

## **Contribution from the Nordic countries Denmark, Finland, Norway and Sweden regarding electricity market design and regional cooperation in the energy sector**

### **Key Points**

#### **Wholesale and retail markets**

- Correct price signals in all markets and for all actors are essential. These prices should be the driver for investments. Regulated prices should be removed
- Level playing field for all market participants and regional harmonisation of short term markets
- Flow of electricity across and within borders without undue constraints
- Linking wholesale with retail markets can be achieved by effective competition
- A cost effective roll-out of smart metering is a key issue to activate demand response and integrating small-scale renewables into the system
- We welcome the freedom to choose aggregation services for all consumers. However, one solution for demand response may not be fit for all retail markets. For the Nordic market we currently believe it is necessary to keep the principle of one Balance Responsible Party (BRP) per connection point
- As a general rule, DSOs should not perform tasks which can be performed by participants in the competitive electricity market

#### **Regional cooperation**

- Regional cooperation can make an important contribution to the development of the internal market
- The Nordic countries can contribute to the process with experience from a long history of cooperation where we have come far in many areas on a voluntary basis.
- Review the existing roles of ACER in the light of the changes to the market design, while respecting subsidiarity of Member States.

### **General**

Development of the market rules should in principle be based on an energy-only system which we believe is the most cost-effective approach. The overarching objective when discussing modifications of the current market design should be to achieve an even better-functioning and competitive market. This will facilitate flexible consumption and higher shares of variable renewable electricity production, to the benefit of consumers, and thereby also facilitate the achievement of our common climate and energy targets with a view to the ambitions in the Paris climate agreement. As a first step, regulated prices should be removed and Member States must implement and enforce existing EU regulatory framework. It is important to first exhaust all benefits of the internal market and then to remove existing distortive provisions and barriers, before other measures are considered.

## **Wholesale markets**

### *Price signals as driver for investments*

Price signals should be the driver for investments both in infrastructure, capacity and flexibility. Correct prices reflect scarcity (time and location) and are important both in terms of ensuring effective market balance and in terms of managing grid congestions. The available capacity of existing and future interconnectors is essential for the development of correct price signals for investment. Establishing grids that can handle trade across borders requires a regional perspective when considering investments, while keeping in mind that planning and investing in infrastructure should be the responsibility of TSOs and market actors. It is important to ensure that cross border trade of electricity is not restricted, including in times where the system is under pressure.

### *Level playing field and harmonisation of short term markets*

In order to create a well-functioning market with a high degree of competition there is a need to ensure a level playing field for all market participants. All market participants – production, demand and storage - should have equal access to balancing markets and have equal balancing responsibilities. Furthermore, harmonization and coupling of intra-day and balancing markets is essential for the integration of renewable energy. Improved conditions for flexibility and renewables to participate in short term markets should also be considered, e.g lower threshold for bid sizes and moving the gate closure time closer to the time of operation. The roles and responsibilities of DSOs in the short-term markets need further development. As a general principle, DSOs should not perform tasks which can be performed by participants in the competitive electricity market. However, if DSOs take on tasks of local balancing and flexibility, a regulatory regime ensuring neutrality is a key element. Unbundling of monopoly activities from activities subject to competition would be a prerequisite.

It is essential to strive for harmonized balancing markets based on the relevant market, with common rules to provide similar conditions for investment incentives. The Nordic countries have come far in this area.

### **Flexible retail markets**

Linking wholesale and retail market will give correct and market based incentives to consumers (and possibly aggregators) to provide flexibility (demand response) and hence contribute to support a cost-effective integration of renewables. The Nordic countries believe that effective competition on retail markets (as well as on the wholesale markets) is the best way to achieve this. This view finds support in different market development initiatives in the Nordic countries in recent years, e.g. roll-out of smart meters, hourly settlement, deregulations of prices, data hubs etc.

Consequently, the EU should focus on facilitating competition, primarily through removing any barriers for new entrants. Smart metering in combination with billing systems to provide consumers with easy access to information is key and allows them to respond to fluctuations in electricity prices. This enables them to be active through demand response and enables a greater variety of contracts, including variable price contracts and time-of-use retail prices. Smart meters are also essential in

integrating increasing amounts of small-scale renewable production into the system. Smart meters are already installed or are being installed<sup>1</sup> in the Nordic countries.

The Nordic retail markets are to a high degree already well-functioning with low entry barriers. It therefore becomes important not to impose measures that may be in conflict with already well-functioning national and regional solutions. We believe that the Commission should be ambitious in the coming proposals related to the retail market, and we would certainly like to contribute by sharing our experiences.

