Draft minutes: Harmonised Nordic Retail Market - Message format, content and interface project
Date: Tuesday December 10<sup>th</sup> and Wednesday December 11<sup>th</sup>, 2013
Time: 09:00 - 16:00 and 09:00 - 16:00
Place: Fingrid offices in Helsinki
December 12<sup>th</sup>, 2013



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	Nordic datahub	
Attachments:	combined billing -	See item 4.1, Homework from previous meeting
	New supplier	
	contacts DSO for ol	<sup>C</sup> See item 5.2, Review of chapter 1 in the BRS
Appendixes:	Appendix A	Assumptions and conclusions
	Appendix B	Content of the pre-switch checking process in the Nordic countries
	Appendix C	Proposal for harmonised address structure
	Appendix D	Comparison of NordREG Moving-report and ebIX <sup>®</sup> BRS for Customer Move



## **Useful links:**

Harmonised Model for Supplier Switching, NordREG, June 2013 Harmonised Model for Moving, NordREG, Report X/2013 ebIX® CuS BRSs (latest "draft documents") ebIX® Business Requirements for Measure Collected Data 2r0E ebIX® Business Requirements for Measure Determine Meter Read 2.0.B ebIX® Business Requirements for Measure for Reconciliation 2r0C ebIX® Business Requirements for Measure for Billing 2r0A http://www.norden.org/sv/aktuellt/nyheter/elmarkedet-i-norden-skal-styrkes http://www.norden.org/fi/ajankohtaista/uutiset/pohjoismaisia-saehkoemarkkinoita-vahvistetaan (Finnish version)

## 1 Approval of agenda

The agenda was approved

## 2 Approval of previous meeting minutes

The minutes from previous meeting were approved

## **3** Status for discussions in national reference groups

Norway had a telephone conference where questions from previous meeting were answered, the answers can be found in Appendix E.

The questions from previous meeting were reviewed and the following comments were made:

- All countries (Denmark, Finland, Norway and Sweden) agrees that there always should be two MPs when there are both production and consumption
- Acknowledgement of receipt (technical acknowledgements on syntax level):
  - All countries agrees that the language shall be English in error texts
  - Finland, Norway and Sweden would like to see a standardised structure of the error text, i.e. where the error occur (element or object), line number etc. In addition there should be a limited set of error codes grouping possible error situation.
  - Denmark want a more detailed list of error codes
- If errors occur on a business level, in a one-way notification pattern:
  - Finland, Norway and Sweden always want an acknowledgement of processing
  - Denmark is not sending acknowledgements today and will not like to see it in the future either
  - If two-way pattern, such as a request and response processes:
    - A negative or positive business document shall be used
    - If an acknowledgement of processing is need depends on the timeframe for responding to the request, i.e. to be specified in the process in the BRS
- Do we need to send both *Metering point address* and *Customer address* if the address is the same?
  - This does not seem as a relevant question, since the DSO is the master of the *MP address* and the Balance Supplier is the master of the *Customer address*.
  - Sweden proposed addition of new processes:
    - A Notify Customer information (e.g. *Customer address*) sent from the Balance Supplier (BS) to the DSO
    - A Request/response from the DSO to the BS, where the DSO can request Customer information
- Should it be separate fields for c/o-address and Attention?
  - Yes, as optional fields and only for addresses where a name (person or company) is relevant
- Should we split company name and private person name into two elements and split private person name into Given Name, Middle Name and Family Name
  - Norway and Sweden agrees to the split company name and private person name into two elements and split private person name into Given Name, Middle Name and Family Name:



- Denmark can't see the need for a split and thinks such a split is a huge job. Denmark will not agree to the proposal unless they have at least 3 to 5 years for a migration project
- All agrees that the Middle name must be optional
- We need the following address types:
  - o MP address
  - Customer Address
  - Invoicing Address
  - Optional Customer Contact Addresses, if different from Customer address, including type of contact code:
    - maintenance information
    - voting address in Denmark
    - e-mail
    - telephone
- The ebIX<sup>®</sup> BRS proposes the opposite process than the NordREG moving report UseCase 8, i.e. the Customer Move Out process is stopped and the Customer Move In process takes over the remaining actions from the Customer Move Out process, including move out for the requested move in date.
  - The ebIX<sup>®</sup> proposal was agreed by TF-BuP
- How to handle a MP without a Customer connected in a Harmonised Nordic Retail Market?
  - According to the minutes from the Steering group meeting we will assume the current situation where the DSO is responsible in Finland, Norway and Sweden, while Denmark has a Supplier of last resort
- For the time being the HNR project will assume national rules regarding number of customers in a MP, i.e. one customer in Norway and Sweden, Two customers in Denmark and an unlimited number of customers in Finland.

