Minutes Nordic TSO Market model project for data exchange **Date:** November, Tuesday 10th and Wednesday 11th **Time:** 9:30 - 17:30 and 9:00 – 16:00 **Place:** EdiSys, Oslo	**Nordel** **Nordic Ediel Group**
November 27th, 2009	

Participants: Jan Owe, SvK
Jari Hirvonen, Fingrid (day two)
Jon-Egil Nordvik (Convenor)
Mikael Kristensen, Energinet.dk
Ove Nesvik, EdiSys (Secretary)

To: Participants
Antti Niemi, Nord Pool Spot
Christian Hoang Huy Le, Statnett
Christian Odgaard, Energinet.dk
Heli Anttila, Fingrid
Roar Grindstrand, Statnett

CC: Jan-Olov Lundberg, SvK
Oscar Ludwigs, SvK
Tor Bjarne Heiberg, Statnett
Tor Åge Halvorsen, NordPool
Willem Karel D van der Meijden, Energinet.dk

Attachment: Presentation from Jan related to item 5.5, Agree on how to identify schedules

Microsoft Office
PowerPoint 97-2003 F

1 Approval of agenda
The agenda was approved with the following additions:
- Introduction to UMM, see new paragraph 4.3
- Review of Appendix B, Extract of the overall project plan
- CC document, see 8.1 under AOB

2 Approval of previous meeting minutes
The minutes from previous meeting were approved with the following comments:
- Questions to the HG were added to Appendix A, since the HG meetings currently are postponed.

The minutes will be sent to Energinet.dk for publication at www.ediel.org.

3 Resolve matters arising from latest NEG meeting October 7th
From the latest NEG meeting:

NEG position:
- NEG is positive to merge ebIX® and ENTSO-E, ref position paper from ebIX®
- NEG wants to use the two existing European standards from ebIX® and ENTSO-E and will work for merging the two standards in the future.
- NEG ask the project group to base the XML documents on the ENTSO-E standards and _not_ using NDR (UN/CEFACT XML Naming and Design Rules) as today.
- The objective of the Nordic TSO XML project should be to change the European standards and _not_ making a new regional standard.
- The name was proposed to be changed to Nordic implementation project of ENTSO-E standards. A name change will be discussed in the project group.

- The main deliverable from the Nordic TSO XML project will be
    - BRSs explaining the Nordic processes
    - Change requests to the ENTSO-E and ebIX® IGs
    - Proposals to ebIX and ENTSO-E when new processes and messages are needed
    - To come up with a XML standard that can be used in the Nordic energy market, based on European standards, i.e. ebIX® for the downstream market and ENTSO-E for the upstream market.

Consequences for the Nordic TSO XML project:
- XML will be based on the ENTSO-E XML schemas (if such XML schemas exist)
- Nordic XML schemas will _not_ be published, unless intermediate schemas while awaiting ENTSO-E approval.
- Differences between the Nordic project and ENTSO-E IGs must be documented as change requests to the ENTSO-E IGs.
- Main deliverables will be process descriptions and change requests to ENTSO-E.
- In other words, the Nordic TSO XML project will make BRSs, but _not_ RSMs.
- The published capacity schemas, based on NDR, will be renamed to a *show case* and kept on www.ediel.org.
- The Nordic TSO XML group have merged several ENTSO-E IGs into the BRSs. These have to be reviewed and maybe changed to be in line with the ENTSO-E split into IGs.
- The common rules and recommendations and CC document must be reviewed and changed according the two agreed standards to be used.

The Nordic TSO XML project is asked to make a business case note stating what the Nordic countries will achieve with the project. The note needs to be commonly understandable, _not_ technical. The document should include:
- the points above
- an overall project plan
- challenges, such as
    - ebIX is using UN/CEFACT standards
    - ENTSO-E is proprietary
    - The Nordic downstream market are using UN/CEFACT

For the codes for Code list responsible agency NEG suggest using ENTSO-E codes for ENTSO-E based documents and UN/CEFACT codes for ebIX® documents.

