

Strategy for a harmonised Nordic retail market



Strategy for a harmonised Nordic retail market 2015-2018

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1 Preface

NordREG, the cooperation between Nordic energy regulators, has for several years been devoted to the work of developing the Nordic electricity market. In recent years, NordREG has focused on making Nordic recommendations for key processes in the electricity market in order to achieve a harmonised Nordic retail market. We strongly believe that the Nordic retail market based on a supplier centric market model will bring benefits to the market such as increased customer friendliness and increased competition. NordREG's work has created a momentum of change in all countries. The work is in line with and supports the development at the European level, in particular as a good example of a regional initiative.

The project towards a Nordic retail market is carried out on a voluntary basis by the national regulatory authorities (NRAs), and therefor needs strong political backing in order to make an implementation of Nordic recommendations possible nationally. The work has been funded by the national NRAs until 2011. From 2011 the Nordic Council of Ministers and the Energy Market Group (EMG) have been providing funds to a project coordinator and to expert studies. The project coordinator is a full time employee who coordinates the work towards the single retail market and supports NordREG's Retail Market Working Group. The expert studies has helped to map and find possible Nordic solutions for a supplier centric market.

The work done so far by NordREG has proven to be an important basis and, when implemented, will provide a basis for a Nordic harmonised retail market. There are major developments nationally and on a European level with the development of smart metering and smart grids. This development will make it possible to have a smart electricity market with smart services for the customers. It is important to continue the work on a Nordic level so that new developments in the energy area, perhaps initiated from the EC, do not risk hampering the harmonization work by creating new areas which create new obstacles for the stakeholders in the competitive part of the electricity market. Thus risking the Nordic customer to have the best possible offers and choices available. Also, new entrants may be taking their business elsewhere to larger markets which are more attractive that the national Nordic countries markets are.

Since the harmonization of the Nordic retail markets will need to continue after 2014, until there is a European retail market in place, there is a need to plan and map future tasks. NordREG arranged a hearing on the 25th of June with representatives from the customers and industry to discuss this future work. NordREG also recognizes that the implementation phase, which now has started, will bring out additional issues that may need to be investigated. This report identifies the most important issues to work on after 2014. The thematic areas and tasks will be presented on a high-level and recommend when and how the harmonization of each task should be done.

Stockholm, September 2014 Chair of NordREG



2 Executive summary

The Nordic Energy Regulators (NordREG) has worked towards a common harmonised retail market for some time. The work has been funded by the national NRAs until 2011 when the Nordic Energy Ministers decided to help fund the work for a four year period. These funds have been used for hiring a full time employee who has coordinated the work by NordREG, chaired task forces, managed projects and drafted documents. The funding has been an important and welcome addition and constitutes a third of the total funding during the last four year period.

New areas of customer engagement, status reviews and revision of key processes NordREG suggest that the focus the coming four years should be on the following key areas of development: information exchange, rules and responsibilities for the stakeholders in the monopoly market, market rules for energy-services and customer's ability to take advantage of smart metering and smarter grids through demand response and micro-production. Apart from these areas, there is a need to keep up the pace in the movement towards a Nordic retail market by monitoring and looking at the status of implementation of Nordic recommendations nationally. The development of national new information exchange systems has created an urgent need to make sure that the Nordic recommendations are in line with this new development. NordREG will therefore revisit recommendations made for key processes such as switching and moving and if necessary update relevant parts. But also other relevant processes may later need to be looked into by NordREG.

NordREG also intends to continue to support the development of underlying processes, technical work, which really determines how efficient and smoothly the key processes will run. However, the lead with these tasks need to be with the TSOs and the industry, which have the expertise in this area.

High-level project plan	2015	2016	2017	2018
Information exchange				
TSO and DSO roles and responsibilities				
Access to and communication between data				
hubs/information exchange systems				
Market design to enable energy services				
Unbundling				
DSO role and responsibilities				
Market design to deploy smart grids				
Micro-production				
Demand response				
Continuous work				
Revision of Switching process				
Revision of Moving process				
Coordination of implementation of EU and national				
legislation				
Monitoring of retail markets on a Nordic level				
Yearly status an final report				

Table 1High-level project plan 2015-2018

Nordic voice in a European context

NordREG's vision is that all Nordic electricity customers will enjoy a free choice of suppliers and energy service companies and benefit from efficient and competitive prices and reliable supply and energy services through the Nordic and European electricity market. The way to reach this vision is to



lower obstacles on the competitive side of the market, making sure that the customer has the tools to make informed choices and benefit from competition.

The European Commission (EC) has focused their work, up to now, mostly on the development of a European wholesale market for electricity and gas. However in the recent years the focus has shifted towards the retail market. The Agency for the Cooperation of Energy Regulators (ACER) is planning to publish a green paper «Energy Regulation: A Bridge to 2025»¹. In selecting a time horizon of over a decade, ACER consider that there can be a greater certainty in assessing the more significant influences that might occur before 2025. In this "Bridge" from the date scheduled for the completion of the internal energy market until 2025, and cover the completion and parallel implementation of the network codes that will provide the core rules supporting the EU's integrated Single Energy Market. The "Bridge to 2025" identifies the challenges Europe's energy markets will face in the coming decade and regulatory responses for the period 2014-2025 to ensure that energy markets operate to the benefit on European consumers. The consultation paper identifies a number of areas that may benefit from greater regulatory focus in the Energy sector trends such as for example:

- Consumers, retail markets and the role of DSOs
- Consumer concerns
- Technological advances
- Enabling demand response
- The future role of DSOs

NordREG notes that the areas included in the The Bridge are of key interest for the Nordic area and is going to affect the Nordic area. It is therefore of utmost importance that the market models chosen in the Nordic area are compatible with the chosen European solutions and that the good examples of for example customer service and availability of smart energy offers are part of upcoming good practices. NordREG needs to be a speaking partner in the European development otherwise we risk having to change our market design in a major way imitating other examples that may very well be unsuitable for our particular conditions.

Therefore a strong Nordic voice with good examples of market design with well-functioning markets is of the essence. "NordREG believes that is increasingly important to have a Nordic approach with regards to the continued development of the electricity market. It is crucial that NordREG engages and provides cases for best practice in the continued work under the EC.