## Action:

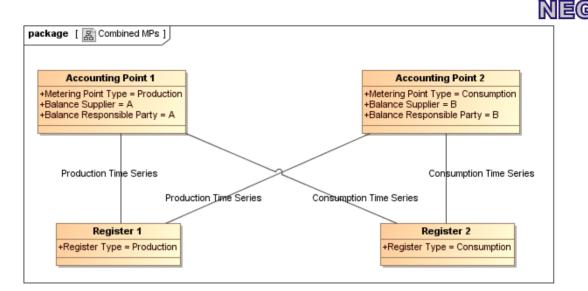
- Ove will make a proposal for the following new processes:
  - A Notify Customer information (e.g. *Customer address*) sent from the Balance Supplier (BS) to the DSO
  - $\circ$  A Request/response from the DSO to the BS, where the DSO can request Customer information

## 4 Continue with national additions and specialities in the "Business Entity View" in the BRS

## 4.1 *Homework* from previous meeting

Poul had as homework from previous meeting to verify the consequences for splitting a POD (Point Of Delivery) into two MPs if there are different suppliers for production and consumption in the POD:

- Poul gave a presentation (see attached PowerPoint presentation):
  - There are about 90.000 combined MPs in Denmark
  - To be able to handle regulations there is a need to have both the consumption and production data available and to make calculations based on both time series
  - In Denmark there may be two different suppliers for a combined MP, one for consumption and one for production
  - According to Danish law and the EU MID directive (Measuring Instruments Directive), both suppliers need the meter reading (meter stand) on start and end of a settlement period.
  - If these combined MPs are split into two MPs, new challenges occur, e.g. when a customer move, the move must be synchronised for the two MPs
- Thereafter possible technical solutions were discussed:
  - Preben proposed a solution, where the DataHub will calculate a netted time series based on time series for register 1 and register 2 (see below). Thereafter the consumption time series is sent to Balance Supplier B, while production series is sent to Balance Supplier A. In addition both suppliers will get the meter reading (meter stand) on start and end of a settlement period, from both registers.



- There will be two Accounting Point (Metering Points)
- Both of these will get metered data from two registers, one registering consumption and one registering production

## Assumption:

- There will always be two Metering Points (Accounting Points) if there are both consumption and production in an installation, which will work independent of the size of the consumption or production site
  - For Finland, Norway and Sweden:
    - If the Customer wants netted settlement from a combined MP, there can only be one Balance Supplier for the two MPs
    - If the Customer wants two suppliers, the settlement for production and consumption must be separated

## 4.2 How can we harmonise the pre-switch checking process

The ebIX<sup>®</sup> process: can be found at <u>Upfront request for Metering Point Characteristics</u>, see also Appendix B.

At the Steering group meeting in November, the TF-BuP Input team agreed to give first priority to UseCases for Change of Supplier, including Pre-switch checking. The pre-switch checking process was postponed until we have a result from the TF-BuP Input team.

4.3 Review of Structuring element usage

Due to lack of time the item was postponed. The review of structuring element usage will be given priority at the next meeting.

4.4 *Review of Measure elements usage* Postponed due to lack of time

## 5 Review of "Business Requirements View" in the BRS

## 5.1 *Homework* from previous meeting

The homework of Jan Pedersen from previous meeting was postponed (Jan will verify if the word *can* in the sentence "*if impossible then an estimation can be used*" should be *shall* for the switch read).



## 5.2 Review of chapter 1 in the BRS

Ove had as homework from previous meeting updated the BRS according to the bullet points in previous minutes.

Markus had noted that the moving process in the BRS is incomplete since the notification to the customer's old supplier is missing in the move-in process and in the move-out process the customer contacts the old supplier (so two different contacts for the customer needed in this case according to the BRS). However, according to the NordREG's moving report the new supplier the customer has chosen also notifies the DSO from where the customer is moving out. Then the DSO notifies the old supplier of the customer (only one contact for the customer).

### Conclusion:

• The Move Out of the Old MP process will be added to the Move In process.

Jan made a presentation regarding the New Supplier sending the Move Out of the Old MP (attached). The process is currently implemented in Finland and the experiences are good. It is a customer friendly process. It was also noted that a power of attorney form the Customer is needed before the New Supplier can request a Move Out of the Old MP and that a special "Reason for Transaction Code" is needed, so that the DSO can distinguish between a Move Out from an existing Supplier and a Supplier for a New MP. A question will be made for the national groups, asking them to discuss the process.

## Homework:

- Ove will:
  - o Add a chapter describing cancellations
  - Update the BRS with comments made during the review
  - Add a paragraph in the introduction, that the BRS concentrate on the Harmonised Nordic Retail Market, which consist of the actors and processes above the DSO or a datahub.
- Markus will make a presentation of how the Move Out process from the MP the Customer Moves Out of, sent by the New Supplier of the MP where the Customer Move In, works in Finland and distribute it before New Year.