The following changes were agreed to the project documents:

BRS for *Determine transport capacity*	The published BRS will be renamed to a *show case* and kept on www.ediel.org
BRS for the *Nordic scheduling process*	Continued, but rewritten according to the new NEG position.
Core Component library	Simplified, i.e. only to keep track of change requests, code lists etc.
Nordic TSO common rules and recommendations	Kept as a supporting document to the BRSs
Nordic TSO Domain model	Kept as a supporting document to the BRSs
RSMs	The published capacity schemas, based on NDR, will be renamed to a *show case* and kept on www.ediel.org. No new schemas will be published in the near future.

The project scope on www.ediel.org was reviewed and will be changed, see Appendix C:

The proposal from NEG to change the name of the project to *Nordic implementation project of ENTSO-E standards* was discussed. However a new proposal was made, *Nordic TSO Market model project for data exchange*. Ove will send the proposal to NEG and ask for comments. Final name will be agreed on the next meeting in the project group.

The Nordic TSO XML merger and split of ENTSO-E IGs into Nordic BRSs based on the ebIX domain model split will be continued. For each document exchange the relevant ENTSO-E IG will be referenced.

A proposal for the *Business case* was reviewed and slightly modified. Ove will verify that the changes are consistent with the decisions on the meeting and distribute to NEG for comments.

Homework:
- Ove will rename the capacity documents to include the term "*show case*" and send these to Energinet.dk for update on www.ediel.org.
- Ove will send the changed text in Appendix C to Energinet.dk for update on www.ediel.org.
- Ove will verify that the changes to the *Business case* are consistent with the decisions on the meeting and distribute to NEG for comments.

4 Nordic TSO common rules and recommendations

4.1 Homework from previous meeting:
- Mikael will write some WS rules, to be agreed by mail.
  Status: A proposal was added to the document. It was noted that the operation name for submission of a message should specifically not be named SendMessage since this exact name is used as a reserved keyword in Microsoft BizTalk Server. If, and if so where, to put this recommendation will be decided later.

- Ove will send the *Common Nordic XML rules and recommendations* document to NEG for approval (after agreement on the WS chapter by mail).
  Status: The *Common Nordic XML rules and recommendations* must be completely reviewed after the decisions on the latest NEG meeting (see below).

- Ove will send the discussion topic related to CEFACT or ENTSO-E codes to NEG.
  Status: NEG proposed that the codes for *Code list responsible agency* NEG should be ENTSO-E codes for ENTSO-E documents and UN/CEFACT codes for ebIX® documents.

The Nordic TSO common rules and recommendations document was reviewed and updated, among others with a paragraph related to web services. The document will be sent on circulation for comments to NEG and a final approval (publication) will be done on the next project meeting.

A general change request should be sent to ENTSO-E asking:
- Remove the TimeIntervalType
- Create a DateTimeType with the format *YYYY-MM-DDTHH:MM:SSZ*
- Remove all period elements and replace these with a start and an end element
- Reason for the request:
  - "Purer concept"

- o Date/time period data type is not supported by w3c (XML), JAVA and .net
- o XML doesn't have the date/time period as a build in data type.
- o Not supported by CCTS and UN/CEFACT NDR
- o Simplification of interfaces for receiving/sending of electronic documents

4.2 **Review of new acknowledgement chapter**

The new acknowledgement chapter was reviewed and agreed.

4.3 **Introduction to UMM**

It was agreed to add an introduction to *UMM* in the *Nordic TSO common rules and recommendations*. Ove will make a proposal, about 3-5 pages.