Need for increased coordination on a Nordic level

NordREG believes that the next step towards a solid and robust organization will be to have a dedicated group working solely on the tasks of NordREG. This would work well in combination with and support of a yearly Presidency by the respective NRA. The national resources devoted to the Nordic work has been satisfactory and supportive for the development of the Nordic recommendations the last nine years. The support with resources from the Nordic ministry has proved to be invaluable in order to keep a momentum and establishing a good cooperation with stakeholders. The support from the NRAs with resources has made it possible to have expert input in regulatory issues and to carry out fruitful negotiations. The support from the Nordic ministry has made it possible to carry out coordination of tasks, administration around meetings, managing projects and draft reports. Without this support the urgency of the respective task would not have been as obvious. It is crucial for a successful result in this enormous project to have a "motor" that keeps the tasks on track and makes sure the deliverables are made.

¹ European Energy Regulation: A Bridge to 2025 Public Consultation Paper PC_2014_O_01 29 APRIL 2014



NordREG therefore suggests a well-balanced, realistic but ambitious plan that will make the harmonization of the Nordic electricity market a reality over time. This will give benefits to our Nordic customers and serve as a good example of a regional initiative working towards the smartest market in Europe. The members of NordREG intends to continue the work towards a harmonised Nordic retail market and intends to apply for continued support from the Nordic Ministers the coming four years.



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3 Introduction

The Nordic Energy Regulators have worked towards a common harmonised electricity market for some time. In August 2005, the Nordic energy ministers set the objectives for further development of the Nordic electricity market at their meeting in Greenland. These objectives and related tasks were commissioned to the Nordic transmission system operators, ministries, regulators and other relevant authorities. The main goal is to create harmonised Nordic solutions and to eliminate the biggest entry barriers for suppliers entering the Nordic market.

The focus for NordREG's work has been primarily on the development of a well-functioning Nordic wholesale market with competitive prices. To this goal the work has been focused on promoting competitive market structures, ensuring smooth interaction with other European regions, ensuring a well-functioning power exchange and to ensure adequate level of transparency in the market. NordREG also sees the necessity of a reliable supply and to enable this NordREG promotes market-based or legal environment for security of supply and works towards ensuring harmonised procedures for handling extreme situations. As NRAs there is a need for cooperation on efficient regulation of TSOs. The NRAs cooperate within NordREG to regulate and monitor the TSOs with focus on efficiency and Nordic harmonization, to promote adequate transmission capacity and efficient market-based congestion management methods. Even though these issues continue to be on NordREG's agenda the focus has been on developing the retail market and towards making a truly common Nordic retail market with free choice of supplier.

The transition from national retail markets to a Nordic market has required and will continue to require a great deal of work and cooperation by NRAs', DSOs, suppliers and TSOs. The benefits that a Nordic retail market will bring will however make it worthwhile. In the long run, the Nordic retail market will be a more efficient solution than keeping the four national markets separate. This is also a step towards the integration of European energy markets. The process of creating a Nordic retail market also brings a unique opportunity to find new efficient solutions on different issues. Hence, the goal is not only to create a Nordic retail market, but also to develop a sustainable, customer friendly market with a high degree of competition between stakeholders. A harmonised Nordic retail market adds value to the Nordic countries in several ways:

- Customers have a greater choice of suppliers/energy-service companies² and better opportunities to change to a new supplier and/or new product
- New suppliers and energy service companies will have more incentives to establish themselves on a larger market
- Suppliers and energy service companies will have more incentive to develop products and new types of contract as well as specialist products
- Greater correlation between pricing on the wholesale and retail markets and thus possibilities for better use of energy.

It should be easy to be a customer in the Nordic electricity market. The Nordic customer should be able use all services provided in the Nordic region, including supply offers or smart services such as having smart applications at home and be a micro-producer. The Nordic market should contribute to the goals set by the EU for 2020, 2030 and 2050. This means that there needs to be a smarter use of energy to enable an increasing amount of renewables in the grids. The Nordic customer needs to use energy in a more flexible way to achieve these goals. The working areas in this report will be chosen in order to support these aspects.

² ESCOs



The harmonisation of the Nordic retail markets will continue after 2014, there is therefore a need to plan future tasks and areas of importance for a continued Nordic cooperation. NordREG also recognises that the implementation phase, which is currently ongoing, may bring additional issues that need to be addressed on a Nordic level. Also the work within EU, in the energy-area, is ongoing and will also require national implementation in the future. There is an increased need to have a Nordic approach, when possible, so that new legislation do not create new obstacles for a Nordic market. NordREG therefore plans the next steps in the harmonisation process. This report will identify the most crucial issues that need to be addressed on a Nordic level after 2014. In the following NordREG will list and describe the topics on a high-level and suggest prioritization of these tasks. This will then be used as input when making a more detailed year by year planning for future work and reviewing of what project structure that is suitable for the continued project towards a Nordic retail market for 2015 to 2018.

This report describes a high level project-plan, thematic areas, project organisation and budget for the continued work towards a truly harmonised Nordic retail market.



4 Vision and objectives for the development of a harmonised Nordic retail market

The main objective for the integration of the Nordic retail markets is to minimize the regulatory and technical obstacles for suppliers willing to operate in the various Nordic countries. This scope also needs to include energy service-companies, ESCOs. They are new stakeholders acting in the competitive part of the electricity-market. ESCOs' provide energy services to the customers which helps them manage their energy-consumption in a smart way. The main objective for NordREG is therefore to harmonise the national market models in the Nordic countries to the extent to make the market smooth and feasible for the suppliers and ESCOs to start operations. The market integration would thus provide a harmonised framework for the stakeholders to have their business activities in the whole Nordic region. In that way all customers are eligible to take part of offers in the competitive side of the Nordic electricity market.

NordREG has, as a part of this strategy, analysed and revised the previous objectives³ that were guiding the NRA's work towards a common Nordic retail market. The purpose of the revision is to adapt the objectives to the ongoing development on the European arena. There are climate-goals on a European level which have resulted and will result in European legislations that the Nordic NRAs must take into consideration and which need to be implemented in the Nordic countries. These legislative packages are for example the 3rd Energy package and the Energy Efficiency Directive⁴ which aim at helping the member states in the EU to reach climate goals until 2020, 2030 and 2050. NordREG formulates the vision for development of the Nordic electricity markets as:

All Nordic electricity customers will benefit from a free choice of suppliers and energy service companies along with competitive prices, reliable supply and energy services through the Nordic and European electricity market.

