Minutes: NEG Technical Committee

Date: Thursday June 1st 2017

Time: 09:00 –16:00

Place: Stockholm (Arlanda)

Nordic Ediel Group

June 19th, 2017

Present: Fedder Skovgaard, Energinet

Jan Owe, Svenska kraftnät

Jon-Egil Nordvik, Statnett (Convenor)

Mats Elmér, Svenska kraftnät Ove Nesvik, Edisys (Secretary)

To (NTC): Christian Odgaard, Energinet

Fedder Skovgaard, Energinet Jan Owe, Svenska kraftnät Jari Hirvonen, Fingrid

Jon-Egil Nordvik, Statnett (Convenor)

Kim Dahl, Statnett Minna Arffman, Fingrid

Ole Fredsø Weigelt, Energinet Ove Nesvik, Edisys (Secretary)

(NBS): Mats Elmér, Svenska kraftnät

Minnakaisa Ahonen, eSett Morten Hilger, Energinet Morten Torgalsbøen, Statnett

Niko Jauhiainen, eSett Pasi Lintunen, Fingrid Tuomas Lahti, eSett Anne Stine Hon, Statos

CC: Anne Stine Hop, Statnett

Oscar Ludwigs, Svenska kraftnät Tor Bjarne Heiberg, Statnett

Appendixes: Appendix A, "To remember list"

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

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re-activation UN

Attachment: CEFA

CEFACT Utilities proj., see Re-activation of UN/CEFACT Utilities project "Alignment of Master Data for Metering Point and of Measured Data", see item 17.2 under AOB

--- Combined NBS and Ordinary NTC---

1 Approval of agenda

The agenda was approved with the following additions:

• Request from Statnett (Svenska kraftnät) for ERRP Activation Document and «Operate BRS», see item 9.1

- New logo for Energinet, see item 17.1
- Re-activation of UN/CEFACT Utilities project "Alignment of Master Data for Metering Point and of Measured Data", see item 17.2
- Profiles for Energy consumption data ("My Energy Data"), see item 17.3
- Process type within "ECAN messages" see item 14.1 under AOB
- Nordic Energy Market Domain Model see item 19.1 under AOB

2 Approval of previous meeting minutes

The minutes from previous meeting were approved.

3 Status for update of NEG BRSs, UserGuides etc.

- 1) New layout, as agreed at the previous NTC meeting published April 9th
- Added a zip file "<u>Complete set of NEG XML schemas 20170510.zip</u>" with the latest version of all NEG xml schemas, including update to the latest ENTSO-E code list (version 48) – published April 10th
- 3) Updated BRS for Nordic Trading System published April 19th
- 4) Updated UserGuide for Acknowledgements published May 5th
- 5) Updated NEG Common rules and recommendations published May 5th
- 6) Updated NEG Code list library published April 19th
- 7) Updated NBS BRS published May 5th
- 8) Updated NBS BRS for TSO/MS published May 5th
- 9) Updated NBS BRS for Master Data published April 19th
- 10) Updated NBS UserGuide published May 5th
- 11) Updated NBS UserGuide for Master Data published May 5th
- 12) Updated complete set of NEG documents for NBS published May 5th

4 Status: Generic- and Specific Format

The link to the Generic- and Specific Format specifications was added to www.ediel.org, i.e.:

eSett communication guidelines and data packages, includes:

- Information on how to establish a connection to Basse imbalance settlement system.
- Full list of Data packages.
- WSDL examples related to Information Service and Messaging Service.
- Generic- and Specific Format specifications.

5 NBS BRS (and related UserGuide)

Ove had corrected the usage of the Boolean value "true" in the BRS. The value shall be written with lower case letters (case sensitive). The correction was published without 14 days of circulation for comments to NEG, since it was a "critical error correction".

During the creation of a complete set of NEG xml schemas, see item 10.1, Ove found an issue:

• In the complete set of NEG xml schemas we have a NEG version of the ESP document "urn-edielorg-neg-esp-energyaccountreportdocument-1-0.xsd", which is fully in line with the ENTSO-E version 1.2. The reason for calling it a NEG version is that there are no namespaced version of the ESP available at the ENTSO-E website.

Action:

• Ove will rename the name of the class diagram from "Energy Account Report Document, v1.2" to "NEG ESP Energy Account Report Document version 1.0".

5.1 Issue from CGI (Stefan Raunert)

We have had a long meeting on how to handle a certain detail regarding MGCO messages and need your expertise.

1. It says that both MGA1 and MGA2 will send exchange values but they can agree that only one DSO sends the information. How would the responding Delta reporting be if only MGA1 will send the information? Or, is this a misinterpretation / interpretation in the handbook?