Homework:
- Ove will add an introduction to *UMM* in the *Nordic TSO common rules and recommendations* and send the document on circulation for comments to NEG.
- Ove will make a proposal for a change request to ENTSO-E related to the TimeIntervalType

5 Scheduling process BRS (Business Requirements Specification)

5.1 **Homework from previous meetings:**

Finland and Norway should verify if the *Market schedule* sent from the *Balance responsible party* to *Imbalance settlement responsible* really is a part of the *Scheduling process* (or if it is a part of the *Trade process*). Note that the question relates to both the sequence diagram for market schedules in chapter 3.1 and the activity diagram in chapter 7.1.

The answer from Norway is that these are a part of the settlement process, i.e. input to the settlement process from the trade process, the latter not a part of the current project phases. Finland will come back with an answer later.

5.2 **Review of Business type Nnn and Tnn codes (in MagicDraw)**

The Business type codes were reviewed and all codes not starting with A or Z will be renamed to start with Z and number sequentially, starting with Z13. The BRS and RSM for transfer capacity will be updated accordingly.

Homework:
- Ove will update the Business type codes in MagicDraw, the BRS and RSM for the transfer capacity documents and the BRS for schedules.

5.3 **Review of document names**

In the Nordic BRSs and the ENTSO-E IGs different terms are used, e.g.:
- Market schedules vs Schedules
- Operational schedules vs Resource schedules
- Document, report and message

It was agreed to use the following rules within the Nordic documents:
- Always use document (not message) when applicable

- When referencing ENTSO-E document names, the ENTSO-E name will be used (e.g. message, report or document).
- We will use *Market schedules* and not *Schedules* when this is applicable
- We will use *Operational schedules* and not *Resource schedules* when this is applicable

5.4 Detailing of the business documents

Ove had looked in the UN/CEFACT code lists to see if there is a suitable code for the *International system operator*, without finding any. However the codes *Z01 (Party responsible for Meter reading)* and *Z02 (Balance responsible)* are currently used in the Nordic PRODAT IG. The code for *International system operator* was renumbered to Z03.

There are also a series of Znn codes defined earlier in the Ediel IGs (MSCONS, DELFOR, PRODAT…). Ove will as homework go through these and add the Z-codes to the MagicDraw model.

The scheduling process document (BRS) was reviewed with the following comments:
- The nominate capacity UseCase was removed, since it is only used towards countries outside the Nordic area.
- Arrow 6 in figure 6 was questioned. Are there exchanges of market schedules between the System operators? Jan noted that they are sending bilateral trade to Norway about bilateral trade between Sweden and Denmark, Finland and Norway.
- There are a reference to the Nordic Domain model (however non existing) in the BRS and there are a 2 page Domain model in the beginning of the document. It was agreed making a small Domain model document - Homework for Ove.

Filling of the tables showing the elements used to identify documents was continued and is expected finalised on next meeting.

The needed changes to ENTSO-E IGs were reviewed for the documents reviewed during the meeting. Ove will make change requests to ENTSO-E for these, which will be reviewed on the next meeting. Jon-Egil will in addition send a mail to Willem, Oscar and Tor, asking them to raise the question on the next ENTSO-E meeting; *when will the ENTSO-E IGs be updated using the term Document instead of Message as earlier agreed with ebIX?* An update should include both IGs and related XML schemas.

Homework:
- Ove will update the MagicDraw model with Z codes from the Ediel IGs and the Z03 for *International system operator*.
- All will verify if there are exchanges of market schedules between the System operators, ref arrow 6 in figure 6.
- Ove will make a proposal for a Domain model.
- Jon-Egil will review chapter "*3.1 Schedule system information flows*"
- Mikael will go through the *Confirmation Report* and hopefully come up with a better solution.
- Jon-Egil will send a mail to Willem, Oscar and Tor, asking ENTSO-E to change the term *Message* to *Document*.
- Ove will verify the Operational schedules class diagrams, if these are in line with the latest ERRP guide (v.3.0).