NordREG's work is to ensure that the regulation that define roles and responsibilities for different market players is sufficiently harmonised. The processes between them need to be adequately harmonised in the Nordic countries to make it relatively easy for stakeholders to start operating in all Nordic countries. The framework for customer empowerment should also be sufficient so that customers, with confidence, can be active and benefit from the competitive market. The goals for further development of the Nordic retail market are:

- The Nordic retail market should be the most efficient retail market in Europe. Characterized
 by attractive offers to customers, easy business operation, efficient information exchange
 and efficient process between market actors and have industry in the frontline for
 development of energy services for active customers
- The Nordic retail market should have the highest customer service level. It should be easy to
 be customer. Relevant information should be easy accessible and there should be efficient
 and processes such as supplier switch and customer move should be customer friendly.
 Further, the supplier and energy service provider should be easy accessible and customer
 complaints should be handled professionally in a timely manner.

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³ NordREG, report 4/2011, Rights and obligations of DSOs and suppliers in the customer interface

^{4 2012/27/}EU



• The Nordic retail market should characterized by competitive prices and few entry barriers to make it easy for new markets players to enter the market.

4.1 Objectives for harmonised solutions

NordREG aims at continuing the work to reach a truly harmonised Nordic retail market, future NordREG recommendations and Nordic solutions should focus on the following objectives:

- Customer friendliness: increase customer friendliness of the market; have a good customer service and create market conditions that make it easy for customers to be active in the market.
- Well-functioning Nordic electricity market: the goal is to have a well-functioning common electricity market. It should be easy for stakeholders to enter the market and business processes need to be clear and easy to apply. When making business processes focus should be on speedy, qualitative processes to a reasonable cost.
- Increased competition: lower the obstacles for the market players in the competitive part of the electricity market, there should be room for innovation and development of energy services in order to increase the attractiveness of the competitive market.
- EU-regulation: Nordic harmonization should comply with the EU regulations and EU retail market development.
- Non-discrimination: The Nordic retail market design should promote non-discrimination. The
 introduction of national Points of Information (NPIs⁵) should guarantee neutrality of
 Distribution System Operators (DSOs) towards other stakeholder. NPIs should function as
 market facilitators.

⁵ E.g. data-hubs



5 Work done from 2011 to 2014

In the period 2011 to 2014 NordREG has been focusing on establishing a common framework and understanding of markets design and market rules in the harmonised Nordic retail market. This has been done through analysing many different areas of the retail market. As part of this work NordREG has also invited the Nordic stakeholders, industry and costumers, to participate through workshops, taskforces and public consultations. The work has resulted in the publication of ten NordREG reports. Furthermore, NordREG has commissioned seven consultancy reports. Based on these studies NordREG has issued a series of recommendations that define the market design and market rules of the common Nordic retail market.

NordREG has issued recommendations for the following topics:

- Combined billing of distribution and supply
- Supplier switching and customer moving
- Information exchange between market participants
- Customer interface

The status of the implementation of the recommendations on information exchange, billing, moving and supplier switching is described for each country in chapter National status, current implementation. The pace of the implementation processes varies between the Nordic countries, due to differences in prioritisation. For example, combined billing will be introduced in Denmark in the autumn 2015. NVE is currently reviewing combined billing and plans to present a proposal on how combined billing can be realised in Norway, at a future date. In Sweden, a proposal has been made to the Government. Finland has started to work on a model for an information exchange system while the schedule for implementation of combined billing, for time being, is an open question.

The national implementation of the recommendations regarding business processes are linked to the development of national information exchange systems. There are activities on information exchange systems going on in all countries. A project has started in Finland. Norway is currently developing an information exchange system and Ei has proposed that a centralised information exchange system is developed by the Swedish transmission system operator, Affärsverket svenska kraftnät(SvK). Denmark has already decided on developing a hub and will release an updated version of their information exchange system in autumn 2015.



Table 2 below presents a summary of the national development toward a Nordic supplier centric model:⁶

	Information exchange	Combined Billing	Moving	Switching
Denmark	Data hub was introduced 2013. New version will be launched Oct. 2015	Combined billing is planned to be introduced Oct. 2015	The supplier takes care of the moving processes since 1st of March 2013	Supplier centric with the implementation of the wholesale model Oct. 2015
Finland	Project to investigate future information exchange model will be finished by the end of 2014. Decision on the future model will be done after that.	No legislation done or planned	Will be initiated after future information exchange model has been chosen	Will be initiated after future information exchange model has been chosen
Norway	Establishment of data hub is underway and will be operational from Oct. 2016	Currently being reviewed, proposal will be delivered within 2014	Will be changed when the data hub is operational	Will be changed when the data hub is operational
Sweden	Ei has proposed a centralized information exchange model to the Government June 19th 2014	Ei has proposed combined billing to the Government	EI has proposed that the supplier should take care of the move out and move in process to the Government.	Supplier centric switching process is implemented

Table 2. Summary of national development toward a supplier centric model

⁶ NordREG, report 2014, NordREG's work towards a harmonised Nordic retail market



6 Work beyond 2014

The Nordic Regulators should continue to harmonise the Nordic Electricity market together. The continuity of the close cooperation within NordREG is essential. We have moved forward during the resent four years but we have still a lot more to do. Market integration takes time. We believe that it is important to have a long term focus for the tasks ahead. Therefore, we propose a second four-year term of cooperation with support of the Nordic Energy Ministries. In this chapter, we present a road-map for the coming four years and we will plan our activities every year based on the developments in the Nordic and European area.

After internal discussions NordREG invited all stakeholders, including customer-representatives and academics, to take part in a discussion regarding the future work of NordREG. The discussion revolved around a reasonable focus and suitable structure for upcoming work towards harmonising the national markets into a Nordic market. About 30 persons was present and 10 to 15 participants over the internet. It was a fruitful discussion which lead to the development of a few thematic areas and suggestions on how these should be prioritized. The objectives for the harmonisation was also discussed and the stakeholder panel was unified that the current objectives still are relevant for the future work. The stakeholders also expressed strong support for the continuation of NordREG's work towards a harmonised retail market based on a supplier centric model. The stakeholders expressed a support for a long term road map which would make it easier for the industry to plan ahead and make sure that resources for experts to provide input can be assured. As a part of this years working plan, NordREG has hired a consultant that is mapping the conditions that suppliers and ESCOs face in the national Nordic retail markets. This work will be part of a report that will be published by NordREG in the end of this year, however some of the preliminary results have been considered during the development of the thematic areas in this chapter.

Some of the thematic areas are new. Apart from new thematic areas that would be fruitful to be addressed on a Nordic level there are several other areas that also has to be taken care of: revision of existing recommendations, future technical work and continuous work such as yearly status reports.