#### *Demand response and aggregators*

In the Nordic countries, implicit demand response (also sometimes called “price-based”) plays a vital role and this view is supported by the Nordic Energy Regulators. Implicit demand response refers to consumers choosing to be exposed to time-varying electricity prices or time-varying network grid tariffs that reflect the value and cost of electricity. With correct information, consumers can decide – or automate the decision – to use less electricity at times of high prices and thereby reduce their energy bill.

Also explicit demand response through aggregation will most likely play an increasingly important role in the Nordic countries, and we believe such solutions are most efficiently developed by retail market competition where BRPs take an active role in the entire value chain of the wholesale market (i.e. day-ahead, intra-day and balancing). In order to ensure an efficient and correct balance settlement throughout this value chain we believe it essential to have the freedom to maintain the principle of only one BRP per connection point.

As the maturity of the different European retail markets differs, we recognise that one solution for demand response may not be fit for all retail markets. We would like to underline the importance of leaving the decision to intervene in the market to the competent national authorities after having conducted thorough impact assessments.

#### *Access to data*

As mentioned above, transparent, relevant and accessible information is an important issue. The Nordic countries are developing data hub<sup>2</sup> solutions that foster competition by providing equal access to data for relevant parties, ensuring standardized communication and market processes with equal timeframes for all market parties, and creating a level playing field for both incumbent and new independent market players. Apart from securing access to data, data hubs are vital for the retail market development in general in terms of supporting market processes, lowering entry barriers and empowering consumers. The entity responsible for data (whether it is the DSO, a common hub or a third party) must always be able to guarantee data security and protect consumer privacy. When it comes to bills as a medium for information for the customer we consider that additional information should be presented as attachments or in service portals and that the bill should be as simple as possible. The design of ICT systems ensuring neutrality would be an important element.

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<sup>1</sup> The roll-out of smart meters is completed in Sweden and Finland, and is scheduled for completion in Norway by 2019 and in Denmark by 2020.

<sup>2</sup> A national hub exists already in Denmark. The Norwegian hub will be operational in February 2017 and the Finnish hub in 2019. Sweden has also taken a decision to create a national hub.

## **Regional cooperation**

### *Nordic cooperation in the electricity market*

Regional cooperation can make an important contribution to the development of the internal market and an open, competitive and integrated electricity market will facilitate this transition. The Nordic long history of cooperation at regional level also shows that many challenges can be solved in a cost-effective way. In recent years, the cooperation in some areas has gradually expanded to also include the Baltic States. We believe that the main success factors behind the well-integrated and well-functioning common Nordic electricity market are a suitable energy mix, the strong tradition of cooperation between TSOs and NRAs, gradual market integration, a liquid market developed through trade at Nord Pool and Nasdaq and finally a strong political commitment. The Nordic countries have experience both from valuable regional initiatives in the past, but also from collaborations that has been less successful. We can see two main conditions for successful cooperation in general. First, there must be a clear target for the work with the aim to support all participating Member States to achieve their energy policy objectives. Second, the regional cooperation should be developed step by step with a bottom-up approach built on mutual interest and, as far as possible, on voluntary basis.

### *Areas suitable for compulsory cooperation*

Regional cooperation is an appropriate intermediate step towards European solutions. The Nordic countries welcome the regional and EU-wide approach in many areas of market design in order to reach a level playing field and if effectively improving market functioning, e.g. when it comes to harmonising important market rules within the scope of the network codes and guidelines. It is also important to have a regional approach regarding system adequacy issues and energy infrastructure planning. Also, the EU should explore the potential of regional retail markets where the Nordic countries have come a long way.

### *Areas suitable for more flexible cooperation*

In some areas however, regional cooperation should primarily be based on voluntary participation in order to be successful. One example is cooperation on support schemes and cooperation mechanisms within the Renewable Energy Directive. The Nordic countries believe that it should remain voluntary for each Member State to decide on the geographical scope of national support schemes. Cooperation between TSOs regarding grid operation is another area where the Nordic countries have achieved much based on a voluntary approach. Tasks now being discussed for Regional Operational Security Coordination (RSCs) have been included in agreements between the TSOs for many years, including principles for grid operation, security of supply, frequency management, balance regulation etc. Another important area is the ongoing cooperation between the Nordic TSOs on data hub development. We encourage cooperation on security of supply, including during scarcity situations, leaving the final responsibility for system security at the national level.

### *Increased regional harmonisation requires a review of existing roles*

It may be appropriate to review existing roles and responsibilities of regional organisations encompassing e.g. regulators, TSOs and power exchanges responsible for market coupling functions and price algorithms, while respecting subsidiarity of Member States. Also, new functions such as the Single Allocation Platform for transmission rights, and the coming XB intra-day solution is lacking governance and regulatory oversight. In order to have successful operation of several NEMOs within a price zone, NEMOs must share their order books in order to deal with situations of decoupling.