5.5 **Agree on how to identify schedules**

The presentation from Jan was reviewed:

- The Swedish way of implementing time series identification does not fit directly into the ENTSO-E IGs.
- However there are probably enough elements in the ENTSO-E documents to handle the Swedish requirements, except for the missing *Business Type Characteristics* (defined on the previous project meeting) and code values.
- It was also found missing documents (IGs) from ENTSO-E, such as price documents from Nord Pool.

The comments (see above) will need to be further analysed when we come to these processes.

6 Bid process

The bid process will be based on the ERRP guide v3.0. Ove will make the first draft of an *Operate BRS* for the next meeting, including:

- Bid document
  - Process described in the *Ediel model for the Nordic trading system*
  - The ERRP bid document will be extended with
    - Activation time
    - Resting time
    - Duration
    - Station group = Resource object (?)
- Activation document
  - Process described in the *Ediel model for the Nordic trading system*
- Allocation result document

7 Next meeting

- December Tuesday 15th and Wednesday 16th, SvK, 9:30 – 17:00 and 9:00 – 16:00
- January Tuesday 19th and Wednesday 20th, Helsinki, 9:00 – 17:00 and 9:00 – 16:00

8 AOB

8.1 **CC document**

The CC document will be put on hold (not updated or published) for the time being. The document may in the future be used for special Nordic needs, such as codes or CCs.

Appendix A   TO BE DISCUSSED AND AGREED (AND REMEMBERED)

1. Should the new principles for time series identification in Sweden influence this project?

2. Follow up on *Special rules related to NOIS*:
   - Reason codes have to be sent in a separate time series. The related quantities must always have a dummy value, but the value will be ignored by NOIS.

3. The Process area *Nominate capacity* (opposite to a schedule the nominations are referencing a contract) is suggested to be define in a separate document for the complete nomination process. A proposal for this new project activity will be forwarded to the next NEG SC.

4. Follow up on question to the HG on how to handle a *Quantity quality* (metered, estimated…) and "*no-value*" or "*nil*".

5. The operation name for submission of a message in WS should specifically not be named SendMessage since this exact name is used as a reserved keyword in Microsoft BizTalk Server. If, and if so where, to put this recommendation should be decided.

Appendix B EXTRACT OF THE OVERALL PROJECT PLAN

The following 5 phases have been identified in the *Nordic TSO Market model project for data exchange*:

Phase 1 (Finalised spring 2009), *Determine transfer capacity process*

Phase 2 (Started spring 2009), *Scheduling and Ancillary Services Process* covered by the ENTSO-E ESS and ERRP IGs
- operational and financial
- balancing and reserves
- In addition phase 2 may include (if needed):
  - A document containing common rules and recommendations, *including* detailing of a communication platform
  - *A docu*ment covering a common *Domain model* for the Nordic market.
  - Agree on how to identify schedules, i.e. can the TSO XML project base its identification principle on the new principles for time series identification in Sweden?
  - Preparation for implementation verification of schedules between the Nordic TSOs.

Phase 3 (Starting autumn 2009), Bid process,
- Bid to the Balance regulation market
- Activation messages
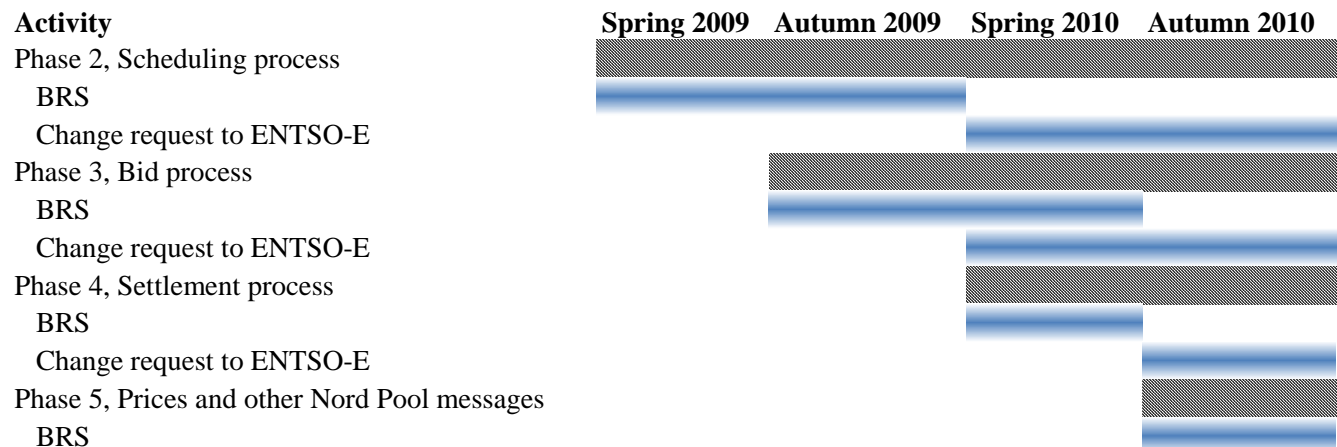- Bid process to the Spot market (dependent on NordPool)

