrictions regarding number of decimals – it will be up to each implementation to decide.

Item closed.

*18.2 Nordic view of how to handle different code lists*

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

Due to lack of time, the item was postponed.

## Appendix A 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 B 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>2</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
25.	ENTSO-E ERRP Activation Document	BRS for Operate						5.0 (not complete)

<sup>2</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.



26.	Capacity Market Document	???							<b>7.1, 8.0</b>
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