Comment:

The description above is correct.

We see that when MGA1 sends its MGXI, it comes one MGCO to MGA2 where Energy is correct and the Delta value is the entire Energy amount, however negative because only one DSO reported.

Comment:

 The MGCO will be sent from eSett to both MGA1 and MGA2. The Delta will not necessarily be negative, but with opposite sign.

When MGA2 reports its exchange, which we still take from UTILTS, MGCO will now come with MGA2 as the reporting party in eSett's reporting. Then with the same Energy amount rereported from eSett but now with a correct Delta, i.e. 0, since both MGAs submitted an Energy to eSett.

Comment:

- The description above is correct.
- 2. About paragraph 1, we also wonder if we interpreted it right, when we say that UTILTS exchange between MGA1 and MGA2 will end? Then the question arises why Delta value is important?

Comment:

The UTILTS exchange will continue for exchange Metering Points (between the MGAs).
 The Delta value is a service from eSett to the DSOs to monitor differences in reported exchanges.

Because the MGCO eSett sends out when MGA1 has reported the exchange will be the only exchange information available to MGA2, the flow MGA2 uses will be the Energy that eSett reports and MGA2 sends back to eSett as MGXI, after which the Delta always becomes 0. Is there any use in this? (All of course, based on the UTILTS exchange between MGA1 and MGA2 ceases).

Comment:

 The reporting from MGA2 is not needed as long as there is no difference to what was reported from MGA1. The difference then against UTILTS management where MGA1 sent its values to both Svenska kraftnät and MGA2 is that it could occur that Svenska kraftnät or MGA2 did not get the values and then a diff occurred. That possibility should be eliminated if the exchange values for MGA2 only come via eSett's reporting in MGCO to MGA2.

Comment:

• The only difference is that the reporting earlier sent to Svenska kraftnät now will go to eSett and in a different format (xml instead of EDIFACT).

What we came up with the following preconditions:

- Both DSO must submit an exchange.
- UTILTS exchange between MGA1 and MGA2 ends.

Comment:

 No, it is enough if one DSO reports to eSett. And, no, the UTILTS exchange between MGA1 and MGA2 must continue, ref Swedish secondary regulation.

Please confirm if this preconditions can be considered correct.

 For the MGCO, that have MGA1 as the reporting party, we only take the Energy and discard the Delta. This energy is later used for MGA2 reporting of exchange in MGXI.

Comment:

 Correct, but the reporting from MGA2 is not needed unless there is a need for correction of the data from MGA1.

Our DSO MGA2 then receives a new MGCO from eSett where the reporting party is MGA2. From this we take Energy as a Matched value (what Mats Elmér called it when he and I spoke) i.e. a receipt of the reported Energy in the exchange.

Comment:

Correct.

We also take Delta value as an area difference ("områdesdiff"), since both MGAs have been included in the reporting and the value should then be correct 0.

Comment:

"Områdesdiff" is not a defined term. This is sometimes used as a difference between the Areas or as MGA Imbalance. At least, the Delta value is not necessarily an area difference ("Områdesbalans") (MGA imbalance is the sum of production, consumption and exchange, while the Delta only is a difference between reported MGA exchange). But if you refer to "diff angränsande nät", then the delta value is the same.

Of course, we take care of the **A08** file that arrives after 14 days where the Final Energy and Delta values are at their own Metering Points, where there are no interpretation problems.

Comment:

• The "Delta value" is also sent in the Final Confirmation Report (**A08**), for the area balance, but not for bilateral trade.

5.2 Pumping

Jon-Egil checked the sending of pumping and combined pumping/production to eSett from Statnett, and the agreed rules is that Statnett not is sending pure pumps and the combined is using signed values, so this is a pure Unicorn problem, although it could have been stated more explicitly in the IG.

Clarifying text was added to the BRS, including the following text related to the Quantity attribute "Business type "A07 Net production/ consumption" uses signed values, i.e. will be negative when pumping".

Action:

Mats will verify the added text ("Business type "A07 Net production/ consumption" uses signed values, i.e. will be negative when pumping"), before Ove send the BRS to NEG for 14 days and thereafter publish it.

6 NBS BRS for TSO/MO communication

6.1 Deletion of regulations (to remember item)

Action from earlier meeting:

 Mats will verify with Unicorn how to handle deletion of regulations (verify red text below), before Ove add the following text and publishes the document (the issue will probably not be given priority in the first version of Basse):

Business rules:

- All valid regulations for a period and Process Type (primary, secondary or tertiary regulations) must be sent in one document.
- If updates are sent, all valid regulations for the relevant period must be sent in the update-document (i.e. all still valid time series from the predecessor). An update-document shall always cover the same period as its predecessor. The latest received message will always replace the previous one. All regulations not part of the latest update-document shall be deleted.