Phase 4 (Starting spring 2010), Settlement process
- Metered data
- Settlement result, including prices

Phase 5 (autumn 2010), Prices from the balancing market and spot market, and other Nord Pool messages (dependent on Nord Pool)

The Customer switching (CuS) process is a potential additional phase, dependent on political decisions, i.e. a common Nordic end user market.

For each of the phases mentioned above, a BRS will be made for the relevant business process. The project group may chose to combine two or more business processes into one BRS, if this seems suitable. Change requests will be submitted for all identified differences between the Nordic processes and ENTSO-E/ebIX® standards.

Activity	Spring 2009	Autumn 2009	Spring 2010	Autumn 2010
Phase 2, Scheduling process				
BRS				
Change request to ENTSO-E				
Phase 3, Bid process				
BRS				
Change request to ENTSO-E				
Phase 4, Settlement process				
BRS				
Change request to ENTSO-E				
Phase 5, Prices and other Nord Pool messages				
BRS				

Appendix C   PROJECT SCOPE

Nordic TSO Market model project for data exchange

The scope of the *Nordic TSO Market model project for data exchange* is defining common Business Requirement Specifications (BRS) as outlined by UN/CEFACT, for the common message exchanges between the actors in the Nordic energy market. BRSs will describe the Business Requirement View of business process models based on the UN/CEFACT Modelling Methodology (UMM).

The justification for the project is today's message exchange between the Nordic TSOs, which is based on several different formats/standards, such as Ediel (DELFOR/MSCONS), NOIS XML messages based on ENTSO-E IGs and Excel documents. In addition the Nordic TSOs have communications towards other European countries, such as Germany, the Netherlands and Poland, using even more standards, such as NorNed xml and ENTSO-E standards.

The goal is to define common principles for all message exchanges, based on ENTSO-E implementation guides as far as suitable processes have been defined. In addition the present implementations and documentation from ebIX and Ediel will be taken into account.

In addition common rules and recommendations and a common Domain model for the Nordic market will be made.

Phase 1 of the project was started in February 2008 and a first version of a BRS and a RSM (show case) for the Determine transfer capacity process and the Acknowledgement process to be exchanged between the Nordic TSOs, are now available:

Link to
Nordic TSO Determine transfer capacity model, v1r0A

Downloads

BRS
(Business Requirement Specification)
for the Nordic TSO Determine transfer capacity model, v1r0A

Nordic TSO Determine transfer capacity model, v1r0A
.zip fil - 6,159 MB

Nordic TSO XML schemas v1r0A
.zip fil - 81 KB

Appendix D   ENTSO-E MAINTENANCE PROCEDURE

From the *ENTSO-E(ENTSO-E) Modelling Methodology*:

5.4   Maintenance procedure

5.4.1   Review committee
ENTSO-E is responsible for the review of the Implementation Guides.

TF 14 on behalf of ENTSO-E will perform the functions of the review committee as long as the group remains in existence. When the TF14 terminates its mission a common neutral body will be set up to continue this function.