## 6 Finalise review of Moving-report

The last UseCases in appendixes in the Moving-Report was reviewed. It was noted that the TF-BuP Input team had changed UseCase 8 in the Moving-report according to the ebIX<sup>®</sup> process. The reset of the UseCases, i.e. from UseCase 9 was reviewed and Appendix D was updated.

#### Homework:

• Markus will investigate if UseCase 14, from appendixes in the NordREG Moving-Report, has any influence on the message exchange.

## 7 Technical alignments

Postponed due to lack of time

## 8 Discussion (brainstorming): Requirements for communication means and formats

Postponed due to lack of time

## 9 Resolve matters arising from Steering group and Coordination group meetings, November 27<sup>th</sup>

The action items and assumptions from the steering group meeting was reviewed:

Action Status
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NEG
The TF-BuP Input team has changed UseCase 8 in
the Moving-report according to the ebIX <sup>®</sup> process
This is an action item for NordREG
This is an action item for TF-BuP Input team
otion
The HNR project will assume the current national
way of doing it
$\checkmark$ For the time being the HNR project will assume
national rules, i.e. one customer in Norway and
Sweden, Two customers in Denmark and an
unlimited number of customers in Finland.
✓ In addition NordREG was asked to look into the
question.

The following items from the Coordination group meeting was presented:

- It was noted that there is a need for a continuation of the technical project after March 2014 and that the stakeholders, such as DSOs, Suppliers, BRPs etc., should be more involved. Among others there is a need for:
  - o A Nordic technical handbook
  - Maintenance of documents, such as xml-schemas
  - Coordination of the national implementations

The topic will be addressed by NordREG

• It was also noted that there is a need for a public consultation after the finalisation of the BRS. This is however not included in the project plan and the consultation should be organised by NordREG.

#### Action:

The HNR project (with a NEG approval) was asked to discuss how to continue with technical aspects after March 2014, while TF-BuP was asked to do a similar job related to business processes and business rules.

## **10** Prepare questions for national reference groups (PowerPoint presentation)

A set of questions for the national groups were agreed (attached)

## 11 Review of HNR web page under www.ediel.org

Ove informed that a web page related to the HNR project now is available at www.ediel.org, containing:

- Approved minutes
  - Questions for national groups
  - Project plan

NEG



## 12 Next meetings

**January 2014:** Tuesday  $21^{\text{th}}$ , 09:00 - 17:00 and Wednesday  $22^{\text{nd}}$  09:00 - 15:00, Fjordkraft, Bergen **March 2014:** Wednesday  $5^{\text{th}}$  09:00 - 17:00 and Thursday  $6^{\text{th}}$  09:00 - 15:00, SvK, Stockholm

13 AOB

No items.



# Appendix A Assumptions and conclusions

Area/Item	Assumption or conclusion	Date
BRS	• We will try to avoid national specialities in the final BRS, there will however be some differences	20130827
	• Identifiers used may differ (e.g. Customer ID may be Social Security Number or Date of birth)	20130827
	• The change of supplier process will include change of suppliers connected to a Production Metering Point	20130827
	• We will assume that an installation with both production and consumption will have two MPs (two IDs)	20131112
	<ul> <li>For Finland, Norway and Sweden:         <ul> <li>If the Customer wants netted settlement from a combined MP, there can only be one Balance Supplier for the two MPs</li> <li>If the Customer wants two suppliers, the settlement for production and consumption must be separated</li> </ul> </li> </ul>	20131211
	• The BRS is assuming a supplier centric model, as stated by NordREG	20130827
	• The document will assume combined billing, according to NordREG recommendations;	20130827
	"In line with previous recommendations the cost for electricity supply and the cost for the grid shall be combined in a single invoice and sent to the customer by the supplier"	
	• We continue using the term Metering Point (and not Accounting point), to avoid misunderstandings	20131112
	<ul> <li>The Harmonised Electricity Role Model from ebIX<sup>®</sup>, EFET and ENTSO-E will be used</li> <li>E.g. Metering Point Administrator will be the Datahub (if relevant), or else the DSO</li> </ul>	20130827
	• A meter reading connected to a switch shall be within +/- 5 days. The switch meter reading <i>can</i> be estimated if not on the exact day. The meter reading must be distributed to the Balance Supplier within 9 days after the switching day.	20131112
	• According to the minutes from the Steering group meeting November 2013 we will assume the current situation where the DSO is responsible for a MP without a Customer connected in Finland, Norway and Sweden, while Denmark has a Supplier of last resort	20131211
Syntax	• We assume that the syntax will be XML based on ebIX <sup>®</sup> and ENTSO-E standards, among others because of:	20130827
	<ul> <li>NBS will use a combination of ebIX<sup>®</sup> and ENTSO-E XML documents</li> </ul>	20130827
	• For the ENTSO-E documents there are no existing alternative based on EDIFACT syntax	20130827
	• The Danish Datahub have already implemented XML documents based on ebIX <sup>®</sup> and ENTSO-E standards	20130827
Date Time Formats	<ul> <li>In the exchanged document we will use UTC time in to avoid different time zones in "the Nordic market".</li> </ul>	20130827

The assumptions and conclusions below will be reviewed during the project.