6.1 Previous work

The focus for NordREG's work so far has been how to reduce barriers for market integration. The role of the supplier and the key processes where the customer interact with the electricity market such as billing, switching and moving. These are also the areas where customers have been able to be active so far. The EU recently published the Consumer Market's scoreboard and the national results for the Nordic area shows that there are a relatively high switching-rate⁷. However, looking at the development of smart grids together with smart metering and the increased need for customer activity to enable a smart use of energy NordREG believes that the focus of Nordic work needs to expand to new areas. The Nordic electricity market has so far been and should continue to be a forerunner and strive to stay as the smartest and most costumer friendly electricity market in Europe. The Nordic customer has and will continue to have high demands on the functionality of the electricity market. There is an increased need for more competitive and individualised offers which correspond to customer needs. These needs have to be at the focus of NordREG's work. At the same time such development cannot jeopardise the stability and security of the grids and supply. Customers should be able to rely on a secure supply also in the future.

⁷ COMMISSION STAFF WORKING DOCUMENT Consumer Markets Scoreboard Making markets work for consumers 10th edition -June 2014



6.2 Development in EU

European Commission (EC) has focused their work, up to now, mostly on market integration of the European wholesale market for electricity and gas. The EU aims to fully integrate national energy markets by 2014, to give consumers and industry more and better products and services, increased competition, and more secure supplies. Progress has already been made: consumers can today switch suppliers for gas and electricity, and suppliers must provide clear explanations of terms and conditions. However much work still need to be undertaken. This includes developing network codes to aligning national market rules and network operation rules for gas and electricity as well as making cross-border investment in energy infrastructure easier. However in the recent years the focus from the EC has turned also towards the retail market.

6.2.1 The Bridge

The European Energy Regulators decided in the beginning of 2013 to formulate a common vision for the electricity and gas markets' development for the coming years. The work is named the "Bridge to 2025". From 29 April to 16 June 2014 the Agency for the Cooperation of Energy Regulators (ACER) has run a public consultation on the green paper «Energy Regulation: A Bridge to 2025»⁸. In selecting a time horizon of over a decade, ACER consider that there can be a greater certainty in assessing the more significant influences that might occur before 2025. The "Bridge to 2025" identifies the challenges Europe's energy markets will face in the coming decade and regulatory responses for the period 2014-2025 including aspects covered by CEER, to ensure that energy markets operate to the benefit of European consumers. The consultation paper identifies a number of areas that may benefit from greater regulatory focus:

- Electricity wholesale markets
 - Integration of wholesale markets
 - Renewables growth driving changes in generation
 - Policy interventions to ensure adequacy
- Gas wholesale markets
 - Integrating gas wholesale markets
 - Uncertain gas demand and supply
 - The gas market's role in providing flexibility
- Infrastructure investments
- Consumers, retail markets and the role of DSOs
 - Consumer concerns
 - o Technological advances
 - Enabling demand response
 - The future role of DSOs

We note that the areas encompassed by the The Bridge are of key interest for the Nordic area as well and the outcome of the initiatives that will follow the Bridge certainly is going to affect the Nordic area. It is therefore of utmost importance that we see to that the market model that we are developing for the Nordic area is compatible with the chosen European solutions. We also believe that we have good experiences of market integration, customer services and availability of smart energy offers to influence the process of Nordic approach to market design

European Energy Regulation: A Bridge to 2025 Public Consultation Paper PC_2014_O_01 29 APRIL 2014



Market design is a key issue in order to have a well-functioning market with equal access for all competitive stakeholders. This means that the definition of the roles and responsibilities of each stakeholder, especially the monopoly ones, is a key feature of a retail market design. There are several different approaches regarding what constitutes a well-functioning electricity market. The Nordic approach has traditionally focused on creating a customer friendly market in which the obstacles for establishing operations for the stakeholders in the competitive market should be low. The approach has been to create conditions for a competitive market with a real choice of solid offers for the customers in order to give the customers competitive prices.

There are however an increasing number of countries in the European arena that have adopted other measures rather than enabling and enhancing competition for the good of the customers. Regulated prices have been a reality for some time in more than half of the EU-countries. This is seen as a tool until the market has a level of competition that is satisfactory. Apart from this, an increasing number of EU-countries have set up new regulation to help vulnerable customers, such as social tariffs for example. All these measures are not in line with the Nordic approach and do not enhance competition.

An example of an increasing level of regulation on the competitive side of the market is for example adopted regulation stating limits on what kind of contracts suppliers can offer the customers. To summarize the consumers in one European country will be able to choose from four core tariffs for gas and electricity from each supplier, a single standing charge, advanced notice of when the fixed deal ends etc. Another example on regulation of the competitive side of the market concerns billing. One country has adopted rules for billing that in practice means that a customer will have an eightpage bill. This in an effort to help and support the customer to make informed and good decisions but may limit the scope for the supplier to formulate their bills.

We believe that it is increasingly important to have a Nordic approach with regards to the continued development of the electricity market. It is crucial that NordREG engages and provides cases for best practice in close cooperation with the other European Regulators in the continued work under the EC.



6.3 Thematic areas for future work

Based on input from stakeholders, the ongoing developments in EU, Member States' climate goals and need for elaboration on the supplier centric model, we have identified several areas that should be the focus in the future road map:

- Information exchange between market players
 - TSO's and DSO's roles and responsibilities
 - Access to and communication between data hubs/information exchange systems
 - A common Nordic Balance Settlement (NBS)
- Market design to enable energy services
 - Unbundling
 - DSO's role and responsibilities
- Market design to deploy smart grids:
 - o Micro-production
 - Demand response
- Continuous work:
 - Revision of past recommendations:
 - Harmonised rules for switching process
 - Harmonised rules for moving process
 - Customer interface toward DSOs and suppliers
 - Continuation of the technical work
 - Coordination of implementation of EU and national legislation
 - Monitoring of retail markets on a Nordic level
 - Yearly status and final report

NordREG would like to point out that there may be other processes that NordREG needs to map and analyse further that is not part of the list above. NordREG intends to have a flexible approach and if needed re-prioritise the tasks at hand.

Most of these tasks will be investigated under the auspices of NordREG. But there are some exceptions where other stakeholder are considered to be better suited to handle the task then NordREG such as continuation development of technical work related to information exchange and detailed procedures for business processes. Following sub chapters describes on a high level the work process and all the working areas and specific tasks identified at these stage. Tentative start and responsibility for each task are also presented.