Ove distributed a draft NBS BRS for TSO-MO to NTC May 15th, which includes the addition above.

Action:

• Ove will send the BRS to NEG for 14 days and thereafter publish it.

6.2 Comments from Nord Pool to NBS BRS for TSO/MO communication

Mats had as action from previous meeting verified the need for arrow 10 in figure 4 in the BRS for NBS; "OK. Remove.". Hence, Ove had update the BRS (removed "arrow 10").

7 NBS BRS for Master Data – if any issues

No issues.

8 BRS for Nordic Trading System – if any issues

Ove had as action from previous meeting sent the BRS on circulation for comments to NEG for 14 days and published it (addition of a Price Category to the NEG ERRP Reserve Allocation Result Document).

During the creation of a complete set of xml schemas, see item 10.1, Ove found some issues, which has been corrected:

- Textual corrections, such as:
 - Making Price category optional in attribute table for NEG ERRP Allocation Result document
 - Wrong version of NEG ERRP Allocation Result document, should be 1.1
 - o Corrected version of NEG Area Specification Document to v1.1 (not 2.0)

Action:

• Ove will send the BRS to NEG for 14 days and thereafter publish it.

9 BRS for Nordic Operational System – if any issues

The update of Process Types for "Reserve Allocation Result Document" was postponed until new codes are agreed within ENTSO-E, i.e.:

- Z01: Frequency activated reserves market (Z01/A28 is currently no valid)
- Z02: FRR-A market (Z01/A29 is currently no valid)
- Z03: Balance regulation market (Z01/A30 is currently no valid)
- Z04: Reserve option market
- Z05: Bilateral trade

9.1 Request from Statnett (Svenska kraftnät) for ERRP Activation Document and «Operate BRS»

In today's solution for electronic ordering, Statnett sends the bid-reference in the order when activating regulation market bids. However, the actors want also the bid price, since they don't necessarily have the Bid reference in their in-house applications. Further, it seems that Svenska kraftnät also needs other references, such as Duration, Resting Time Hence, new codes are needed for the ERRP Activation Document.

Property	Code	Representation	Example		
Budpris	S30	xsd:decimal	<pre><reason><reasoncode v="\$30"></reasoncode><reasontext v="123.45"></reasontext></reason></pre>		
Bid price	Z40	2 desimaler	Neason Neason Code v- 330 / Neason Text v- 123.43 / Neason		
Budvaluta Bid	\$31	xsd:NCNAME	<reason><reasoncode v="S31"></reasoncode><reasontext v="EUR"></reasontext></reason>		
currency	Z41	3 bokstaver			
Aktiveringstid	S32				
Activation	332 Z42	xsd:duration (minutes)	<reason><reasoncode v="\$32"></reasoncode><reasontext v="PT5M"></reasontext></reason>		
Duration	242				
Varighet	\$33	vedidiration (hours)	CDascan Coda v="C22" / CDascan Tout v="DT1H" / C/Dascan		
Duration	Z43	xsd:duration (hours)	<pre><reason><reasoncode v="S33"></reasoncode><reasontext v="PT1H"></reasontext></reason></pre>		
Hviletid	C24				
Resting	534	xsd:duration (minutes)	<reason><reasoncode v="\$34"></reasoncode><reasontext v="PT30M"></reasontext></reason>		
Duration	Z44				

Some comments from Ove:

- The ERRP Activation Document xml schemas has not been published;
- The «Operate BRS» needs update with the new codes required by Fifty;
- In the NEG ERRP Reserve Bid Document, in BRS for Trade, we use Minimum Duration and Maximum Duration Not Duration

Jon-Egil proposed to use the Reason Code "A95 Complementary information - Additional text is provided in order to further explain a condition, for example to provide details of an outage" instead of the Znn (Snn) codes proposed above. However, this may be a problem for Swedish Fifty users, who send bids as OUOTES document without a bid reference.

Conclusion:

 Reason code "A95 Complementary information" was added to the BRS together with Reason Text

Action:

- Ove will update the BRS, send to NEG for comments and publish it;
- Ove will publish the ENTSO-E ERRP Activation Document with the Nordic codes from the BRS.

