Memo: Differences in NBS implementations between the Nordic countries **To:** Those it may concern **From:** NEG	Nordic Ediel Group
February 4th, 2016	

Content

1 Introduction

NEG has asked NTC to make an overview of differences in the NBS implementations between the Nordic countries, including differences in time frames and code usage.

2 Differences regarding date and time

2.1 Deadline for reporting for Norwegian actors until Elhub is operative

The Norwegian regulation regarding deadline for reporting of consumption and production will be unchanged until the Elhub is operative, planned February 20th 2017. This means weekly reporting, three working days after the end of the settlement week and no intermediate reporting D+2. This option will work within the normal eSett settlement rules, but there will be some functionality not available for Norwegian users, such as some reports that not will be available.

Three working days after the end of the settlement week, the settlement is calculated as today:

- Final aggregated data for profile settled Metering points are sent to eSett
- Final aggregated data for hourly metered Metring Points are sent to eSett
- Final metered data for hourly metered production Metring Points are sent to eSett
- Aggregated data (time series with 168 observations) for profile settled Metering Points and hourly metered Metring Points can be downloaded from eSett by the suppliers

When Elhub is operative, the Norwegian reporting will follow the same rules as in Finland and Sweden.

2.2 Usage of time zones

The Nordic Imbalance Settlement Model will be operated in CEST (Central European daylight Saving Time). Finland reports using local time, EEST (East European daylight Saving Time), while Sweden most likely will be managed in Swedish Normal Time (pending on final approval of the secondary law). In Norway there will be no changes compared to the current situation.

The Nordic Imbalance Settlement Model utilises a combined Nordic calendar, which consolidates the public national holidays from all involved countries. The calendar will be taken into account in the terms of payment in settlement related invoicing. As an example, if a certain day is considered as a public holiday in Sweden, it will be considered as a

public holiday in all involved countries. Note that this not influences the deadline for reporting from the DSOs, 13 calendar days after the delivery day.

3 Difference in code usage

The usage of Coding schemas and Identifier schemes is found in Appendix A.

3.1 NEG (ebIX® based) Aggregated Data per MGA for Settlement Responsible (E31, E44)

The dependency matrix below shows types of aggregated metered data for Consumption metering points:

		Settlement method	Business type
Hourly metered consumption in a MGA	Total hourly metered consumption	**E02** Non Profiled	**A04** Consumption (general consumption)
	Large installation consumption	**E02** Non Profiled	**B28** Large installation consumption
	Pumped (**only in Norway**)	**E02** Non Profiled	**B27** Pumped
	Pumped storage (from combined generator/pump) (**only in Norway**)	**E02** Non Profiled	**A07** Net production/ consumption
	Interruptible (**only in Sweden**)	**E02** Non Profiled	**A72** Interruptible Consumption
	Production Units own consumption (**only used in Finland**)	**E02** Non Profiled	**B36** Production Units own consumption
Hourly profiled consumption in a MGA	Total profiled consumption	**E01** Profiled	**A04** Consumption (general consumption)
	Pumped (**only in Norway**)	**E01** Profiled	**B27** Pumped
Hourly losses in a MGA	Metered grid losses	**E02** Non Profiled	**A15** Losses
	Profiled grid losses	**E01** Profiled	**A15** Losses

3.2 ENTSO-E ERRP Planned resource schedule

The Subject Party (RE ID) and Subject Party Role ("**A12**, Balance supplier (Retailer)") reported from the TSOs to eSett, is only used in Finland.

3.3 NEG Party Master Data Document

Business type "**B36**, Production Units own consumption" is only used in Finland.

3.4 NEG Party Master Data Document

Reason Code "**Z38**, TSO Internal Countertrades" is only used in Finland.

4 Different process implementations

A) Bilateral trade reports are sent from Svenska kraftnät in Sweden (because of the matching process) and from the BRPs in Finland and Norway
B) Profiled consumption is sent from Svenska kraftnät in Sweden and from the DSOs in Finland and Norway
C) Reporting of production units – Small units, less than 1 MW, is reported as aggregated production per MGA and BS (RE) in Sweden. Production units less than 3 MW in Norway is settled as consumption imbalance.
    - Production imbalance:
        - < 1 MW, is aggregated in Sweden, using a virtual MP ID
        - >= 1 MW, is sent per MP in Sweden, using a production MP ID
        - >= 3 MW in Norway
        - >= 1 MVA in Finland
    - Consumption imbalance (The PU Type is set as ”MINOR”):
        - <3 MW in Norway
        - < 1 MVA in Finland
D) The Related Area is required for Generator Groups in NEG Resource Object (Production Unit) Master Data Document in Sweden

Appendix A Coding schemas and Identifier schemes

A code or identifier scheme is used to uniquely identify the responsible agency for the code or identifier of an object, such as a party, a domain (Metering Point, Area etc.), a product etc. In the Nordic countries objects are identified using one of two international schemes (GS1 or EIC), or by using a national scheme.

The following table shows how to convert between ebIX® and ENTSO-E Identifier schemes:

Identifier scheme	**ebIX®**		***ENTSO-E***
	Scheme Agency Identifier	*Scheme Identifier*	*Coding Scheme*
EIC	305	Not used	A01
GS1	9	Not used	A10
Danish national coding scheme	260	DK	NDK
Finnish national coding scheme	260	SLY	NFI
Norwegian national coding scheme	260	SM	NNO
Swedish national coding scheme	260	SVK	NSE

Table 1: *Usage of Coding Schemes in the Nordic countries*

The following table shows which schemes that are used for parties and a selection of domains in the Nordic countries:

	Denmark		**Finland**		**Norway**		**Sweden**	
	ebIX®	**ENTSO-E**	**ebIX®**	**ENTSO-E**	**ebIX®**	**ENTSO-E**	**ebIX®**	**ENTSO-E**
Parties	9 or 305	A10 or A01	260/SLY[1)]	NFI[1)]	9	A10	260/SVK[1)]	NSE[1)]
MGA	260/DK	NDK	260/SLY	NFI	305	A01	260/SVK	NSE
MBA	**305**	**A01**	305	A01	305	A01	305	A01
MP	9	A10	260/SLY	NFI	9	A10	9 or 89	A10 or NSE
RO	9	A10	260/SLY	NFI	260/SM	NNO	260/SVK	NSE

Table 2: *Usage of Coding Schemes in the Nordic countries*

1) For parties active in more than one country only one id, GS1 (9 or A10) or EIC (305 or A01), shall be used when communicating with eSett.

Abbreviations:

MGA Metering Grid Area
MBA Market Balance Area
MP Metering point

RO	Resource objects
ENTSO-E	European Network of Transmission System Operators for Electricity
ebIX®	European forum for energy Business Information eXchange
EIC	European Identification Code, issued by ENTSO-E
GS1	Issuing body of GS1 identification schemes

In ebIX® document the *list*- or *scheme Agency Identifier* can be:

9	GS1
305	ENTSO-E
260	ebIX®
89	DSOs own Metering Point ID in Sweden

For national *code Lists* or *identification Schemes* the *list Agency or scheme Agency Identifier* will be ebIX® (code 260) and, in addition, a *list Agency* or *scheme Identifier* that will identify the country:

DK	Danish Ediel group
SLY	Finnish Electricity Association
SM	Norwegian code list
SVK	Svenska kraftnät

In ENTSO-E documents the *list*- or *scheme Agency Identifier* can be:

GS1	A10
EIC	A01
Denmark	NDK
Finland	NFI
Norway	NNO
Sweden	NSE