6.4 Organisation of work

NordREGs experience with earlier work process and project organisation is positive. There has been a list of tasks that should be investigated and harmonised in order to eliminate the biggest entry barriers for suppliers. The project organisation has been predetermined and secured the link to decision makers and involved stakeholders. The primary work has been done by the Working Group (WG) and Task Forces (TF). The work list and the project organisation has been efficient tools in order to specify a supplier centric model and harmonise the market. A fixed work list and project organisation was necessary in order to take the first step toward a common retail market and create a momentum of change. This organisation has made a little difficult to have flexibility to address important topics that are dealt with on the European arena. Thus the future work method needs to be more dynamic in order to find the correct tasks that NordREG regard as key for the harmonisation. That would secure sharper recommendations and Nordic solutions as well as a Nordic



voice in the European context. This work method requires a strong and competent coordination and support on a Nordic level.

The future work method will in general follow the following three steps; mapping process, harmonisation process and national implementation.

6.4.1 Mapping process

When investigating an area a mapping process will be the first step. The purpose of the mapping is to identify issues that constitutes a hinder to reach the goals and objectives for the harmonisation. The timing and priority for when to start the harmonisation process will be define. National circumstances and decisions process will be considered. Finding the best suitable timing will increase the possibility to create Nordic solutions and recommendations. The mapping process will also indicate what type of resources and experts is needed.

WG will carry out the preparations work for the mapping process. Relevant TFs or a consultant will carry out the mapping process.

Currently there are a mapping process ongoing. That work will identify entry barrier for suppliers and ESCOs. The result from this mapping will be taken into account when making the work program 2015 and for more forward-looking work program.

6.4.2 Harmonisation process

Second step are the harmonisation of tasks identified during the mapping process. The TFs will carry out the main work. The purpose are to find recommendations or Nordic solutions for the tasks that contributes to realise the goals and fulfils the objectives described in this report.

The work will either be conducted by the drafting team in relevant TFs or by a consultant. During the work in the TFs the drafting team will regular consult the input team members in workshops and in written procedures. If a consultant study are arranged the end results/report will be followed by a NordREG note including recommendations and/or suggestions on further work.

6.4.3 National implementation

The national implementation is depending on the national decisions and legislative processes. Different speed and order of implementation can therefore be expected. Even if unified process for the implementation are preferred.

⁹ The organisation of task forces are described more detailed in chapter "Project organisation"

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6.5 High level project plan

This is a high level project plan year by year until 2018. The timeline below presents how the work with the thematic areas can be done over the four year period. Each thematic area will involve a series of activities that is based on the previously described work-method; mapping, analyzing the results and if needed - Nordic recommendations.

Below a high-level project plan:

High-level project plan	2015	2016	2017	2018
Information exchange				
TSO and DSO roles and responsibilities				
Access to and communication between data				
hubs/information exchange systems				
Market design to enable energy services				
Unbundling				
DSO role and responsibilities				
Market design to deploy smart grids				
Micro-production				
Demand response				
Continuous work				
Revision of Switching process ¹⁰				
Revision of Moving process ¹¹				
Coordination of implementation of EU and national				
legislation				
Monitoring of retail markets on a Nordic level				
Yearly status an final report				

Table 3 High-level project plan 2015-2018

¹⁰ The revision of the switching process will be coordinated with the expected development of new information exchange systems. Working time are estimated to one year and are expected to start earliest in 2016 depending of the development of new information exchange systems.

¹¹ The revision of the moving process will be coordinated with the expected development of new information exchange systems. Working time are estimated to one year and are expected to start earliest in 2016 depending of the development of new information exchange systems.



7 Areas of future work, elaborated

In this chapter brief descriptions are given of all the tentative tasks according to the high-level project plan, Table 3. An exception is the task concerning the common Nordic Balance settlement that is handled by Wholesale and Transmission WG.

7.1 Information exchange between market players

Due to the fast development of new national information exchange system issues has high priority. Rules for the actor managing new information exchange system will be needed. What rules should there be for access the information exchange system and how will the information exchange system interact cross boarder? Three tasks are identified related to these issues. Further NordREG stress the importance of continue already started harmonisation of technical work on a Nordic technical handbook, maintenance XML schemas and harmonisation of use-cases from the industry.

The TSOs in Sweden, Finland and Norway has since 2012 worked on a common system for balance settlement ¹². Denmark has integrated a balance settlement in their information exchange system. The development on Nordic balance settlement will be consider when working on information exchange tasks.

7.1.1 TSO's and DSO's roles and responsibilities

The TSOs role is changing with the establishment of national data hubs run by the TSO. The TSO takes on a role as a market facilitator in a way. Therefore, it's crucial that the TSO should act in a neutral and non-discriminatory manner. The roles between the TSO and DSO may also need to be reviewed.

Task: Mapping TSOs role and responsibilities related to information exchange systems.

Start: Q1 2015 – Q3 2015. If recommendations are deemed necessary this work is carried out Q4 2015 – Q1 2016.

Responsible: Information Exchange TF

7.1.2 Access to and communication between data hubs/information exchange systems

The creation of different national data hubs may risk being a new obstacle for suppliers/ESCOs entering the Nordic market. It is important to look into how these hubs interact and how the stakeholders can access the Nordic market. How should the exclusion from one hub affect the access to another information exchange systems etc. There is a need for high level guidelines on how to develop information exchange systems in order to secure necessary changes on national levels to realise common harmonised information exchange systems and business processes. A harmonised information exchange system to such an extent that suppliers and other market actors can use same internal operative systems in all countries.

<u>Task</u>: Guidelines to TSOs or other responsible organisation for legal framework for development of information exchange systems

Start: Q2 2015 - Q1 2016

¹² NBS, 16 June 2014, http://www.nbs.coop/about



Responsible: Information Exchange TF

7.2 Market design for enabling energy services

In the near future it will became increasingly important to provide the customers with energy services. The retail market needs to be designed in a way enable energy services providers to enter the Nordic market. The DSOs, TSOs etc gives these new actors the possibility to manage the customers' electricity consumption and/or balance. It can also create new market situations that are not yet frequent in the electricity market. An energy service that the customer benefits from could have external effects on other parties. That means that the overall benefit could be negative and/or positive. It is important to provide a market design and a regulatory framework that clearly states the roles and responsibilities for energy service providers. The work on rules for energy services focuses on market rules for DSOs and unbundling.

7.2.1 DSO role and responsibilities

The DSO is in charge of metering, metering equipment and metering data. This means that the DSO has great insight into their customer's consumption and behaviour. This information might be relevant or even necessary for energy service providers and other market players in the market. Therefore it's crucial that the DSOs act in a neutral and non-discriminatory manner. Questions that need to be answered are for example what the DSO should do as a market facilitator and should the DSO be able to offer energy services.

We therefore suggest that a status review should be made which includes a mapping exercise to examine the differences between the Nordic countries regarding the DSO role with regards to energy services. If NordREG then finds that there is a need for harmonised rules then Nordic recommendations should be developed.

Task: Status review including a mapping exercise

<u>Start</u>: Mapping from Q1 2015 - Q2 2015. If recommendations are deemed necessary, they will be developed Q 3 - Q 4 2015.

Responsible: Market rules for energy services TF

7.2.2 Unbundling

If we want new market players to enter the market, we need to make sure that the established vertically integrated supplier does not have strong market advantages. The implementation of unbundling rules, which are primarily based on European legislation, impacts the functioning of the Nordic retail market. We therefore suggests that an assessment should be made of the need to further harmonise unbundling rules in the Nordic countries based on a mapping of existing rules. If, after such an assessment, NordREG finds that there is a need for Nordic harmonisation then Nordic recommendations should be developed.

Task: Mapping exercise

<u>Start</u>: Mapping from Q3 2015 – Q1 2016. If recommendations are deemed necessary, they will be developed Q 2 - Q 3 2016.

Responsible: Market rules and energy services TF



7.3 Smart grids will give us new opportunities to develop the retail market

All the Nordic TSOs and DSOs will need to develop smarter grids in a cost efficient manner. This is also identified as a necessary step to meet the Member States 2020, 2030 and 2050 climate goals for the EU and increase the security of supply in Europe. However smart grids will also increase the customer's ability to be active and invest in smart energy solutions such as small scale electricity production and engage in demand response schemes.

Smart grids will de facto give us the opportunity to develop the Nordic retail market. We believe that NordREG should address some of these "opportunities" together. Therefore we should address the importance to map the need for Nordic rules for micro-production and demand response.

7.3.1 Market design for demand response

With regards to the energy efficiency directive, demand response is given a bigger role in the electricity market in dealing with network constraints as a result of more renewables in the grid etc. How much should the customer be able to choose and what should be "controlled" by other parties. NordREG suggests that a mapping exercise should begin the work and thereafter, if deemed necessary, Nordic recommendations should be developed.

Task: Mapping exercise

<u>Start</u>: Mapping from Q 3 2016 – Q 1 2017. If recommendations are deemed necessary, they will be developed Q 2 - Q 4 2017.

Responsible: Smart grid TF

7.3.2 Market rules for micro-production

In order to reach European climate goals of increasing amounts of renewable energy it is important to have rules that enable customers to become producers. Therefore rules regarding access to the grid needs to be transparent and reduce entry barriers. Since the micro-producer needs contracts with suppliers it is important that rules are harmonised on a Nordic level. NordREG therefore suggests that a mapping exercise should begin the work and thereafter, if deemed necessary, Nordic recommendations should be developed.

Task: Investigating and analysing the conditions

<u>Start</u>: Mapping from Q 3 2017 – Q 1 2018. If recommendations are deemed necessary, they will be developed Q 2 - Q 4 2018.

Responsible: Smart grid TF

7.4 Continuous work

There is a need to continue the monitoring of the national implementation of the Nordic recommendations. NordREG therefore suggests that a yearly status reports should be carried out the upcoming four years.

NordREG foresees a continued high focus and development in the energy area on a European level. There are quite a few steps that need coordination on a European level if the climate-goals for 2020,



2030 and 2050 are to be reached. In order to not to risk new obstacles for a harmonised Nordic market there is an increased need of coordination of implementation of European legislation on a Nordic level. NordREG therefore suggest that new relevant European legislation, for example potentially a new 4th package, should be coordinated as far as possible on a Nordic level, due to the fact that this can have implications for the retail markets.

NordREG also intends to make a more extensive status report, a final report, after the upcoming four year period has come to an end.

7.4.1 Revision of past recommendations

There is a need to make revisions of past recommendations due to national development of new information exchange systems. Denmark has already developed a national hub run by the national TSO, Energinet.dk, and Norway has decided to develop a national hub together with the implementation of smart meters on a national scale. The Norwegian hub is going to be developed and run by the Norwegian TSO, Statnett. The Swedish regulator has recommended that there should be a national hub also in Sweden run by the Swedish TSO, Svenska Kraftnät (SvK). Finland has an ongoing work, made by the national TSO, Fingrid, looking into information exchange models and is expected to have a recommendation by November 2014. The development of information exchange systems are key to further harmonisation. It will leverage access to information for market actors on the competitive side of the Nordic electricity market such as suppliers and ESCOs. These also creates a need for revising and develop earlier recommendations, such as the customer interface towards the market's actors.

The introduction of new information exchange systems will widening the room for further harmonisations for areas such as business processes, access to information and customer interface. NordREG therefore suggests that a revision is made of the Nordic recommendations for switching ¹³ and moving ¹⁴. This work should be carried out in collaboration with the TSOs and other relevant stakeholders.

7.4.1.1 Switching process

In 2013, NordREG published a framework for a future process for supplier switch. The report contains recommendations for time frames, responsibilities and content of messages. The communications are related to suppliers and DSOs/NPIs. There are areas still not harmonised in the report. When the development of national information exchange system starts further harmonisation of the switching process can be made.

Task: Revision and further harmonisation of the customer moving process as well as other processes if necessary. The task will be coordinated with the development of national hubs.

Start: Q 3 2015

Responsible: TF under the Retail Market WG

 13 NordREG, report 4/2013, Harmonized model for supplier switching

¹⁴ NordREG, report 2014, Framework for a harmonized moving process



7.4.1.2 Moving process

In June 2014, NordREG published a framework for a harmonised moving process. The report contain time frames, messages and responsibilities for customer moving in or out from a location with metering. The moving process relates to the communication between market players such as suppliers and DSO/national point of information15.

There are still elements that could not be harmonised. Further harmonisation on the moving process will be possible as the national decisions and development of new information exchange systems.

Task: Revision and further harmonisation of the customer moving process. The task will be coordinated with the development of national hubs.

Start: Q 3 2015

Responsible: TF under the Retail Market WG

7.4.2 Continuation of the technical work

NordREG has made and commissioned work regarding business processes of a more technical nature¹⁶, more detailed messages connected to processes such as switching and moving for example. It is of utmost importance that this work continues. Underlying more detailed schemes of communication between stakeholders are developed so that the processes can function smoothly on a Nordic level.