10 XML schemas

10.1 NEG set of schemas

Action from previous meeting:

- Anti will verify if all three sets of NBS xml schemas are needed at www.ediel.org.
- Anti/Eveliina will verify if we can replace the current "auctionspecification**document**" with the latest version, in the NPS set of XML schemas. The changes are:
 - Update (correction) of urn-ediel-org-neg-masterdata-auctionspecificationdocument-1-1.xsd, where the text "document" is added to the namespace "auctionspecificationdocument" and "Capacity is removed from the root element "CapacityAuctionSpecificationDocument".
- 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 published at
 www.ediel.org.

There has not been any reaction from Nord Pool, hence we keep the current three versions of xml schemas at the web site. The two first action items above are then closed.

ERRP Activation document will be added to the NEG set of xml schemas. The action item will be kept.

Ove had made a common package of NEG xml schemas:

- Including the latest ENTSO-E code list, version 48
- Added local-extensions from xml schema package for NBS, MO and TSO to the new urn-entsoeeu-local-extension-types.xsd under core based on version 48.

An updated set of NEG schemas are shown in Appendix B.

Action:

- Ove will add "ERRP Activation document" to the NEG set of xml schemas.
- 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.

11 Status for NPS implementation of NEG Documents – if any issues

NPS has sent a request to Svenska kraftnät for going completely over to xml.

The item is closed and will be removed from future NTC agendas.

12 Addition of Metered Data Administrator to the Harmonised Role Model

Continued action from previous meeting:

• Jan, Jari, Jon-Egil and Ole are asked to forward the memo to their respective datahubs, asking for support to forward the MR to the HG.

13 BRS for schedules

The review of chapter 7 and the rest of the BRS continued close to the end of the meeting. The draft BRS can be downloaded from:

NTC working documents

Action:

- Jan and Fedder will check the dependency matrix for ESS schedule document and ESS confirmation report, chapter 7.1 and 7.3.
- Everyone will:
 - Verify the usage of Planned resource schedule, Production and consumption schedule, chapter 7.4
 - Verify tables marked "to be verified"
- Ove will correct missing links in the document

14 Status for MRs to ENTSO-E

Status for ENTSO-E/WG-EDI project related to ERRP (ancillary services) that will deal with not yet dealt with NEG MRs.

14.1 Process type within "ECAN messages"

Jan had considered an old list of "NTC MR" (dated April 2014) and found these wanted additions of Process Type (see below).

The problem is that Svenska kraftnät want this Process Type now in the Publication Document. But is it there? And will it be there in the next CIM version of the Publication document? Will this be handled in the new ECAN group that, I think, Jon-Egil will participate in? I.e. when can we expect updates?

And until then, should we guess how the (CIM) schema would look like?

2012/102	ECAN	Add a <i>Process Type</i> to	Awaiting	NEMM 20130527:
	Allocation	be used for specifying	ENTSO-E	Will be handled in a new
	Result	the relevant market		ECAN group
	Document			NEMM 20121218:
				MR will be sent

2012/106	6 EPD	Add a Process Type	Awaiting	NEMM 20130527:
	Publication	element for	ENTSO-E	Moved to new ECAN group
	Document	identifying different		NEMM 20121218:
		processes (e.g.		MR will be sent
		primary, secondary		
		and tertiary control		
		processes)		

It was noted that there are Nordic version of the ECAN Publication Document and the ECAN Allocation Result Document that includes Process Type.

Action:

Ove will make a list over unsolved change requests to ENTSO-E

15 Status www.ediel.org

Ove had as homework from previous meeting updated the NEG Common Documents page at www.ediel.org, as agreed at the previous NTC meeting. In addition, Nord Pool has been removed from the homepage.

16 Review of Appendix A, "To remember list"

Due to lack of time, the item was postponed.

17 Information (if any)

17.1 New logo for Energinet

Energinet.dk is now called Energinet (without .dk) and has got a new logo:

ENERGINET

17.2 Re-activation of UN/CEFACT Utilities project "Alignment of Master Data for Metering Point and of Measured Data"

Ove informed that ebIX® plan to re-activate the UN/CEFACT Utilities project "Alignment of Master Data for Metering Point and of Measured Data", see attached mail from Kees. It is not expected to be much work from ebIX® side on the project.

During this item Ove also informed that Belgium will migrate to Enterprise Architect, hence no longer use MagicDraw and TT.

17.3 Profiles for Energy consumption data ("My Energy Data")

Ove informed of a new IEC "NWI" (New Work Item Proposal). The scope of the proposed deliverable is:

"My Energy Data" (MED) is the term adopted as a generic description of services to offer customers (residential, municipalities, ...) the possibility of downloading their energy consumption information and granting access to third parties to that information to enable

service providers to offer analytical and other services to customers (residential, municipalities, ...).