		NEG
	• E.g. if a Norwegian supplier want to send a request for change of supplier to a Finnish DSO at midnight during summer:	20130827
	<ul> <li>The switch time in the document will be 21:00 (the day before)</li> </ul>	20130827
	<ul> <li>The Norwegian supplier system will display 23:00 (the day before)</li> </ul>	20130827
	<ul> <li>The Finnish DSO system will display 00:00 (on the switch day)</li> </ul>	20130827
	We will assume calendar days unless otherwise explicitly stated	
Acknow- ledgements	• We describe usage of the ENTSO-E acknowledgment document in the BRS for a Common Harmonised Nordic Retail Market processes.	20130827
	• Technical acknowledgement on a syntax level (similar to the CONTRL messages used in FI, NO and SE) will only be used for asynchronous communication, such as SMTP. For Web Services, technical acknowledgement on a syntax level is not needed, since the response will appear more or less immediately (as SOAP ack), as a part of the service.	20130827
	• We will add the possibility to use the ENTSO-E acknowledgement document on an "Object level", i.e. rename the Time Series Rejection class to Object Rejection	20130827
	<ul> <li>We will use NBS principles for acknowledgement of receipt (technical acknowledgements on syntax level)         <ul> <li>For synchronous WS:</li> <li>If error: Always sending SOAP ack</li> <li>If OK: no SOAP ack</li> <li>For asynchronous communication (MADES, SMTP)</li> <li>If error:                 <ul> <li>Always sending negative acknowledgement of receipt</li> <li>Only using one error code, "999", and specify the error so that the recipient of the acknowledgement can understand the error</li> <li>If OK: Never sending positive acknowledgement of receipt</li> <li>If OK: Never sending positive acknowledgement of receipt</li> <li>If OK: Never sending positive acknowledgement of receipt</li> <li>If errors occur on a business level in a one-way notification pattern, we will specify in the business process if an acknowledgement of processing shall be used. This apply for both negative and positive acknowledgements</li> </ul> </li> </ul> </li> </ul>	20131112
	<ul> <li>The language in error text shall be English</li> <li>Finland, Norway and Sweden would like to see a standardised structure of the error text, i.e. where the error occur (element or object), line number etc. In addition there should be a limited set of error codes grouping possible error situation.</li> <li>Denmark want a more detailed list of error codes</li> <li>If errors occur on a business level, in a one-way notification pattern: <ul> <li>Finland, Norway and Sweden always want an acknowledgement of processing</li> <li>Denmark is not sending acknowledgements today and will not like to see it in the future either</li> </ul> </li> <li>If two-way pattern, such as a request and response processes: <ul> <li>A negative or positive business document shall be used</li> <li>If an acknowledgement of processing is needed depends on the timeframe for responding to the request, i.e. to be specified in the process in the BRS</li> </ul> </li> </ul>	20131211



		RE6
Addresses	• The DSO is the master of the <i>MP address</i> and the Balance Supplier is the master of the <i>Customer address</i> .	20131211
	<ul> <li>There shall be separate fields for c/o-address and Attention, as optional fields and only for addresses where a name (person or company) is relevant (i.e. NOT for MP address)</li> <li>This BRS suggests a split of the names related into separate fields for company name and private person name and further on a split of private person name into Given Name, Middle Name and Family Name <ul> <li>To split the names as suggested a huge job for the actors and the actors should be given 3 to 5 years for the migration</li> <li>The Middle name will be optional</li> </ul> </li> <li>The following address types may be used: <ul> <li>MP address</li> <li>Customer Address</li> <li>Invoicing Address</li> <li>Optional Customer Contact Addresses, if different from Customer address, including type of contact code: <ul> <li>maintenance information</li> <li>voting address in Denmark</li> <li>e-mail</li> <li>telephone</li> </ul> </li> <li>This BRS assumes national rules regarding number of Customers in a Metering Point, i.e. one Customer in Norway and Sweden, Two Customers in Denmark and an unlimited number of Customers in Finland</li> </ul> </li> </ul>	20131211
Datahub	• The Datahub in Denmark will include combined billing from autumn 2014	20130827
	<ul> <li>There will be a first version of a Datahub in Norway (end of 2016), probably without combined billing, planned one year after start of a Common Harmonised Nordic Retail Market (end of 2015)</li> </ul>	20130827
	There are no decisions regarding Datahub in Finland or Sweden	20130827
Means of	Means of communication can be:	20131112
communi- cation	<ul> <li>MADES         <ul> <li>Requires that the four Nordic TSOs (or some other national or Nordic organisation) agree to run "MADES nodes"</li> <li>SMTP:                 <ul> <li>Currently used in Norway and Sweden</li> <li>As addition to existing FTP communication in Finland</li> <li>As addition to existing WS in Denmark</li> </ul> </li> </ul> </li> </ul>	