In the note "Continuation of technical work after the BRS report¹⁷" published in June 2014, NordREG proposes that:

- A Nordic technical handbook is developed by TSOs and the industry. However NordREG
 intends to be part of this work as facilitators or observers depending on the need for
 support.
- A task consisting of Maintenance of documents, such as XML schemas should be taken on by the TSOs and industry.
- The development of Use-cases from the industry NordREG encourages the industry to continue this work and suggests that this work should be led by the industry. However NordREG intends to be part of this work as facilitators or observers depending on the need for support.

<u>Task</u>: Continue the technical work on a Nordic technical handbook, maintenance of XML schemas and use-cases on business processes.

Start: Q 3 2014

<u>31a11</u>. Q 3 2014

<u>Responsible</u>: The Retail Market WG will be able to act as a facilitator and/or observer in these processes. NordREG suggest that TSOs and the industry should take the lead for these tasks.

¹⁵ National point of information can be an information exchange system such as the Danish or Norwegian HUB

¹⁶ EDISYS consulting, 23 Juni 2014, Information exchange –Business requirements for a harmonized Nordic retail market

¹⁷ NordREG, 24 June 2014, Task 1.6: Note on Continuation of the technical work after the BRS report



7.4.3 Coordination of implementation of EU and national legislation

When new legislation on EU-level is developed there is a need for cooperation and information exchange between the members of NordREG.

Task: Coordination activates between the NRAs.

Start: ongoing, depending on European development

Responsible: The Retail Market WG

7.4.4 Monitoring of the retail market on a Nordic level

We believe that the Regulators will need to cooperate more systematically in the future to monitor the market players acting on an increasingly Nordic retail market. It might be needed to exchange information in a more formal way to investigate cases properly and to be able to enforce decisions. In a first step NordREG will map the legal scope for each regulator and discuss the need for enhanced cooperation in the future.

7.4.5 Yearly and final status report

The Retail Market WG will produce a status report on a yearly bases. The report will contain the development of the harmonisation and summarise the status for the tasks at hand. The report will also contain a national description of the development and a monitory view to visualise the progress of the national implementation of issued recommendations.

The four-year period will be summarised in a final status report. This report will be an extended version of the yearly status report and contain the work done during the project period 2015 to 2018. The result will be presented with greatest achievements and challenges during the period.

Target groups for these reports are the Nordic energy ministers, EMG, the EC, TSOs and stakeholders from consumer organisations and the industry.

Task: Yearly and final status report

Start: The reports will be delivered in due time before the yearly Nordic minister meeting to EMG.

Responsible: The Retail Market WG



8 Increased need for a flexible organization and Nordic coordination

8.1 Introduction and background

NordREG experience with earlier project organisation, 2011-2014, is positive. The connection and support from the Nordic Energy Ministers (NEM) and EMG has been essential for the project. The funds devoted by the NRAs and the NEM made the project possible and discussions with EMG helped to find ways forward when such was needed. Also the involvement from the industry through the steering group and task forces has been essential for the project. The industry has given valuable input and insight in current national business routines and rules. Stakeholders' different views and interests has been heard. NordREG recognise that these elements also will be vital for a coming project organisation. However, the new work method with mapping project that identifies areas possible to harmonise implies that there should be more flexibility in the project organisation. Suitable expert must continuous be engage in the project.

The main organization of NordREG so far is a rotating Presidency whose appointment changes every year. The highest deciding function is the Board which meets at least twice a year. This means that responsibility for the NordREG web, templates for reports, routines, policies, experts and stakeholders involved etc changes year from year. The funding of the Precidency is done within each NRA's existing budget and organisation. This has been a good organisation and functions well when all NRAs have resources to devote to this project. However there is a weakness in an organisation that is working on a long term project for nine years now to have such a lucid organisation. There are examples of other regional and European initiatives that have decided on a permanent supranational organisation. For example MEDREG which is the Association of Mediterranean Energy Regulators, that has been established in 2007. The organisation has a secretariat placed at the Italian regulator's, AEEG, premises. The Council of European Energy Regulators, has a supra-national organisation placed in Brussels. The benefits of having an organisation funded jointly or on a Nordic level is that there is a momentum in the progress made when the organisation is not reliant on national resources which may differ year from year.

8.2 Organisational structure

8.2.1 NordREG Board

The highest decision making organ within NordREG is the Board. The Board consists of the Director Generals from the Nordic National Regulatory Authorities (NRAs). NordREG Board authorises the Retail Market Working Group and has the ultimate decision making powers on all tasks and deliverables that are organized under the Board. One specific task for the Board in the work on creating a harmonised Nordic retail market will be to approve proposals from the project organisation that should be passed on to EMG and NCM in order to make high level political decisions.

8.2.2 Retail Market Working Group

NordREG's Retail Market Working Group (RMWG) is the group in charge of all retail market projects within NordREG. The RMWG monitors ongoing national work, consults with stakeholders, develops the work programme, prepares all deliverables to the Board and receives all material from the underlying task forces. Furthermore, the RMWG manages the work of negotiating and issuing recommendations, making status reports and coordinates the implementations and development on a national and European level. This implies contact with other organisations such as the EC, for example, to be part of and interact with the European development.



The RMWG provides guidance to the overall project and frequently supervises that the whole project, and separate subtasks related to it, are going forward according to the timetable and that necessary definitions of policy are prepared.

8.2.3 Nordic co-ordination

To be able to keep momentum and have an efficient project management on a Nordic level, NordREG needs continued support to be able to sufficiently focus on the important tasks at hand to be able to realize a harmonised Nordic retail market. Resources related to the Nordic retail project administration and project coordination is needed so that NordREG can carry out the important tasks at hand and to keep momentum. The administrative and coordinating support could be described as a secretariat. The tasks for this coordinating function could be:

- Responsibility for NordREG document templates
- Responsibility for NordREG webpage
- Quality check reports and other publications
- Act as secretary in the Retail Market WG and the task forces18 if needed
- Prepare meetings with stakeholders
- Managing and leading some appointed tasks
- Develop detailed project plans for these appointed tasks
- Draft documents
- Coordinate with CEER secretariat and/or other external organisations

8.2.4 Task forces

NordREG sees the need for Task Forces (TF) for areas of related tasks, the permanent members should be experts from NRAs. Each task force should have a drafting team. The drafting team will include one or more person(s) from the TF members. The TF can also hire a consultant to aid in the work. The function of TFs is to prepare and draft documents relating to the task at hand. The work should then be approved by the TF and then sent to the RMWG for approval. If the TF cannot agree on a specific issue this issue can be forwarded to the RMWG. The TF should consult with stakeholders through bilateral meetings, hearings and/or through public consultation

The number of required task forces is depending on the required tasks. NordREG has estimated that at least three different task forces¹⁹ should be established at the beginning of year 2015. These task forces will be active during year 2015 and 2016 at least, but the work related to the certain tasks can be depending on other tasks and therefor active on a later stage in the project.