Europe needs to define a standard to support the "My Energy Data" requirements.

The application domain of this work is limited to customers connected to Distribution System Operator (DSO) grids.

Proposed deliverable: an XML schema supporting "download my Energy consumption".

The project will be run with European Smart Grids Task Force Experts Group 1 of the European Commission and CEN-CENELEC-ETSI Smart Energy Grid Coordination Group, CLC TC13 as liaisons. The initiator is Eric Lambert, EDF Lab Paris-Saclay.

18 Next meeting

Thursday June 22nd 2017 from 12:30 to 14:30, Skype

CGMES 2.4.15 + GLSK/CRAC vs. CGMES 2.5 – An introduction will be prepared by Fedder

Monday August 21st, 09:30 – 15:30, Gardermoen

19 AOB

19.1 Nordic Energy Market Domain Model

Ove had updated the Nordic Energy Market Domain Model with the latest overall UseCases and corresponding text.

Action:

• The updated Nordic Energy Market Domain Model will be sent on circulation for comments to NEG for 14 days before publication.

19.2 CIM documents

To prepare a future using CIM based xml-schemas instead of ENTSO-E based schemas it was agreed to make a trial-version of a NEG CIM schema from one of the Nordic documents (NEG Area Specification Document, NEG Currency Exchange Rate Document etc.).

Appendix A "To remember list"

Item #	Item	Description	Status
1.	EMFIP Configuration Market Document	Within EMFIP there is a document called Configuration Market Document. NTC don't think that the document can be use for any master data in the foreseeable future. However, the topic should be kept in mind and we might get questions why we didn't use it. At a later stage, NEG might do some work to influence the European standards.	TBD
2.	Balancing Publication Implementation Guide	To be looked into	TBD

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

XML schema	BRS	Version used by		
AIVIL SCHEMA	BRS	NBS	MO	NEG ¹
NEG ECAN publication document	NBS BRS for NPS-TSO	1.0	1.0	1.1
NEG ERRP Reserve Allocation Result Document	NBS BRS for NPS-TSO	1.0		1.1
	BRS for Trade			
NEG ESP Energy Account Report Document	NBS BRS	1.0		1.0
NEG Area Specification Document	NBS BRS for Master Data	1.0 ²	1.0	1.1
	BRS for Trade			
NEG Bilateral Trade Structure Document	NBS BRS for Master Data	1.0		1.0
NEG Party Master Data Document	NBS BRS for Master Data	1.0		1.0
NEG Resource Object Master Data Document	NBS BRS for Master Data	1.1		1.1
ENTSO-E Acknowledgement Document	NEG Common XML rules and recommendations	6.0	6.0	6.0
ENTSO-E ERRP Planned Resource Schedule Document	NBS BRS for NPS-TSO	5.0		5.0
NEG ERRP Planned Resource Schedule Document	BRS for Schedules			1.0
ENTSO-E ERRP Resource Schedule Confirmation Report	BRS for Schedules	No N	No NEG version	
ENTSO-E ESS Confirmation Report	NBS BRS	4.1		4.1
	BRS for Schedules			
ENTSO-E ESS Schedule Document	NBS BRS	4.1	4.1	4.1
	NBS BRS for NPS-TSO			
	BRS for Schedules			
ENTSO-E ESS Anomaly Report	BRS for Schedules	No NEG version		sion
ebIX® Aggregated Data per MGA for Settlement for Settlement Responsible	NBS BRS	2013pA		2013pA
ebIX® Aggregated Data per Neighbouring Grid for Settlement for Settlement Responsible	NBS BRS	2013pA		2013pA
ebIX® NEG Confirmation of Aggregated Data per Neighbouring Grid for ISR	NBS BRS	2013pA		2013pA
ebIX® Validated Data for Settlement for Aggregator	NBS BRS	2013pA		2013pA
NEG ECAN Allocation Result Document	BRS for Trade		2.0	3.0
NEG Currency Exchange Rate Document	BRS for Trade		1.0	1.0
NEG Auction Specification	BRS for Trade		1.0	1.1
NEG Spot Market Bid Document	BRS for Trade		2.0	2.0
NEG ERRP Reserve Bid Document	BRS for Trade			1.0
ENTSO-E ERRP Reserve Bid Document	Primary Reserves Market Trade Schemas ³			5.0
ENTSO-E Outage document	BRS for Schedules	No N	IEG ver	sion

¹ Latest version

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

³ Part of the "Primary Reserves Market Trade Schemas package" published at <u>www.ediel.org</u> – not documented in any NEG documents