## Appendix B Content of the pre-switch checking process in the Nordic countries

#### **B.1** Norway; NUBIX pre-switch checking process

In Norway NUBIX is used in the pre-switch checking process. NUBIX is a system where all DSO's databases are connected to a central service hosted by Statnett (TSO). Suppliers can make requests against the central service via web-site <u>www.nubix.no</u> or via web-services. The requests are routed to the right DSO based on postal code. The main idea of NUBIX is to let new suppliers obtain and/or verify information about the customer and his metering point ID before starting the switching process. This can be done by three different requests:

- Request for private customers.
- Request for companies.
- Verify already known metering point ID.

The tables below lists request and response content for each request.

#### **B.1.1** Request for private customers:

Request
Customer first name
Customer middle name
Customer family name
Customer address
Date of birth
Flat/unit number
Postal code
City
Meter ID

All fields are optional except Postal Code. At least three fields must be filled in. Customer name fields are considered as one field. Wildcard search with three, four or five characters + an asterisk (\*) depending on field, are allowed.

Response.
Request status (Information found/not found etc.)
Grid owner
Customer Name
Date of birth
Meter ID
Address
Postal code
City
Metering point ID
Way of metering (hourly/automatic or manual
reading)
Description (free text)
Status of installation active/inactive
Date of last meter reading
Date for delivery obligation
Number of digits on meter
Grid owner.



## B.1.2 Request for companies:

Request
Customer name
Customer address
Organization number
Postal code
City
Meter ID

All fields are optional except Postal Code. At least three fields must be filled in. Wildcard search with three, four or five characters+ an asterisk (\*) depending on field, are allowed.

Response.
Request status (Information found/not found etc.)
Grid owner
Customer Name
Date of birth
Meter ID
Address
Postal code
City
Metering point ID
Way of metering (hourly/automatic or manual
reading)
Description (free text)
Status of installation active/inactive
Date of last meter reading
Date for delivery obligation
Number of digits on meter
Grid owner.

**B.1.3** Verify already known metering point ID.

Request
Date of birth
Organization number
Metering point ID
Postal code

Metering point ID and Postal code are mandatory.

Response.
Request status (Information found/not found etc.)
Date of birth or organization number
Address of metering point
Postal code
City
Metering point ID



Way of metering (hourly/automatic or manual reading) Description (free text) Status of installation active/inactive Date of last meter reading Date for delivery obligation Number of digits on meter Grid owner.



## **B.2** Swedish pre-switch checking information

PRODAT/Z01 (Request):
Metering Point ID
Start date
Metering Grid Area
Reference to authorisation
Transaction ID
Customer ID (Social security number or
Organisation number)
Customer Name and Address
PRODAT/Z02 (Response):
Metering Point ID
Metering Method
Metering Grid Area
Reference to requesting Transaction ID
Customer ID
Customer Name and Address
Metering Point Address

The Swedish pre-switch checking process is optional and not much used. All fields are mandatory and the output of the process is a verification of the information sent in, possible a correction of the address and name fields and the Metering Method. The alternative to using PRODAT/Z01 and Z02 is for the supplier to get a "power of attorney" from the customer and send this to the DSO (e.g. via mail) to get the Metering Point ID.



## **B.3** Finnish pre-switch checking information

In Finland there is a Metering point database, accessible on internet or via Web Service, where the suppliers can get the Metering Point ID. Input is:

Street name
House number
Post code
DSO name.



## **B.4** Danish pre-switch checking information

In Denmark the Metering Point ID can be obtained online from the Datahub. If the Metering Point ID is known a message based process can be used, where the Supplier sends in the Metering point ID and the result is:

### B.4.1 Master Data Metering point

Metering Point ID
Meter reading day
Type of meter reading
Meter reading frequency
Energy limit kW
Energy limit Ampere
Estimated annual consumption
Validity date
Hour data
Metering Point address
Type of Metering Point
Metering Gird Area ID
Connection status
Settlement method
Net settlement group

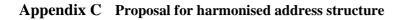
#### B.4.2 Master Data Meter

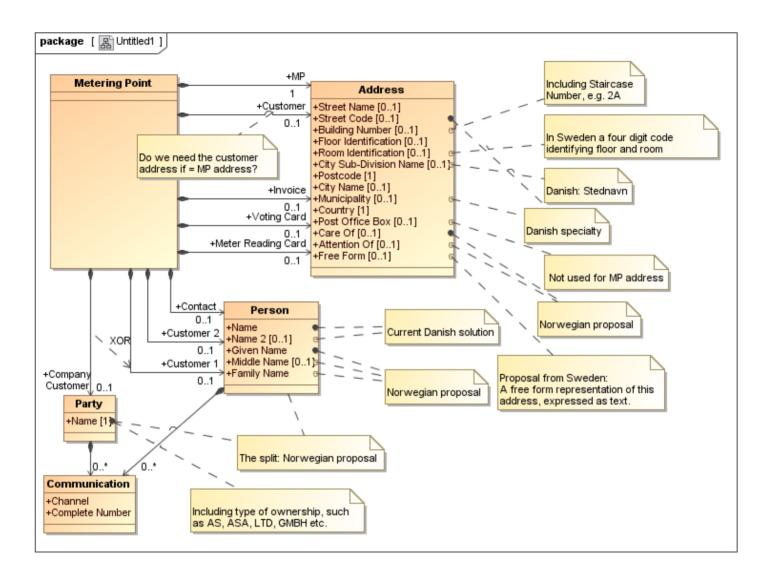
Metering Point ID
Meter number
Number of digits
Meter constant
Register ID (Tælleværksenhed)
Type of Register

## B.4.3 Master data Customer, Balance Supplier

Metering Point ID
Sector code from Danish Energy
Electricity heating (Boolean)
Electricity heating fee start date
Supplier of last resort Customer
Validity date
Customer name(s)









Appendix D	Comparison of NordREG Moving-report and ebIX <sup>®</sup> BRS for Customer Move
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NordREG UseCase	ebIX <sup>®</sup> Use Case	Comment
UC1: New customer only reports move in	Standard ebIX <sup>®</sup> Customer Move In UseCase, including the UseCases:	In Denmark there will be a Supplier of last resort connected to the MP if the Old
	Request Customer Move In	Customer has been moved out before the
(in this UC there is no	Notify Metering Point	Request Move In has been received. I.e. The
Customer linked to the MP	Characteristics	Supplier of last resort must be notified of the
when the Move In is	Determine Meter Read	Move In.
received)		
	Excluding the UseCase:	
	Notify Customer Move In	
UC2: New customer	Standard ebIX <sup>®</sup> Customer Move In	
reports move in, current	UseCase, including the UseCases:	
customer has not reported	Request Customer Move In	
move out	Notify Customer Move In	
	Notify Metering Point	
	Characteristics	
	Determine Meter Read	
UC3: New customer	Standard ebIX <sup>®</sup> Customer Move In	
reports move in, metering	UseCase, including the UseCases:	
site is disconnected	Request Customer Move In	
	Notify Customer Move In	
	Notify Metering Point	
	Characteristics	
	Determine Meter Read	
UC4: Move in on empty	Standard ebIX <sup>®</sup> Customer Move In	Time limits for move in date back in time must
site, not reported to anyone	UseCase, including the UseCases:	be decided nationally or by NordREG
	Request Customer Move In	
	Notify Customer Move In	
	• Notify Metering Point	
	Characteristics	
LICE. Customer reports	Determine Meter Read     Standard ebIX <sup>®</sup> Customer Move In	Time limits for move in date back in time must
UC5: Customer reports		
move in, ongoing new connection	UseCase, including the UseCases: • Request Customer Move In	be decided nationally or by NordREG
connection	<ul> <li>Nequest Customer Move In</li> <li>Notify Customer Move In</li> </ul>	
	<ul> <li>Notify Customer Move in</li> <li>Notify Metering Point</li> </ul>	
	Characteristics	
	Determine Meter Read	
<b>UC6:</b> Retroactive move	Standard ebIX <sup>®</sup> Customer Move In	Time limits for move in date back in time must
Ceo. Renoaenve move	UseCase, including the UseCases:	be decided nationally or by NordREG
	Request Customer Move In	be decided individually of by Horditele
	<ul> <li>Notify Customer Move In</li> </ul>	
	<ul> <li>Notify Metering Point</li> </ul>	
	Characteristics	
	Determine Meter Read	
UC7: Current customer	Standard ebIX <sup>®</sup> Customer Move Out	<sup>1)</sup> Only used for notifying the Grid Access
only reports move out	UseCase, including the UseCases:	Provider if the Metering point Administrator is
	Request Customer Move Out	a Datahub (i.e. currently only valid for
	• Notify Customer Move Out <sup>1)</sup>	Denmark)



	Determine Meter Read	
UC8: New customer	Standard ebIX <sup>®</sup> Customer Move In	The Danish rules is opposite to the NordREG
reports move in, current	UseCase, including the UseCases:	moving report.
customer has reported	Request Customer Move In	
different move out date	Notify Customer Move In	
	Notify Metering Point	
a) move out date	Characteristics	
later than the	Determine Meter Read	
move in date		
	The ebIX <sup>®</sup> Customer Move Out is	
	cancelled	
b) move out date	Standard ebIX <sup>®</sup> Customer Move In	
earlier than the	UseCase, including the UseCases:	
move in date	-	
move m date	Request Customer Move In	
	Notify Customer Move In	
	Notify Metering Point	
	Characteristics	
	Determine Meter Read	
	Standard ebIX <sup>®</sup> Customer Move Out	
	UseCase, including the UseCases:	
	Request Customer Move Out	
	Notify Customer Move Out	
	Determine Meter Read	
UC9: Current customer	Standard ebIX <sup>®</sup> Customer Move Out	
reports move out, new	UseCase, including the UseCases:	
customer has noted a	• Request Customer Move Out.	
different move in date	• The ebIX <sup>®</sup> Customer	
	Move Out is rejected	
a) move out date	Move Out is rejected	
later than the		
move in date		
b) move out date	Standard ebIX <sup>®</sup> Customer Move Out	
earlier than the	UseCase, including the UseCases:	
move in date		
move in uate	<ul> <li>Request Customer Move Out         <ul> <li>The ebIX<sup>®</sup> Customer</li> </ul> </li> </ul>	
	Move Out is confirmed	
	Notify Customer Move Out	
	Determine Meter Read	
UC10: Cancelled move	Normal cancellation process	It is a precondition that the Move In or Move
		Out is in the future (at least one day), i.e.
		Cancellations cannot be performed back in
		time
		In Denmark a Move In cannot be cancelled
		today
UC11: Move in to an	Normal cancellation process and restart	In Denmark the Move In and/or Move Out to a
incorrect metering point	of new standard ebIX <sup>®</sup> Move In and/or	wrong MP must be handled manually by the
	Move Out	DataHub
UC12: Customer contacts	Standard ebIX <sup>®</sup> Customer Move In	The first-in-first-out principles will always be
several suppliers in case of	UseCase for Supplier 2:	valid for Move In processes
move in	Request Customer Move In	1



	1	NES
	• The request is rejected	
UC12.1: Customer wants to	Normal cancellation process followed	
have a contract with second	by a standard ebIX <sup>®</sup> Customer Move In	
or later Supplier and	UseCase, including the UseCases:	
contract with first Supplier	Request Customer Move In	
is not valid yet	• Notify Customer Move In	
	<ul> <li>Notify Metering Point</li> </ul>	
	Characteristics	
	Determine Meter Read	
LIC12 2. Containing the factor		
UC12.2: Customer wants to	Standard ebIX <sup>®</sup> Customer Move In	
have a contract with second	UseCase, including the UseCases:	
or latter Supplier and	Request Customer Move In	
contract with first Supplier	<ul> <li>Request is rejected</li> </ul>	
is already valid		
	Thereafter a normal ebIX <sup>®</sup> Change of	
	Supplier is run	
UC13: Move in when	For divorce a standard ebIX <sup>®</sup> Customer	
customer reports contract	Move In UseCase, including the	
party change due to e.g.	UseCases:	
divorce, death etc	Request Customer Move In	
	<ul> <li>Notify Customer Move In</li> </ul>	
	•	
	Notify Metering Point	
	Characteristics	
	Determine Meter Read	
	For death or bankruptcy a "Update of	
	Master data, party" can be used for	
	changing to the estate of a deceased	
	person or the estate of a bankrupt, as an	
	intermediate step before using a Move	
	In and/or Move Out	
UC14: Customer reports	The UseCase has no influence on	Homework:
that existing connection	document exchanges	Markus will investigate if UseCase 14 has
contract is to be		any influence on the message exchange
transferred to a new owner		any minuence on the message exchange
UC15: Move in when	The UseCase has no influence on	
customer has lost his		
creditworthiness	document exchanges	
UC16: Move out/in when	The UseCase has no influence on	
customer has fixed contract	document exchanges	
UC17: Change move out	Standard cancellation of current Move	In Denmark it is currently not possible to make
date	Out, followed by a standard ebIX <sup>®</sup>	a new Move Out later than a valid Move Out.
	Customer Move Out UseCase, including	A move out may be changed to an earlier point
	the UseCases:	in time
	Request Customer Move Out	
	$^{\circ}$ The ebIX <sup>®</sup> Customer	
	Move Out is confirmed	
	• Notify Customer Move Out	
	<ul> <li>Determine Meter Read</li> </ul>	
UC18: Change future move	Standard cancellation of current Move	
-		
in date	In, followed by a standard ebIX <sup>®</sup>	



Customer Move In UseCase, including the UseCases:	
<ul> <li>Request Customer Move In         <ul> <li>The ebIX<sup>®</sup> Customer</li> </ul> </li> </ul>	
Move Out is confirmed	
Notify Customer Move In	
Notify Metering Point	
Characteristics	
Determine Meter Read	



# Appendix E NORWEGIAN ANSWERS TO QUESTIONS FROM PREVIOUS MEETING

NEE (Norsk Ediel Ekspertgruppe) has reviewed the questions at a meeting November 22<sup>nd</sup> and came up with the answers and comments below.

Slide	Question	Answer from Norway
2	<ul> <li>An installation with both production and consumption will have two Metering Points (if there are different Balance Suppliers for production and consumption?)</li> </ul>	The Norwegian user group would like to always split production and consumption into two MPs.
3	<ul> <li>✓ Use NBS principles for acknowledgement of receipt (technical acknowledgements on syntax level)</li> </ul>	The Norwegian user group would like to see a standardised language (English) and a standardised structure of the error text, i.e. where the error occur (element or object), Line number etc. In addition, it should be discussed if we should add a limited set of error codes grouping possible error situations.
	<ul> <li>✓ If errors occur on a business level, in a one-way notification pattern:         <ul> <li>✓ the business process will specify if an acknowledgement of processing shall be used</li> <li>✓ If two-way pattern, such as a request and response processes:             <ul> <li>✓ a negative or positive business document shall be used</li> </ul> </li> </ul></li></ul>	OK
5	<ul> <li>Review of address structure, see class diagram later in the presentation</li> <li>Do we need a "Free Form" element, e.g. for a textual description of the MPs physical location?</li> <li>Do we need to send both <i>Metering point address</i> and <i>Customer address</i> if the address is the same?</li> </ul>	The Norwegian user group would like to have an optional "Free Form" textual description of the MPs physical location We want to always send both <i>Metering point address</i> and <i>Customer address</i> , even if the address is the same (to simplify the rules)
6	<ul> <li>Should it be separate fields for c/o-address and Attention</li> <li>Should we split company name and private person name into two elements and split private person name into:         <ul> <li>Given Name</li> <li>Middle Name</li> <li>Family Name</li> </ul> </li> <li>Do we need more address types than:         <ul> <li>MP address</li> <li>Customer Address</li> <li>Invoicing Address</li> </ul> </li> </ul>	<ul> <li>We want two separate fields for c/o-address and Attention, since c/o-address is a part of the postal address and Attention is used in the header of letter</li> <li>We would like to split company name and private person name (to be in line with UN/CEFACT CC) and have two elements for private persons (Given Name and Family Name)</li> <li>We need: <ul> <li>✓ MP address</li> <li>✓ Customer Address</li> <li>✓ Invoicing Address</li> </ul> </li> </ul>
11	The ebIX <sup>®</sup> BRS proposes the opposite process than the NordREG moving report UseCase 8, i.e.: The Customer Move Out process is stopped and the Customer Move In process takes over the remaining actions from the Customer Move Out process, including move out for the requested move in date.	We agree with the ebIX <sup>®</sup> proposal



	The Danish rules is according to the proposal from the NordREG moving report.	
14	<ul> <li>Review of the ebIX® BRS for: Upfront Request for Metering Point Characteristics</li> </ul>	<ul> <li>We are missing <i>Meter number</i> from the request. The current In Norwegian solution (NUBIX) requires three elements to be filled in</li> <li>In the response we will propose the current elements from NUBIX:</li> <li>Status for request (found, not found)</li> <li>DSO information</li> <li>Name / Company</li> <li>Organisation number / Date of birth</li> <li>Meeter number</li> <li>Address</li> <li>Postal number</li> <li>City</li> <li>Country</li> <li>Metering Point ID</li> <li>Metering Method</li> <li>Description of installation addresss o</li> <li>Insallation Status</li> <li>Latest Meter Reading Date</li> <li>Date for "Supply of last resort"</li> </ul>
1.5		Number of digits on meter
17	How to handled a MP without a Customer connected in a Harmonised Nordic Retail Market?	In a supplier-centric model, the supplier of last resort should be an external supplier (not the DSO). It was also noted that the introduction of a Supplier Of Last Resort should seen in connection to a common invoicing of grid connection and supply.
18	Should the HNR project assume that there only can	Yes, the HNR project should assume that there only can
10	be one Customer at a MP at a given point in time?	be one Customer at a MP at a given point in time
19		See 11