The working language in all the task forces will be English.

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¹⁸ See 9.2.5

 $^{^{19}}$ Information exchange TF, Market rules for energy services TF and Smart grids TF



9 Budget for 2015-2018

During the period 2011 to 2014 the Nordic Energy Ministers has funded the development of a common harmonised retail market. These funds have been used for hiring a person to coordinate the work by NordREG and for projects carried out during the period. The funding has been a necessary and consists of almost one half of the total costs during the last four year period. The other two thirds are resources from the three NRAs; DERA, Ei, EV and NVE. Annex 4 gives an overview of previous four years budget.

The project period 2011 to 2014 has created a momentum of change toward a supplier centric market. The work on implement issued recommendations requires that the NRAs allocate more resources at national level. At the same time, the development on the European arena increase the need for a Nordic approach toward chosen market model. Further development of a secretariat in combination with the new project organisation would be necessarily for maintain the development toward a common harmonised retail market.

Below a tentative budget for the project period 2015 to 2018. NordREG expect that the NRAs contribute according to previous four years. The table shows the cost evenly over four years but in reality, the workload will vary.

Budget NRA	2015	2016	2017	2018	Total
Ei, Resources	1 796	1 796	1 796	1 796	7 184
NVE, Resources	450	450	450	450	1 800
EMV, Resources	450	450	450	450	1 800
DERA, Resources	750	750	750	750	3 000
Total	3 446	3 446	3 446	3 446	13 784

Budget Coordination	2015	2016	2017	2018	Total
Consultants	500	500	500	500	2 000
Meeting activities	435	435	435	435	1 740
Coordinator	1 650	1 650	1 650	1 650	6 600
Administration	80	80	80	80	320
Total	2 665	2 665	2 665	2 665	10 660

Total Project Costs	6 111	6 111	6 111	6 111	24 444

Table 4 Tentative budget 2015-2018, TNOK



10 Annex 1 Abbreviations

DSO: Distribution system operator ESCO: Energy Service Company EMG: The Electricity Market Group NCR: Nordic Council of Ministers NPI: National point of information NRA: National regulatory authority

SvK: Svenska Kraftnät TBD: To Be Decided

TSO: Transmission system operator

RMWG: NordREG retail market working group



11 Annex 2 References

NordREG:

NordREG, report 9/2010, COMMON NORDIC RETAIL MARKET Organization of the further work

NordREG, 2010, Implementation plan for a common Nordic retail market

NordREG, report 4/2011, Rights and obligations of DSOs and suppliers in the customer interface

NordREG, report 4/2013, Harmonized model for supplier switching

NordREG, report 3/2013, Nordic harmonization of universal service supply obligations

NordREG, May 2013, NordREG recommendations on implementing combined billing

EDISYS consulting, 23 Juni 2014, Information exchange –Business requirements for a harmonized Nordic retail market

NordREG, 24 June 2014, Task 1.6: Note on Continuation of the technical work after the BRS report

NordREG, report 2014, Framework for a harmonized moving process

NordREG, report x, 2014, NordREG's work towards a harmonised Nordic retail market –Roadmap update and national implementation monitoring

Other sources:

NBS, 16 June 2014, http://www.nbs.coop/about



12 Annex 3 Budget 2011-2014

In total 12 024 mil NOK has been invested in the harmonisation of the Nordic retail market during 2011 to 2014. The investment was shared between NRAs (64 percent) and NCM (36 percent). Below you will find the income and the estimated costs for the past four years in the project:

NRA funds:

T NOK

Funds NRA*	2011	2012	2013	2014	Total
Ei	1 776	1 917	2 016	1 474	7 183
NVE	450	450	450	450	1 800
EV	550	450	450	450	1 900
DERA	750	750	750	750	3 000
Total	3 526	3 567	3 666	3 124	13 883

Cost NRA:	2011	2012	2013	2014**	Total
NRA costs	3 526	3 567	3 666	3 124	13 883
Total	3 526	3 567	3 666	3 124	13 883

Result NRA	0	0	0	0	0

NCM funds:

T NOK

Funds NCM	2011	2012	2013	2014	Total
Transfer from balance		1 328	1 678	1 200	
Funds	3 000	1 500	1 500	1 500	7 500
Financial income	185	14	103	30	332
Total	3 185	2 842	3 281	2 730	7 832

Cost NCM:	2011	2012	2013	2014**	Total
Consultants	940	246	1 039	1 429	3 654
Coordinator	709	745	811	800	3065
Administration	208	173	231	501	1 113
Total	1 857	1 164	2 081	2 730	7 832

Result NCM:	1 328	1 678	1 200	0	0

Table 5Result and budget 2011-2014

^{*}NRA budget are based on rough estimate

^{**} The posts for 2014 includes costs per account 31 July, and remaining budget for 2014: Consultants includes ongoing studies and planned activates. Administration includes network activates such as Task Force meetings, workshops and public hearings.



13 Annex 4 Project organisation 2011 to 2014

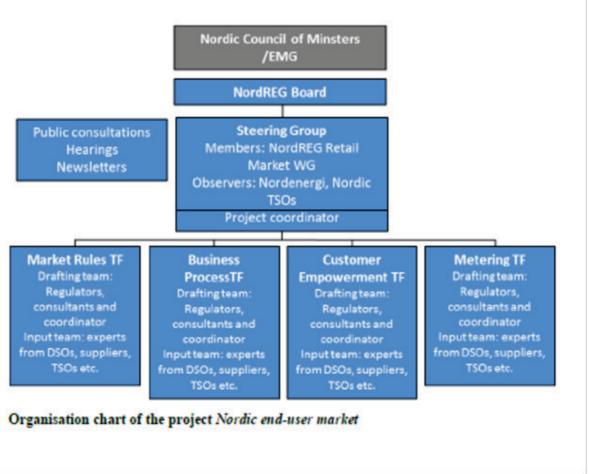


Table 6 Project organisation 2011-2014