The review committee may delegate the review functions, for one or more Implementation Guides to designated ad-hoc working groups of experts.

The Ad-hoc working groups will have a specific charter and TOR.

The review committee will call for experts after each set of request for changes are approved.

Other interested parties (market participants making use of the implementation guide i.e. non ENTSO-E members, trader associations, software providers, …) may establish a liaison with the review committee in order to follow the progression of maintenance requests that they initiate or to follow the evolution of the guides. The liaison members shall have no voting rights within the review committee. Their role is essentially informative and they may provide clarification to requests for which they are concerned.

The review committee will carry out the following tasks:

- Ensures that the maintenance procedures are respected.
- Posts all maintenance requests to the web site and ensures that they are duly processed within the announced timeframe.
- Provides justification for any maintenance request that has been rejected.
- Maintains all ENTSO-E approved code lists.
- Submits the approved requests to the ENTSO-E Task Force for implementation guide modification

5.4.2 Maintenance request
All maintenance requests shall be sent to "ENTSO-E Task Force 14 Electronic Data Interchange" via e-mail at the following address: edi@ENTSO-E-net.org.

The implementation guide maintenance procedure is transparent to both market players and software providers. All maintenance requests will be posted on the ENTSO-E EDI web site for a 30-day comment period.

After the comment period is closed the review committee shall examine the request bearing in mind the business practises that are currently operational throughout Europe.

The review committee's acceptance or rejection of the maintenance requests will be posted to the ENTSO-E EDI web site. The procedures established by the review committee determine the criteria for the acceptance or rejection of a maintenance request. The basic philosophy is through consensus. However where necessary an internal voting procedure will be identified in the procedures.

Once the review committee has accepted the maintenance request, an ad-hoc group will be formed to integrate the maintenance requests in a new version of the implementation guide concerned by the modification.

Maintenance requests involving code requests will immediately be implemented on their approval providing the implementation guide is not impacted by their addition.

5.4.3   Maintenance request form

A maintenance request to the ENTSO-E implementation guides can cover one of the following categories of modification or addition:

- The addition of new functionality.
- The modification of existing functionality
- Correction of text of an editorial nature
- Clarification of existing text
- The addition of new codes to lists within the document

A request may cover only one type of addition or modification. This is to enable an easy follow up of the maintenance requests and also to avoid the problem of the partial rejection of a multiple modification request.

A maintenance request is essentially a cover page containing all the essential information and in many cases this will be sufficient. However in the cases where additional functionality is requested or modifications of a complex nature additional documentation will be required. This additional documentation shall be attached to the maintenance request cover page. The additional documentation may, for example, be a complete electronic document such as a Microsoft Word document. In this case the first page of the document shall consist of the maintenance request form.

In the case of a code addition, the request has to provide the following:

- The UID or name of the element concerned,
- A detailed description of its purpose,
- The proposed name of the new code

In the case of a code modification, the request has to provide the following:

- The UID or name of the element concerned?
- The motivations for the change
- The modified information

Modifications to text, either corrections or additional explanatory text, shall identify the incriminated text as it exists in the guide and the proposed corrections or additions.

The addition of new functionality or the modification of existing functionality shall provide use case and information flow diagrams positioning the new or modified functionality. Detailed explanatory text must also be provided.

The standard maintenance request form in a Microsoft Word format may de downloaded from the ENTSO-E website (www.edi.ENTSO-E-net.org).

All maintenance requests have to be submitted by e-mail to edi@ENTSO-E-net.org.

ENTSO-E IMPLEMENTATION GUIDE MAINTENANCE REQUEST

Submittor identification		ENTSO-E identification	
Submittor name			
Submittor organisation			
E-mail address			

Implementation guide	

	Code request	
	Functional addition	
Nature of change	Functional modification	
	Correction of text	
	Clarification of text	

Request details: