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EUROPEAN ENERGY MARKETS
TRANSPARENCY REPORT - 2012 EDITION

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The Report is published further to the attribution of the 2011 Energy Transparency Award (ETA). The ETA prize is assigned every year by the Florence School of Regulation to a company or institution for their particular contribution to the transparency of energy markets in Europe. The ETA is financed by a fund managed by the Florence School of Regulation and RWE is the initiator and the sponsor of the initiative. The purpose of the ETA is the promotion of transparency, which plays a fundamental role in favouring market well-functioning as well as economic and technical efficiency.

Executive Summary

This Report presents the main initiatives which contributed to promote and enhance the transparency of European wholesale energy markets in the year 2011.

The year 2011 was particularly landmarked by the development of the public dimension of transparency governance: a tailor-made regulation (Regulation on wholesale Energy Market Integrity and Transparency, also known by the acronym “REMIT”) of the European Parliament and the Council was precisely dedicated to the promotion of transparency and integrity in the European wholesale energy markets. The new Regulation allowed to fill the gaps in the existing regulation. While several regional markets had implemented at their own initiative various measures to promote transparency and integrity – for example, Nord Pool had implemented reporting requirements for fundamental data already in 2002 – the existing regulation had proved partial and unable to provide adequate governance to such complex and interconnected markets at EU level, where both financial and physical transactions are executed by different types of operators.

The REMIT is mainly built on three pillars: i) the prohibition of inside information; ii) the prohibition of market manipulation; and iii) the regulation of monitoring and surveillance functions, mainly performed by the Agency for the Cooperation of Energy Regulators (ACER) in close collaboration with National Regulatory Authorities (NRAs).

The REMIT’s potential in terms of improvement and development of energy trading in Europe is vast. Some of REMIT’s basic elements have successfully been implemented already in the past decade in the Nordic Wholesale Market.

However, a major role in producing the expected outcome will be played by the effectiveness of its implementation, which requires a remarkable load of work to be undertaken by the different parties involved – including both national (NRAs, Member States) and supra-national institutions (European Commission, ACER) – and leaves some scope for disharmonised procedures and sanctions to be established across the EU. Moreover, the needs and behaviour of the end-users may have to be addressed more clearly.

In the pre-REMIT context, with no precise and common rules concerning what information should be disclosed, and to whom, how and how often, the 2011 pro-transparency initiatives of public bodies (such as ERGEG, CEER, ACER and other regulatory agencies) and private market operators still played a remarkable role, and allowed developing transparency and integrity beyond the requirements established by the law in force. For example, TSOs can contribute to the development of a transparent market environment with the publication of fundamental and real-time data, and increased cooperation at EU and regional levels. NRAs had also made efforts to develop a market monitoring and surveillance function themselves but with a very high level of diversity in their scope. As long as this Report is concerned, two specific case studies of energy trading via exchanges (EEX and Powernext) show the typical transparency features of exchanges, which include the publication of transactional data, fundamental data and price indexes, as well as the establishment of monitoring practices to prevent market misconducts.

In fact, all of these remarkable “self-regulation” initiatives can only develop uneven standards and market conditions for traders across Europe. In light of this lack of harmonisation, the entry into

force of the REMIT offered a unique opportunity to raise and level out the transparency and integrity standards in any energy and capacity trading activity in Europe, in order to ensure a more efficient trading environment to all market agents, ultimately to the benefit of European energy consumers.

1. INTRODUCTION

In October 2011 the European Parliament and the Council issued a tailor-made Regulation on wholesale energy market integrity and transparency.¹ The Regulation, largely known by the acronym REMIT, entered into force on 28th December 2011 and established a common regulatory framework for energy trading at European level.

As highlighted in last year's Report, such rules had been long-awaited by market operators and stakeholders.² Transparency has the power to create a level playing field, reduce the scope for anti-competitive practices and more generally, increase market operators' confidence in fair pricing mechanisms.

A well-functioning wholesale market is fundamental for the whole energy system, including the downstream market, since suppliers source the energy they need from the wholesale market and pay wholesale prices.³ Accordingly, there is a clear regulatory interest in having efficient wholesale markets, where energy and (cross-border) transportation capacity is fairly priced and abuses are prevented. In this case, wholesale markets provide a mechanism to purchase energy and manage the risk, promote competition and facilitate new entry all along the value chain.

1 Regulation (EU) No. 1227/2011, OJ L 326/1 of 8 December 2011.

2 For further details, cf. 2010 Edition of the Report (Michetti, 2011).

3 The definition of "wholesale market" in REMIT includes OTC, derivate and bilateral markets: "Wholesale energy markets encompass both commodity markets and derivative markets, which are of vital importance to the energy and financial markets, and price formation in both sectors is interlinked. They include, inter alia, regulated markets, multilateral trading facilities and over-the-counter (OTC) transactions and bilateral contracts, direct or through brokers." (page 1, (5) of Regulation (EU) No. 1227/2011, OJ L 326/1 of 8 December 2011).

In the pre-REMIT context, pan-European energy trading activities were combined with a framework featured by nation-wide oversight, that mostly lacked clear provisions for the prohibition of market abuse on trading venues and that mostly lacked the visibility of trading, due to the lack of transactional data reporting and to the limited access to fundamental data.⁴ This means that so far the majority of transactions have not been reported and NRAs have not been in the position to catch the entire extent of energy trading activities, based on both commodities and derivatives. Thus, a harmonised set of specific rules for the promotion of market integrity and transparency was advocated in view of the good functioning of European energy markets.

In the context of liberalised energy markets, the REMIT has the potential to work as a tool that is complementary to competition policy in the pursuing of market well-functioning. While competition policy addresses the issues deriving from the opening of the markets - such as the competition between incumbent operators, with significant market power, and smaller operators -, the REMIT regulates transparency and integrity in market conducts, in order to guarantee that i) the relevant information is available to market operators (transparency), and ii) the available information is not opportunistically used to the detriment of fair competition (integrity). In light of the REMIT, transparency and integrity become two prerequisites for the lawful market conduct of any operator, independent of the market power and the actual ability to implement opportunistic behaviours. In particular, the new dedicated regulation for market integrity and transparency defines and prohibits trading on inside information

4 Nord Pool is an exception: a reporting obligation was established in 2002 and the reporting system, in the form of Urgent Market Messages (UMMs), has been further developed and elaborated since.

and market manipulation. Moreover, it establishes explicit market monitoring and data collection duties for ACER.

Following a broad overview on European energy trading in Section 2, Section 3 surveys the provisions included in the REMIT concerning inside information, market manipulation and market monitoring activities, in the innovative context of a tailor-made regulation for European energy trading.

Section 4 analyses the major issues related to the implementation of the REMIT, including those related to the multi-level nature of the governance of transparency.

Section 5 surveys the most relevant pro-transparency initiatives undertaken by public bodies, such as the Council of European Energy Regulators (CEER) and ACER, while Section 6 reports the transparency developments registered by two power exchanges, presented as case studies: EEX and Powernext. Also thanks to their centralised structure, energy exchanges typically disclose relevant information to traders and establish surveillance mechanisms to avoid market misconducts. As a result, their price and quantity signals are generally deemed reliable and their price references indexes are even used as benchmark for OTC trading, which still represents the large majority of energy trading in Europe.

Finally, Section 7 provides some concluding remarks.

2. OVERVIEW ON ENERGY TRADING

Competitive energy wholesale markets play a key role in ensuring an efficient energy system. The energy price in the wholesale market, for instance, represents a considerable component of retail price. In the EU, excluding taxes, the part of the average energy bill that is represented by the cost of wholesale electricity is around 60% for electricity and 40% for gas (European Parliament's Committee on ITRE, 2010; Ofgem, 2011). Wholesale markets typically enable suppliers to source the energy they need to operate in the downstream market. In some specific cases, suppliers source their energy in different ways, notably through vertical integration or bilateral contracts:

- Those suppliers who are part of integrated companies which also operate in the generation segment of the value chain, will be in the position to utilize the benefits of a vertically integrated structure and source their energy within the integrated structure, with no need to turn to the wholesale market.
- Suppliers can establish long-term bilateral contracts directly with electricity generators or gas producers, thus using an alternative way to buy and sell energy (although these volumes may be subsequently traded in the wholesale market).

However, under all other circumstances, suppliers typically buy the electricity and the natural gas they need from the wholesale market and pay

wholesale prices: a well-functioning market, for instance, allows those who are not part of a vertically-integrated organisation to source their energy and compete in the downstream market. In other words, well-functioning wholesale markets provide a mechanism to purchase energy, promote competition and facilitate new entry in all segments of the energy supply chain.

Accordingly, there is a clear regulatory interest in wholesale prices to be fairly set and not be manipulated or distorted.

2.1 Exchanges vs. OTC Trading

Energy trading on wholesale markets (both prompt and forward) typically concerns either exchanges or over-the-counter (OTC) platforms.

Exchanges allow parties to anonymously trade commodities, derivatives and other financial instruments and trade standardised contracts on standard terms and conditions. Moreover, exchanges publish pricing information that is often used as a reference for both OTC and structured contracts.

However, the biggest portion of trading concerning electricity and gas in Europe takes place in the OTC market. As regards electricity trading in 2009, for example, according to the European Commission, 75 per cent of electricity was traded OTC, while only 25 per cent was traded via power exchanges (European Commission, 2010a).⁵

Energy trading in Europe involves a multitude of market operators of different nature, including

⁵ The OTC market is less dominant in the Nordic market due to the successful implementation of the Nordic financial electricity exchange, Nasdaq OMX. Even though, the share of cleared OTC trading on the Nordic market, which doesn't take in account non-cleared OTC trading, is still a considerable 40% (Nordic Energy Regulators, 2012).

physical participants (such as generators and suppliers) and non-physical participants, which usually trade for speculative purposes. The boundaries between the two categories are far from being clear-cut: on the one side physical participants may engage in speculative trading, while on the other side non-physical market participants also take contracts for physical delivery.

Energy trading includes different market segments for electricity and gas, but also hard coal, CO₂ and oil. A wide range of products is traded accordingly:

- Spot, forward, futures and options products in the electricity market;
- Spot, forward, futures, swaps and options products in the natural gas market;
- Spot, forward, futures, swaps and options products in the hard coal market;
- Spot, forward and futures in the CO₂ market;
- Spot, forward, futures, swaps and options products in the oil market.

While spot products refer to trading for delivery in the same day as the trade, forward trading consists of trades over a longer duration, and may include trades which are months, seasons or even years ahead of delivery. Physical market participants typically buy or sell forward and use spot and prompt markets to fine-tune their position and manage their risk. For example, electricity generators and gas producers typically manage the risk deriving from the sale of energy, while suppliers typically manage the risk deriving from both variations in the cost of energy and price volatility (Ofgem, 2009).

2.2 Trading in Energy Exchanges

The figures concerning the volumes of electricity and natural gas traded at European exchanges in recent years clearly show that trading activities have been enhanced.

As regards electricity trading, in particular, European power trading hubs have witnessed increased liquidity, higher number of participants, and price convergence. Price convergence has further been enhanced by the ongoing coupling of the EU electricity markets, such as the introduction of price market coupling in the

2012 (DG Energy, 2012a). Also the number of participants increased with EEX and Nord Pool Spot respectively reporting around 220 and 370 participants in 2011. Moreover, prices in European power trading are converging more and more as a result of the development of emissions trading, of the globalisation of fuel markets and of the proceeding market coupling in electricity (RWE, 2011).

Similar trends of increased liquidity and number of market participants have been featuring the trading of natural gas. Natural gas is exchanged at: ICE/APX (London), Powernext (Paris), APX/

Table 1. Traded market size of European wholesale energy markets according to the UK broker survey

	Traded size in 2011	Change compared to 2010	Change compared to 2009
Electricity	6,200,339 GWh	+27%	+51%
Gas	6,259,668 GWh	+27%	+93%
Emissions	2,553,945,866 metric tonnes	-13%	-14%

Source: Our elaboration of data from Financial Services Authority (2011; 2012).

Central Western Europe (CWE) region and the interim tight coupling between the CWE and the Nordic markets. The biggest power exchanges are EPEX (Leipzig and Paris), Nord Pool (Oslo) and APX/Endex (Amsterdam) for spot and futures products, while other important power exchanges, such as OMEL (Madrid), EXAA (Graz), Belpex (Brussels), APX UK (London), GME (Italy), OTE (Prague), PPX (Warsaw), Borzen (Ljubljana) and Opcom (Bucharest) mainly trade spot products (RWE, 2011).

Total trading volumes per year in continental Europe increased from 3,000 TWh in 2003 to 12,500 TWh (annualized) in the first quarter of

NP-Endex (Amsterdam) and EEX (Leipzig), while further trading hubs are NBP (UK), Zeebrugge (Belgium), TTF (Netherlands), Gaspool (Germany), NCG (Germany), CEGH (Austria), PEG (France), CDG (Spain) and PSV (Italy). Hub traded volumes increased remarkably from less than 650 bcm in 2003 to 1700 bcm in 2011, with NBP holding the biggest market share (67%) in 2011, followed by TTF (9%) and NCG (7%) (DG Energy, 2012b).

Moreover, price convergence is also featuring the European gas market. NBP, in the UK, is the most liquid natural gas market in Europe and

basically works as a benchmark for the price on the continent, notwithstanding the low physical interconnection of the markets. The existing price differences may be usually explained in terms of transportation costs or short-term physical constraints (RWE, 2011).

2.3 Trading Outside Energy Exchanges: The FSA Broker Survey 2011

An interesting reference in the analysis of trading activity in the European energy markets in 2011 is provided by the survey conducted by the Financial Services Authority (FSA), the authority in charge of the regulation of the financial services industry in the United Kingdom. The survey concerns trading in the energy markets (precisely gas, power, coal and emissions traded markets, both national and European) in the period between 1st August 2010 and 31st July 2011, and it is restricted to UK brokers.

The broker survey shows that the absolute number of trades increased compared to the previous year both in the European gas market and in the European electricity market, with increases ranging between 9% and 15%. On the contrary, the emissions market shrunk by 43% compared to the previous year. The FSA believes that this substantive reduction is due to the combination of the success of the exchange-traded emissions contracts,⁶ as well as to the temporary decline in market confidence following a phishing attack which temporarily affected transaction volumes in early 2011. Moreover, according to the survey, both the Eu-

⁶ The ECX/ICE trading platform accounts for 80% of the exchange traded volume on the European carbon market. The other major exchanges upon which EU ETS compliant carbon credits and their derivatives are traded are the NASDAQ OMX Commodities Europe (formerly Nord Pool), BlueNext and EEX (Carbon Investments, 2011).

ropean power market and the European gas market grew by 27% compared to the previous year, respectively reaching up to 6,200,339 GWh and 6,259,668 GWh (FSA, 2011).

The figures reported in Table 1 are limited to the sample of UK brokers and do not include exchange-traded energy. However, the remarkable expansion registered in the size of European gas and electricity markets clearly suggests a positive trend. Similarly, the decrease in the size of the emissions market can be interpreted as a signal of the growth of exchange-based emissions trading.

3. A NEW GOVERNANCE FOR TRANSPARENCY: THE REMIT

Liberalised European energy markets are in big need of transparency. The first energy package laid the basis for an EU-wide liberalised energy market in 1996 and led to a prodigious increase in EU-wide trading as well as to more complex, sophisticated and interconnected markets.⁷

“Therefore the concern to ensure the integrity of markets cannot be a matter only for individual Member States. Strong cross-border market monitoring is essential for the completion of a fully functioning, interconnected and integrated internal energy market.”⁸

As a matter of fact, bottom-up nation-based or sector-specific rules and monitoring practices have proved unable to provide an adequate EU-wide regulatory framework for transparency and integrity.

⁷ For instance, the overall volume of electricity traded via both exchanges and OTC almost tripled between 2000 and 2009, increasing from 3,500 TWh to 10,000 TWh (European Commission, 2010).

⁸ Section (4), preamble of Regulation (EU) No. 1227/2011, OJ L 326/1 of 8 December 2011.

The Regulation (EU) No 1227/2011 on Wholesale Energy Market Integrity and Transparency (REMIT) precisely provides a common regulatory framework for the promotion of transparency and integrity in wholesale energy markets, for the benefit of final consumers of energy. The Regulation was published on the Official Journal of the European Union on 8th December 2011 and entered into force on 28th December 2011.

The experience of the European energy markets shows that markets fail to provide transparency and integrity automatically, so that specific and dedicated rules and enforcement mechanisms are required. In fact, the lack of transparency and integrity and the absence of effective market monitoring may leave scope for market misconducts, and thus prevent fair competition.

Competition policy has always been an important pillar of the European Union agenda. In view of market well-functioning and consumer welfare, competition policy in Europe aims to create non-discriminatory access to the open markets to all operators, and to prevent those who hold a significant market power to behave opportunistically to the detriment of fair competition. The REMIT represents an important complementary instrument to competition policy in the pursuit of market well-functioning: it explains what information should be disclosed and how the available information should be used, and thus clarifies the features of the information framework for any trading activity involving any market participant in Europe.

Higher transparency ensures that more information is available. The disclosure of the information which is deemed relevant in light of the good functioning of the market, affects the possibility for market operators to receive efficient market signals before making their choices. With

no precise and common rules concerning what information should be disclosed, and to whom, how and how often, the pre-REMIT context was featured by a considerable variety of transparency practices implemented by market operators across Europe with different outcomes. By contrast, the new setting establishes clear disclosure requirements and data collection responsibilities for NRAs and ACER.

Higher integrity entails that the available information is used in a fair fashion, in order to avoid damaging the other market participants. The remarkable contribution of the REMIT in this area is related first of all, to the definition of the market misconducts which should be sanctioned across the European energy market, and second, to the establishment of monitoring and surveillance duties, aiming at the detection and prevention of such misconducts.

Overall, the REMIT builds up an integrated regulatory framework addressing some of the misconducts which are most detrimental for market well-functioning. It does so by focusing on three “pillars”: i) Prohibition of inside information; ii) Prohibition of market manipulation; and iii) Regulation of monitoring and surveillance functions, mainly performed by the Agency for the Cooperation of Energy Regulators (ACER) in close collaboration with the National Regulatory Authorities (NRAs).

Subject Matter and Scope

The new Regulation establishes a set of rules prohibiting abusive practices on wholesale energy markets, coherently with the existing rules on financial markets (Art. 1). Accordingly, it applies to trading in wholesale energy products, with the exception of those financial instrument already

covered by the Market Abuse Directive (MAD).⁹ In view of the detection and prevention of abusive behaviours, the Regulation assigns fundamental monitoring functions to the Agency for the Cooperation of Energy Regulators (ACER), which has a duty of collaboration with NRAs (Art. 1). Finally, the Regulation takes into account the interaction between wholesale energy markets and the Emission Trading Scheme (EU ETS) of the European Union (Art. 1), which is the largest scheme for the exchange of greenhouse gases emission allowances implemented in the world.¹⁰

It is possible to identify three different pillars upon which the Regulation is built:

- i) The prohibition of inside information;
- ii) The prohibition of market manipulation; and
- iii) The regulation of monitoring and surveillance functions, i.e., a number of activities performed by ACER in close collaboration with NRAs, including the registration of market participants, the reporting of suspected practices and the enforcement of the regulation.

Prohibition of Insider Trading

The Regulation clearly defines inside information as the “*Information of a precise nature which has not been made public, which relates, directly or indirectly, to one or more wholesale energy products and which, if it were made public, would be likely to significantly affect the prices of those wholesale energy products*” (Art. 2).

First of all, the Regulation prohibits trading on inside information, i.e., misusing inside information to obtain monetary or competitive advantages. This means that those who hold inside information are prohibited to: use the information to acquire or dispose of the wholesale energy products to which that information relates; disclose that information to other persons; recommend or induce other people to acquire or dispose of wholesale energy products to which that information relates (Art. 3).

Second, the Regulation establishes the obligation to publish inside information. Market participants are obliged to disclose effectively and timely the inside information which they hold, especially that concerning the capacity and use of facilities for production, storage, consumption or transmission of electricity or natural gas, and the capacity and use of LNG facilities, including planned and unplanned unavailability of these facilities. The disclosure of inside information can be only delayed by market participants if this is necessary to protect their legitimate interests. However, in any case, the delay should not have the effect of misleading the public. Moreover, during the time of the delay, the operator concerned has to ensure the confidentiality of the inside information and cannot take trading decisions based on that information (Art. 4).

Prohibition of Market Manipulation

The Regulation defines “market manipulation” through the identification of a number of abusive practices (Art. 2), such as:

- i) Entering into a wholesale transaction which gives false or misleading signals concerning the supply or the demand or the price

⁹ Directive 2003/6/EC, OJ L 96/16 of 12 April 2003.

¹⁰ Cfr. European Union, Climate Action: “Emission Trading Scheme (EU ETS)”, http://ec.europa.eu/clima/policies/ets/index_en.htm.

- of wholesale energy products;
- ii) Securing or even trying to secure the price of a product at an artificial level;
- iii) Implementing deceptive behaviours which give false or misleading signals to the market;
- iv) Disseminating through the media information, which gives false or misleading signals to the market, as well as disseminating false or misleading news.

The Regulation recognises the abusive nature of these practices and their potential in working to the detriment of market well-functioning, and accordingly prohibits market manipulation activities (Art. 5).

Monitoring, Surveillance and Other Duties of ACER

In order to detect and prevent the misuse of inside information and market manipulation activities by market participants, the Regulation establishes clear monitoring duties for ACER and NRAs (Art. 7). These additional duties of ACER provide for an extension of the activity scope of the Agency to the field of market transparency and integrity and contribute to enlightening the crucial role of these two issues in the promotion of effective regulation and energy market integration.

In particular, further to the REMIT, ACER holds the responsibility for market monitoring activities - to be undertaken in cooperation with NRAs -, and for the collection of both transactional and fundamental data from market participants.

In light of the responsibility on market monitoring, NRAs have an obligation to immediately inform ACER in case they suspect that abusive market practices concerning trading on inside information or market manipulation are preventing the well-functioning of wholesale energy market in their Member State or in any other Member State (Art. 16). Similarly, any person professionally arranging transactions with wholesale energy products who reasonably suspects that a transaction might breach the REMIT, has to notify the NRA (Art. 15).

In case of infringement, penalties are applied by the Member State concerned. More precisely, Member States are responsible for setting the rules concerning effective, dissuasive and proportionate penalties applicable to infringements of the Regulation. Moreover, they are responsible for ensuring that they are implemented. Penalties must reflect the nature, duration and seriousness of the infringement, the damage caused to consumers and the potential gains from trading deriving from inside information or market manipulation. The rules set by Member States on this regard will have to be notified to the Commission within 18 months after the entry into force of the Regulation, i.e., by 29 June 2013 (Art. 18). This arrangement implies the existence of a diversity of national enforcement regimes which is suboptimal as compared to a regime harmonized at the EU level and may therefore not work in an effective and efficient way.

As for the responsibility of ACER in data collection, the Regulation establishes a duty for market participants to provide ACER with a record of all wholesale energy market transactions (so-called “transactional data transparency”). These records must specify, at least: product bought or sold, price and quantity agreed, date and time of

the transaction, parties involved in the transaction and beneficiaries of the transaction. Similarly, the Regulation establishes a duty for market participants to provide both ACER and NRAs with the information on the capacity and the use of facilities for production, storage, consumption, or transmission of electricity or natural gas, as well as LNG facilities (“fundamental data transparency”). The European Commission is in charge of working on the implementation of these data collection rules. More precisely, the Commission is responsible, by means of implementing acts, for listing the contracts and derivatives that must be reported to ACER, and adopting uniform reporting rules and procedures for the disclosure of both transactional and fundamental data (Art. 8).

Apart from these two major areas of activity, namely market monitoring and data collection, the Regulation establishes further relevant responsibilities for ACER. First of all, ACER is deemed responsible for the creation of a European register of wholesale market participants. All market participants involved in the transactions that reported to ACER, have to register at the NRA of the Member State where they are based or where they are resident. NRAs will set national registers and then transfer the information included in their registers to ACER, in a format that ACER itself will have to determine in cooperation with NRAs. ACER will then be responsible for the collection of all of the information and the creation of a single European register of market participants (Art. 9).

Moreover, in view of effective cooperation, the Regulation deems ACER responsible also for the identification and implementation of efficient mechanisms to collaborate and share the relevant information with other authorities, including NRAs, financial authorities and national competition authorities (Art. 10). Finally, ACER

is responsible for the confidentiality, integrity and protection of all the information that is received and kept in its system (Art. 12). This will be a comprehensive task and it is therefore essential that ACER will have at its disposal the appropriate resources in terms of staff and (IT) budget.

4. IMPLEMENTING THE REMIT

Before the introduction of the REMIT, energy trading at pan-European level was combined with only nation-wide oversight, no clear definition or prohibition of market abuse on trading venues and finally, no visibility of trading, due to the lack of transactional data transparency and to the limited access to fundamental data.

The new dedicated regulation for market integrity and transparency defines and prohibits trading on inside information and market manipulation. It also establishes for the Agency for the Cooperation of Energy Regulation explicit market monitoring and data collection duties. In particular, in order to overcome the previous lack of harmonisation and the existing regulatory gaps, the REMIT promotes the implementation of a more holistic approach to energy markets, based on both wider commodity coverage and centralised monitoring and reporting functions (DG Energy of the European Commission, 2011).

The REMIT does have a potential to fundamentally improve and develop energy trading integrity and transparency in Europe. However, the extent to which this potential will be fully exploited will mainly depend on the effectiveness of its implementation. It should be clear that the implementation will require a remarkable load of work to be undertaken by the different involved parties, especially ACER and the NRAs. Moreover, for the effective implementation the quality of the collected data will be of essential importance.

- The European Commission will have to work on the implementing legislation;
- Member States will have to ensure that NRAs hold adequate and effective enforcement and penalty powers;
- ACER will have to prepare its data collection and analysis operations and the efficient mechanisms to cooperate with NRAs; It will also have to build up its human / analytical capacity to meet the expectations of REMIT. An increase in staff is unavoidable.
- NRAs will have to set up the registries; and finally,
- Market participants will have to ensure compliance – in practical terms, this implies that market operators will have to understand the reporting obligations, collect the relevant information, compile the forms and deal with the bureaucratic procedure established by the registration requirement.

As a result, a number of relevant implementation challenges can be identified.

4.1 Registration vs. EU Trading Passport

One of the issues that the REMIT addresses is the existence of particular national licensing regimes which may prevent market entry and market integration by foreclosing national markets. The NRAs, via CEER, had proposed the introduction of a Europe-wide Energy wholesale Trading Passport. The Trading Passport was intended as a form of certification allowing to trade in all of the countries of the European Economic Area and replacing the existing national licensing regimes.

The benefits of such Passport were mainly identified in the possibility to reduce bureaucracy and create a single certification allowing trading in all of wholesale energy markets in Europe. The simplification deriving from the Passport mainly concerned the establishment of a “one-stop shop” for traders and a more efficient allocation of the monitoring functions: only the NRA of the home country of the market participant was going to be responsible for the compliance with the licences and their allocation.

The Passport was proposed by the Rapporteur of the European Parliament, but was finally not agreed by the Council. The REMIT introduced a national registration requirement for market participants instead.

According to this registration system, every market participant has to register once, using a format which will be determined by ACER within the six months following the entry into force of the REMIT. The content of the registration form will be determined via the coordinated approach by NRAs and will be publicly consulted with market participants.

There is a major difference between the regime installed by the REMIT and that initially proposed

by CEER: the registration requirement established by the REMIT will apply on top of the several national access regimes which will continue to be implemented. On the contrary, the Trading Passport would have replaced the existing national licensing regimes. Accordingly, the latter solution would have represented a more powerful tool to create an EU level playing field and avoid unnecessary administration costs (CEER, 2011).

Nevertheless, the REMIT leaves room for an adjustment of the regulatory framework in the near future. After one year from the entry into force of the registration regime, the European Commission will have to assess the functioning and usefulness of this system. Should the registration regime not prove effective in delivering the expected outcomes in terms of transparency and integrity, the Commission will have the chance to consider the implementation of further instruments, including the Trading Passport.

4.2 National vs. European Requirements for Collecting Data

The collection of data by ACER is without prejudice to the right of NRAs to collect additional data for national purposes. This means that in some cases market participants will have to comply with additional transparency requirements outside those established by the REMIT.

The fact that national reporting obligations are not restricted in light of the REMIT, weakens the degree of harmonisation of data collection practices across the EU. Market participants will have to keep on dealing with different requirements, submission methods, formats, as well as languages.

The issue of the combination of national and supranational (European) requirements for data

collection is related to the multi-level nature of the governance of transparency.¹¹ When rules are established and enforced at different competing levels of governance, a high degree of coordination is required in order for the overall institutional framework to deliver efficient outcomes. By contrast, the lack of coordination among the different levels may cause both overlapping and inconsistency. This in turn increases regulatory uncertainty and inevitably works to the detriment of the good functioning of the market.

4.3 Implementation Schedule

The REMIT entered into force in late December 2011. However, its full implementation will only be achieved in the medium-term.

In 2012, all of the required implementing acts will have to be issued and adopted. ACER, for instance, will have to define the registration details and format and market participants will have to register with NRAs. In order to do that, national registers will have to be operational within 3 months from the adoption of the implementing rules. Similarly, within 6 months from the adoption of the implementing rules, the reporting requirements for transactional and data transparency will become applicable.

Finally, within 18 months from the REMIT's entry into force, Member States will have to specify the penalties to be charged in case of infringement of the regulation. Therefore, the REMIT's implementation process allows for the period between December 2011 and June 2013 to be marked by considerable regulatory uncertainty over the consequences of potential infringements.

¹¹ For further details, cf. 2010 Edition of the Report (Micchetti, 2011).

5. PRO-TRANSPARENCY INITIATIVES OF PUBLIC ENTITIES

Besides the legislative initiative of the European institutions to create a tailor-made and dedicated regulatory framework, a number of noticeable pro-transparency actions were undertaken by other public entities in 2011. In this regard, the activity of CEER, ACER, AU and BNetzA particularly deserves to be mentioned.

Moreover, it is important to acknowledge the remarkable activity of ERGEG, “the forerunner to ACER”.¹² ERGEG, a formal advisory group to the European Commission, was created by the Commission itself in 2003¹³ and dissolved with effect from 1 July 2011, with ACER fully operational. ERGEG held a pioneering role in the development of transparency and regulatory best practices, and considerably contributed to highlight the need of a common regulatory framework for transparent energy markets in Europe.

For instance, in December 2007, during the preparatory work for the Third Energy Legislation Package, the former DG Tren issued a joint mandate to the Committee of European Securities Regulators (CESR) and ERGEG to gather advice on whether the existing securities regulation (MAD and MiFID) was sufficiently addressing market integrity in the electricity and gas markets. ERGEG and CESR advised the Commission that the securities regulations were not sufficient and advanced a number of recommendations for the filling of the existing regulatory gaps. Their advice was then integrated into the Proposal of a Regulation on energy markets integrity

¹² Cfr. CEER’s website: www.energy-regulators.eu.

¹³ Decision 2003/796/EC, OJ L 296/34 of 14 November 2003.

and transparency advanced by the European Commission in 2010 (European Commission, 2010b).

5.1 Council of European Energy Regulators (CEER)

The Council of European Energy Regulators (CEER) is the body through which Europe’s national energy regulators voluntarily cooperate.

Between July 2010 and January 2011, CEER implemented a remarkable pro-transparency initiative: a pilot project called “Energy Trade Data Reporting Scheme”. The objectives of the project were (CEER, 2011b):

- Demonstrate the feasibility of an efficient, cost effective, comprehensive and standardised collection, storage and monitoring scheme for energy trade data;
- Provide representative examples of statistical analysis of trade data;
- Provide examples of trade data analysis which may lead to the identification of potential market abuses;
- Provide recommendations for the future development of an EU trade data reporting and monitoring scheme.

The project was set up under the overall framework of the Financial Services Working Group of the European Energy Regulators, and in cooperation with the European Federation of Energy Traders (EFET) as well as an external consulting firm.

The geographical scope of the pilot project was limited to the “CWE+” area, including France, Germany, Austria, the Netherlands, Belgium and Luxembourg. The project considered only the data on the wholesale electricity market, due to

Box 1 – Energy Transparency Award (ETA) 2011

CEER was the winner of the Energy Transparency Award 2011. The prize was delivered during the ETA Ceremony on 9th November 2011 in Brussels.

Following a call for proposals launched in May 2011, the numerous nominations were evaluated according to 8 different criteria: efficiency, reproducibility, innovation, simplicity of design and implementation, responsiveness to users' needs, leverage and contribution to market oversight improvement.

The Selection Committee, composed of Jorge Vasconcelos (Chair), Jean-Michel Glachant, Peter Kaderjak and Jan Moen decided to assign the 2011 ETA to CEER, recognising in particular its contribution to the

implementation of transparency regulation at European level through the pilot project “Energy Trade Data Reporting Scheme”.

According to the Selection Committee:

*“The CEER Pilot Project Energy Trade Data Reporting Scheme demonstrated within a period of only six months that the establishment of an effective European monitoring of wholesale energy trading based on a largely electronic data collection will be challenging, but is feasible. It served as a prototype for the implementation of the Regulation on Energy Market Integrity and Transparency and hence it contributed to persuade EU legislators about the possibility and usefulness of more systemic and sophisticated EU-wide market monitoring”.*¹⁴

the higher liquidity and faster data availability compared to the gas market. However, the conclusions of the project are deemed to have general implications for the gas market too.

The electricity data considered during the pilot project covered OTC, brokers and exchanges trading venues and the following products and markets: OTC and exchange trading, physical and financial energy markets, spot and derivatives. Moreover, fundamental data on generation outages was collected from both public and non-public sources. The monitoring was performed through a type of software commonly used in financial markets, which was re-adapted according to the specificities of the wholesale energy markets.

CEER published the final report in May 2011, providing the findings concerning the prototype

of an electricity and gas trade reporting and monitoring scheme. The last two sections of the report (Section 5 and Section 6) are respectively dedicated to the provisions of recommendations for a future European trade data reporting scheme, and to the analysis of the pilot project results in view of the REMIT. In particular, the report highlights that:

“The vision developed in the course of the pilot project is a central EU energy trade database, possibly administered by ACER, enabling a simple reporting from market participants and an effective monitoring of the energy wholesale market for all relevant authorities, monitoring the energy wholesale market under their respective energy regulatory, financial market or competition legislation.”

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The decisions of the Selection Committee, as well as more

5.2 Agency for the Cooperation of Energy Regulators (ACER)

The Agency for the Cooperation of Energy Regulators (ACER), located in Ljubljana, is part of the new institutional framework introduced by the Third Energy Legislation Package, adopted in 2009 and in force since March 2011.

The tasks, organisation and operation of ACER are set out in the legal acts forming the Third Package and, in particular, in its founding regulation: Regulation (EC) No. 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.¹⁵

ACER's mission is to cooperate with NRAs and other EU institutions to develop common rules for the internal energy market and the operation of the European energy grids. Moreover, ACER's role is to complement the activity of NRAs by providing EU-level regulatory oversight.

Since its launch in March 2011, ACER has already delivered a series of instruments dedicated to the completion of the single energy market, including:

- Opinions on the ENTSO-E and ENTSO-G Statutes, Rules of Procedure and list of members (published in May 2011);
- Framework Guidelines on Capacity Allocation and congestion Management for Electricity (published in July 2011);
- Framework Guidelines on Capacity Allocation Mechanisms for the European Gas Transmission Network (published in August 2011).

details on the Energy Transparency Award 2011, are available at the following link: http://www.florence-school.eu/portal/page/portal/FSR_HOME/ENERGY/Energy_Market_Transparency_Award.

15 OJ L 211/1 of 14 August 2009.

ACER has rapidly taken over its tasks according to its founding Regulation and the fundamental role recognised by the REMIT in the promotion of energy markets' integrity and transparency (cf. Section 3).

5.3 Acquirente Unico (AU)

In Italy, Acquirente Unico (AU) ("Single Buyer") is a not-for-profit company which was set up in 1999 in order to ensure the supply of electricity to the customers of the captive market, i.e., the customers who do not exert their right to choose the supplier, in accordance with the EU provisions on the Single Buyer.¹⁶ By purchasing in the wholesale market the energy which distributors must resell to captive consumers, AU works as a kind of aggregator between the customers and the market.

Since the full-opening of the market in July 2007, AU is tasked with the provision of electricity supply to the small consumers (households and small businesses connected at low voltage, with less than 50 employees and a yearly turnover not exceeding € 10 m) which do not wish to migrate to the open market. These consumers represent the market for the protected price regime ("*servizio di maggior tutela*"). In order to source its energy, AU can trade in regulated (spot and forward) markets and hold auctions under transparent and non-discriminatory procedures. A number of pro-transparency initiatives can be related to AU's activity.

AU posts demand forecasts and details about the composition of its procurement portfolio (type of contracts, duration, amount of electricity and

16 Decreto Legislativo del Presidente della Repubblica Italiana of 16 March 1999 no. 79, published on the Gazzetta Ufficiale no. 75 of 31 March 1999: "Implementation of Directive 96/92/CE establishing common rules for the internal electricity market in the European Union".

prices) on its website. In October 2010, AU also implemented an energy auction portal concerning a number of products: physical bilateral, contracts for differences, transmission capacity, green certificates and guarantees of origin. The portal allowed to considerably reduce the time required to hold auctions as well as improve the efficiency of the overall process of bid submission. Moreover, the portal allows operators to retrieve information about rules for participation, contractual standards and all data concerning the auctions already concluded.

Following Law No. 99/2009, the AU has been charged by the Italian energy Authority with the responsibility to implement customer protection services.¹⁷ The AU's Help Desk is a call centre providing information about the functioning of the liberalised market and consumers' rights. It also collects consumers' complaints concerning unfair contractual practices and incorrect information provided by operators. Moreover, the AU Help Desk reports about these issues to the Italian energy Authority.

Finally, starting from 2010, AU has been responsible for the operation of the Integrated Information System (*Sistema Informatico Integrato*, SII). The data base concerns energy end-users in Italy, and collects the information about switching and consumers' bills, to be released upon request of suppliers and distributors. The Italian energy Authority recognised AU a role in the design and development of the system. The system allows to integrate and exchange data on energy consumers, as well as make the switching process faster and more secure.

¹⁷ Legge No. 99/2009 of 23 July 2009: "Disposizioni per lo sviluppo e l'internazionalizzazione delle imprese, nonché in materia di energia", published on Gazzetta Ufficiale no.176 of 31 July 2009.

5.4 Bundesnetzagentur

In Germany, The Federal Agency for Networks - i.e, Electricity, Gas, Telecommunications, Post and Railway - (BNetzA), is the regulatory authority.

In recent years, BNetzA has constantly worked for the improvement of transparency in both gas and electricity markets. For instance, in 2011, BNetzA started monitoring to what extent German TSOs were publishing the required information on all the relevant points of their transmission systems, also in light of the Gas Regional Initiative North-West (GRI NW) transparency project.¹⁸

6. "SELF-REGULATION" FOR TRANSPARENCY: POWER EXCHANGES

The governance of European energy markets transparency, consisting in the establishment and in the enforcement of rules, has been developing also through the initiative of private operators. Energy market operators can implement a variety of mechanisms favouring information disclosure and data reporting, thus going beyond the requirements deriving from the existing law.

Generally speaking, both the public and the private dimension of governance are relevant in light of the overall development of transparency in European energy trading. The co-existence of private and public rules and enforcement mechanisms reflects the multi-level governance of transparency with regard to the specific dimension of the nature of the enforcers.¹⁹ The different levels interplay and compete in creating governance, and provided that there is a sufficient level of coordination,

¹⁸ The Gas Regional Initiative North-West includes the following participating countries: Netherlands, Belgium, France, Ireland, Great Britain, Germany, Denmark, Sweden, Northern Ireland, Norway (observer).

¹⁹ Cfr. European Energy Markets Transparency Report 2010 (Michetti, 2011).

Table 2. EEX volumes of trades for 2011 compared to 2010

EEX Markets	2010	2011	Change
Power Spot mkt (Auction+Intraday) – EPEX spot volumes (TWh)	279.0	314.0	+12.5%
Power Derivatives mkt (TWh)	1,208.0	1,075.0	-11.0%
Thereof OTC-Clearing (TWh)	712.0	577.0	-19.0%
Thereof exchange traded (TWh)	496.0	498.0	+0.4%
Natural Gas Spot mkt (TWh)	15.0	23.0	+53.3%
Natural Gas Derivatives mkt (TWh)	31.8	35.5	+11.0%
Emissions Spot mkt (1000 tonnes)	25,184.0	25,640.0	+1.8%
Emissions Derivatives mkt (1000 tonnes)	127,197.0	81,048.0	-36.3%
Coal Derivatives mkt (1000 tonnes)	1,350.0	420.0	-68.9%

Source: Our elaboration of data provided by EEX, 9 March 2012.

efficient outcomes may be achieved. For this reason, all self-regulation initiatives - such as market conduct rules, grid codes, monitoring mechanisms, disclosure requirements - represent important tools for the development of transparent energy markets.

The main difference between the two levels of governance is that while public governance applies to all market operators, and thus, creates universal conditions for better trading across Europe, self-regulation initiatives inevitably originate a certain level of disharmonisation, since they favour the uneven achievement of specific transparency and integrity standards. However, it wasn't before the end of 2011 that energy trading was provided with a dedicated EU-level framework of specific binding rules to be implemented in all of the

Member States. Therefore, especially until that moment, the initiatives of market operators have been playing a fundamental role in the promotion of transparent energy markets.

This year, our Report will focus on the transparency developments of power exchanges, which provide centralised structures for energy trading, as opposed to bilateral trading and OTC transactions.

6.1 Case Study No. 1: EEX (European Energy Exchange AG)

EEX (European Energy Exchange AG) is an energy exchange with headquarters in Leipzig, Germany. In 2011 the exchange had 219 trading participants from 20 different countries,

compared to 206 participants in 2010 (data provided by EEX).

EEX offers trading venues for the following markets: power spot and derivatives, natural gas spot and derivatives, emissions spot and derivatives as well as coal derivatives.

Table 2 shows that EEX trading volumes increased in 2011 as regards the power spot market, the exchange traded derivatives market, all of the natural gas markets as well as the emissions spot market.

Market data concerning all products traded on EEX are available in electronic format as Info-Products (EEX, 2012). The Info-Products concern both **End-of-Day** and **Delayed** data. The former includes data on volumes and prices after the closure of trading, final settlement prices for all trading products as well as aggregated representation of individual trades (all available in CVS, XLS and XML formats), while the latter includes daily volumes and prices with a 15- to 20- minute delay, prices of all trades for all trading products, as well as per-second representation of individual trades (available in XML format). The Info-Products also provide **Historical** data - that is all data until the end of the previous year -, and **Current** data - that is all data concerning the current and the previous year.

Further informative means used by EEX include: **SMS** for the prices from the EEX and EPEX Spot, **RSS-Feed** on planned and unplanned unavailability of power plants (without delay), as well as **Reports**. The Reports (in PDF format) provide detailed information on power plant data or CO₂ emissions. The “Daily Transparency Report”, for instance, is a daily newsletter concerning the German/Austrian market area and providing fundamental information on the

availability of power plants and on the actual feed-in by both conventional and renewable sources of energy.

To safeguard that the processes of trading and pricing are carried out fairly and free from manipulations, an autonomous and independent body of the exchange, the Market Surveillance was formed. The Market Surveillance records all the data regarding exchange trading and the settlement of trades on a daily basis, evaluates these and carries out any investigation activities which might be required. In addition to this, it carries out special investigations on its own initiative or upon an instruction to that end by the exchange supervisory authority. The Market Surveillance commands far-reaching rights to demand and obtain information in order to be able to fulfil its tasks.

Transparency in Energy Markets Platform

The “Transparency in Energy Markets” platform, established in October 2009, represents a remarkable initiative of EEX toward the achievement of higher level of transparency in energy trade. The platform was at first established through the collaboration of EEX with the four German transmission operators (50Hertz Transmission GmbH, Amprion GmbH, EnBW Transport-netze AG, TenneT TSO GmbH) and now includes Austria too (EEX, 2012). The platform offers the possibility to share the information which plays a crucial role in ensuring market well-functioning and efficient outcomes in European energy markets. The access to the content of the platform is allowed to trading companies, analysts, journalists and public authorities via an ftp server. The information disclosure is based on both statutory and voluntary information provided by market operators of the German/Austrian area.

Table 3. Performance indicators of the transparency platform in 2011 (2010 in brackets)

	Germany	Austria	Entire Market Area Germany/Austria
Total number of reporting companies	29 (24)	10 (2)	39 (26)
Coverage for statutory publications	93% (89%)	100%	94%
Coverage for voluntary publications	42% (48%)	71%	45%

Source: EEX (2012)

The **statutory** publication requirements concern (data provided by EEX):

- Installed capacities (per generation unit), for generation units equal or larger than 100 MW
- Planned non-usabilities of generation units equal or larger than 100 MW;
- Planned and actual production of conventional units equal or larger than 100 MW;
- Expected and actual production for wind and solar power plants;
- Planned and unscheduled non-usabilities of generation and consumption units equal or larger than 100 MW.

The information disclosed on a **voluntary** basis concern all generation units, independent of their size, and may include (data provided by EEX):

- Installed generation capacity;
- Available generation capacity;
- Generation of the previous day.

The platform facilitates the process of data reporting to ACER from market operators established by the REMIT, since it can take over messages to ACER by market participants in aggregate terms. Moreover, the disclosing of information on the platform can help prevent inside trading or other abusive conducts which work to the detriment of competition and market well-functioning (EEX, 2012).

The improvement implemented into the platform during 2011 concerned both technical aspects and the content (EEX, 2012). In particular, starting from November 2011 the facilities with less than 1 MW have been included in the message on the installed generation capacities, and the installed wind and solar facilities have been updated on a quarterly basis. Moreover, the improvements also concerned the IT security and the general technical performance of the platform. In 2011 the platform was visited by approximately 15,000 different visitors every month, tripling the average number of visitors in 2010 (EEX, 2012).

The comparison of the performance indicators of the platform in 2010 and 2011, highlighted in Table 3, shows that the total number of reporting companies increased from 26 to 39 and the growth was particularly remarkable in Austria,

Box 2 - Powernext's History 2008-2012²⁰

Starting from the establishment of Powernext Day-Ahead market in 2001, Powernext has managed the French power market (spot and futures) until 2008.

In November 2008 Powernext Gas spot and Powernext Gas Futures were launched. One month later the activities and the staff of Powernext Day-Ahead, Powernext Intraday and market coupling were transferred into EPEX Spot. Powernext currently holds a stake of 50% of this company, which operates the power spot market in France, Germany, Switzerland and Austria.

In April 2009 Powernext transferred French Power Futures Market (Powernext Futures) into EEX Power Derivatives. Powernext acquired in return a stake of 20% of this company, which trades power futures in France and Germany.

From that moment, Powernext specialised in spot and future markets for gas trading. Powernext launched the OTC Clearing service for Powernext Gas Futures in October 2010, and the Powernext Energy Savings market in January 2012. Powernext Energy Savings is a spot market for the French “Certificats d’Economies d’Energie”, CEEs (Energy Saving Certificates).²¹

where the number increased from 2 to 10. As for Germany, the percentage of coverage for voluntary publications decreased by 6%, against a 4% increase in the percentage of coverage for statutory publications: this shows that the willingness of market operators to disclose extra information should not be given for granted. The degree of coverage is precisely calculated on the basis on the ratio between the power plant capacity reported on the platform and the total power plant capacity located in the control area in Germany or Austria. Another interesting fact highlighted in Table 3 is that there is a considerable difference between the percentage of coverage in Germany and Austria, with the latter reporting higher percentages in terms of both statutory and voluntary publications (EEX, 2012).

Reporting companies are those with generating units equal or larger than 100 MW. Moreover, most of these companies and a further number of small undertakings report additional data on a voluntary basis. Finally, both the German and the

Austrian TSOs use the platform to report relevant information (data provided by EEX).

Furthermore, in 2011 the platform has proven that both statutory and voluntary sections are open to further countries or market participants and can be expanded with data from other countries

20 More information on Powernext's history available at: Powernext – “History”, http://www.powernext.com/#sk;tp=app;n=page;f=getPage;t=page;fp=system_name:History;lang=en_US;m=Powernext_Group.

21 Cf. articles 14 to 17 of the Law n. 2005-781 of 13 July 2005 establishing the programme for energy policy (aka “Loi POPE”). The CEEs are recognised under certain conditions from the Ministry of Energy to those who take actions for energy savings, in all sectors (residential, industrial, farming, transport). The mechanism relies on the obligation established on energy suppliers to realise energy savings and obtain CEEs based on the number of kWh saved. Moreover, these eligible operators are also incentivised to promote energy efficiency with their customers, such as local authorities. Alternatively, the eligible operators also have the chance to buy the CEEs from other operators who implemented actions for energy savings. Further details available (in French) at: Ministère de l’Ecologie, du Développement durable, des Transport et du Logement – “CEE : Principes du Dispositif”, <http://www.developpement-durable.gouv.fr/Principes-du-dispositif.html>.

Table 4. Powernext's volumes of trade in 2011 by month and comparison with 2010 (TWh)

2011	Powernext Gas Spot				Powernext Gas Futures	OTC Clearing
	PEG Nord	PEG Sud	PEG Sud/ Nord	PEG TIGF	PEG Nord	PEG Nord
January	1.34	0.53	0.00	0.08	14.77	13.80
February	1.44	0.47	0.00	0.04	4.01	5.07
March	1.63	0.31	0.00	0.00	5.14	5.80
April	1.05	0.26	0.00	0.03	2.07	1.63
May	1.08	0.15	0.08	0.00	2.63	3.94
June	2.08	0.27	0.04	0.03	3.32	5.03
July	1.28	0.27	0.08	0.00	1.70	0.80
August	2.09	0.15	0.11	0.00	1.94	0.61
September	2.26	0.33	0.14	0.00	3.39	2.65
October	2.39	0.17	0.08	0.01	4.89	3.86
November	2.19	0.21	0.12	0.07	3.87	2.05
December	2.04	0.15	0.07	0.07	6.30	1.20
Total	20.87	3.27	0.72	0.33	54.03	46.44
Change (Tot 2010)	+100%	+28%	n.a.	-48%	+99%	n.a.

Source: Our elaboration of data provided by Powernext, 27 April 2012.

relatively easily. For instance, the publication of fundamental data regarding the generation of power from Austria was launched in July 2011, within the implementation of the statutory requirements. Moreover, the existing voluntary messages by Austrian power plant operators were expanded considerably. Starting from the beginning of 2012, the voluntary section of the

transparency platform has been offering also the information on Czech Republic (EEX, 2012).

6.2 Case Study No. 2: Powernext

The Powernext gas markets allow trading natural gas on the French gas exchange points (PEGs), the virtual points which enable shippers to exchange

titles of gas. There are three hubs in France: PEG Nord and PEG Sud (operated by GRT Gaz, a subsidiary of GDF-Suez), and finally PEG TIGF (operated in the south-western part of France by TIGF, a subsidiary of Total).

The **Powernext Gas Spot** market offers three types of spot contracts on all of the 3 PEGs: Within-Day, Day-Ahead and Week-End. The first type of contracts are meant to enable the intraday arbitrage and balancing for the running gas day - considering that the French gas transport network operator offers daily and not hourly balancing -; the second type of contracts allows buying and selling gas for the next gas business day; finally, the third type of contracts allows buying and selling gas for the coming week-end.

The **Powernext Gas Futures** market offers Futures contracts only on PEG Nord and enables to trade for the next 3 months, the next 2 quarters and the next 3 gas seasons. These contracts are continuously traded from 9am to 6pm on business days.

As of April 2012, Powernext had 43 members in its gas spot market and 37 members in its gas future market (data provided by Powernext). The volumes of trade for 2011 are reported in Table T4.

The pro-transparency initiatives of Powernext concern the disclosure of transactional information and in particular, the provision of price references both in the spot and in the futures market (data provided by Powernext).

Transactional Data

The transactional data disclosed by Powernext includes both end of session and real-time data.

As for end of session data, Powernext discloses

the information concerning all of the transactions concluded on the market at the end of each negotiation day, 15 minutes after the end of the trading session. The information provided concerns: the time of transaction; product characteristics, such as the delivery area, type of product, first and last delivery days and number of days; total traded volume (MWh/day); total traded volume for the whole contract period (MWh); as well as the price (Eur/MWh). The names of the parties involved in the transactions are not disclosed in order to ensure anonymity and prevent discretionary practises. All the transactions are anonymously recorded in two files published on Powernext's website, namely Powernext Gas Spot Daily Transactions and Powernext Gas Futures Daily Transactions. Every day at the end of each trading session, Powernext also publishes the "open interest", that is the sum of the open positions held by each market participant on each product.

As for real-time data, Powernext publishes real-time information on its transactions through Bloomberg, Montel and Thomson Reuters. During each trading session and close to real time (10 minutes delay), these data providers publish the information on the transactions that are concluded and the order book, listing all the bid/ask orders.

Price Reference Spot

The Price References Spot indexes are available on Powernext website and are used as fundamental reference in operational contracts (e.g., for infrastructure operators to adjust their position), as well as in commercial contracts stipulated by other market operators. The two indexes available are the **Powernext Gas Spot End of Day Price (EOD)** and the **Powernext Gas Spot**

Daily Average Price (DAP). The EOD index is a closing-time reference price provided for a given product on the grounds of the trades concluded over the settlement period (15 minutes, from 16:30 to 16:45) close to the end of the trading session. The DAP index is an all-day reference price calculated as a volume-weighted average of all the trade prices registered for a given product during the entire trading session.

Price References Futures

The Price References Futures indexes are available on Powernext website and include the **Powernext Gas Futures Settlement Prices** and the **Powernext Gas Futures Monthly Index**. The settlement prices are closing prices based on trades and bid/ask spreads over a 15 minutes period (between 16:30 and 16:45). They are calculated every trading day on the contracts available for negotiation, based on a methodology that is also available on Powernext's website. The monthly index is published by Powernext on a monthly basis and is calculated as the simple average of daily settlement prices of the front month contract.

Fundamental Data

Powernext does not directly disclose information on fundamental data on gas market, such as: capacity availability and unavailability on the transport network, LNG and storage capacity availability, etc. However, through its website it provides links to institutions and organisations which provide fundamental data: regulatory bodies such as the French energy regulator (CER), ACER, CEER and the European Commission; transmission system operators (GRTgaz, TIGF); distribution system operators (GrDF); and storage system operators (Storengy, TIGF).

Monitoring

Powernext implements market surveillance routines and procedures in order to detect possible abuses or misconducts and pays particular attention to the admission of new market operators to avoid fraud and other opportunistic behaviours. The monitoring activities are implemented in cooperation with sector specific regulatory bodies.

Conclusions on the Self-Regulation of Power Exchanges

In the pre-REMIT era, with no common regulatory framework in force at EU-level, the initiatives of market operators - for instance, in terms of promotion of information disclosure and market surveillance -, were among the few available tools to boost market well-functioning.

Even though most of energy trading in Europe occurs through OTC, energy power exchanges have certainly led the way in terms of pro-transparency best practices. Energy exchanges provide centralised structures and platforms for energy trading, as opposed to bilateral and OTC trading, and this centralisation offers the opportunity to collect the information and share it with market participants. Besides, energy exchanges have a strong interest in guaranteeing fair pricing mechanisms to their users: the higher the confidence that operators have in the pricing mechanisms of the centralised trading system, the higher the number of market participants using the exchange will be. Even though to different extents and with different formats and procedures, nowadays exchanges disclose information concerning both the transactions taking place and the fundamental data that is necessary in order for market operators to take efficient trading choices. Moreover, they typically implement surveillance mechanism to avoid misconducts

and unlawful market practices. As a result, the price and quantity signals deriving from energy exchanges are generally deemed reliable and their price references indexes are used as benchmark for OTC transactions.

However, the absence of standardised rules for information disclosure and monitoring, as well as the reliance on information disclosed on a voluntary basis, allowed a rather disharmonised development of transparency practices across Europe. For instance, voluntary based information disclosure cannot always guarantee sufficient transparency standards, since in some circumstances market participants may not want to share all the relevant information they have in order to retain an advantage towards to the other competitors. In this context, the REMIT offers a unique opportunity to raise and level out the transparency standards in all the energy trading activities in Europe, both exchange- and OTC-based, also taking into account the transparency best practices implemented so far. By establishing common binding rules for all energy trading activity in Europe, the new set of rules dedicated to market integrity and transparency has the potential to achieve more even transparency standards, guarantee a level playing field and ensure a more transparent trading environment to all European energy traders.

6.3 Case Study No. 3: Nord Pool Spot

Nord Pool Spot is the spot exchange of the Nordic countries: Denmark, Estonia, Finland, Lithuania, Norway, and Sweden are the principle owners (Latvia, the remaining Baltic country, is expected to join Nord Pool Spot in the near future). Nord Pool Spot has its headquarters in Oslo, Norway. In 2011 the exchange had 370 trading participants from 20 different countries.

Nord Pool Spot has two markets: Elspot, the day-ahead market and Elbas, the intraday market. Elspot is a day-ahead market for the physical delivery of electricity in which hourly supply and demand bids for the next day are aggregated and matched. The resulting market clearing price is the system price. Absent transmission constraints, all electricity is traded for the system price. The system price also constitutes the reference price that is used for power derivatives. Elspot is Europe's most liquid day-ahead market: more than 70% of Nordic power consumption is bought on Elspot. Elbas is an intraday market with continuous power trading up to the hour prior to delivery.

Nord Pool Spot also operates, together with NASDAQ OMX, the UK power market N2EX.

NASDAQ OMX is the financial market for the Nordic countries. Nord Pool used to operate the financial market, but decided to sell it to NASDAQ OMX in 2008. NASDAQ OMX trades power derivatives such as futures, forwards and options. Their time horizons range from a single day up to six years. The base load derivatives traded at this market are daily and weekly futures; monthly, quarterly, and yearly forwards; and options and contracts for differences. The peak load derivatives traded at this market are weekly futures and monthly, quarterly, and yearly forwards, NASDAQ OMX also trades Certified Emission Reductions (CER), European Union Allowances (EUA), and German, Dutch and UK power derivatives.

Table 5 shows that Nord Pool trading volumes are very large relative to the market. The traded volumes at Elspot are larger than 70% of the total consumption, indicating that Elspot is a deep and liquid market.

Transparency in Energy Markets Platform

Market data concerning all products traded on NordPool Spot, dating back to January 2010, are available at their website and can be browsed, depicted as charts or on maps and downloaded in XLS format. Fundamental information, dating back to May 2011 can be found under Urgent Market Messages (UMMs), where planned, unplanned and revisions of planned outages of plants or grids are announced.

The system of Urgent Market Messages was implemented already in 2002 and has been further developed since as a reporting tool. More recently, Nord Pool Spot has implemented several rules in line with provisions in the REMIT. The market conduct rules implemented in June 2012 contain a prohibition on insider trading and disclosure requirements for planned and unplanned outages. Disclosure should occur within sixty minutes after occurrence by means of an Urgent Market Messages.

A Market Surveillance monitors trading activities and investigates possible breaches of the market conduct rules. Any possible breaches on the market conduct rules and national legislation are reported to the authorities. Market Surveillance is looking for matters likely to have an impact on the prices, and whether this information is available

to all members. A central activity for Market Surveillance is checking the quality of the above mentioned Urgent Market Messages.

7. Concluding Remarks

The present Report aimed at picturing the most relevant developments of transparency registered in the European wholesale energy markets during the year 2011, in terms of both public governance and private operators' actions. These two fields correspond to different dimensions of the governance of transparency, which create specific rules for transparency and ensure their enforcement.

The private dimension of transparency has played a relevant role so far. One example is provided by the transparency rules and procedures which typically feature energy exchanges, including codes of conduct for market participants, information disclosure obligations, as well as surveillance mechanisms for the detection of abusive practices.

However, these "self-regulation" initiatives could only produce uneven transparency standards across Europe, and a binding and tailor-made Regulation for energy trading was advocated in view of the good functioning of energy wholesale markets and of the necessity to guarantee more harmonised trading conditions. Binding rules

Table 5. Nord Pool Spot Markets volumes of trades for 2010 and 2011

Nord Pool Spot Markets	2010	2011
Power Spot mkt Elspot (TWh)	305.2	294.4
As share of consumption	74.4%	73.1%
Power Spot mkt Elbas (TWh)	2.2	2.7

Source: The Annual report of Nord Pool Spot 2011.

would have reduced the scope for voluntary mechanisms of disclosure - for which market participants might have little incentives -, and would have created a level playing field for all energy trading activities in Europe, including both exchange-trade and OTC-trade, which still represents the big majority of energy trading in Europe.

For this reason, the adoption of the REMIT represents the most remarkable development of transparency registered in the year 2011. The new European Regulation filled the gaps in the previous regulatory framework and thus, made it more suitable for nowadays integrated and complex energy markets. The new rules apply to all energy trading activities in Europe, and therefore aim at creating more even transparency standards and guarantee more efficient trading environment to all energy traders.

In the context of liberalised energy markets, the REMIT represents a powerful tool complementary to competition policy in the pursuing of market well-functioning. While competition policy addresses the issues deriving from the opening of the markets - such as the competition between incumbent operators with significant market power and smaller operators -, the REMIT regulates transparency and integrity in market conducts. The experience of the European energy markets shows that markets fail to provide transparency and integrity, so that specific rules and enforcement mechanisms are required in order guarantee that i) all the relevant information is available to market operators (transparency), and ii) the available information is not opportunistically used to the detriment of fair competition (integrity).

Accordingly, the REMIT defined the market misconducts which should be sanctioned across the European energy market, and established

monitoring and surveillance duties aiming at the detection and prevention of such misconducts. The entry into force of the REMIT allowed the development of the public dimension of transparency governance, and the definition of clear rules concerning the information to be disclosed and the misconducts to avoid. The REMIT certainly has a remarkable potential in the enhancement of fair competition and market well-functioning.

However, further challenges lie ahead for the development of transparent European energy markets. The current mid-term challenges, especially for 2012 and 2013, concern precisely the implementation of the REMIT.

The implementation of the REMIT will require a remarkable work to be undertaken by the different parties involved, such as the European Commission, ACER and the NRAs. A number of issues will have to be addressed, and a few examples are: the definition of the most suitable format for the disclosure of the information and the identification of the transactions that should be reported; the creation of national registries of market participants; the guarantee that NRAs have adequate enforcement and penalty powers to punish in case of infringement; the degree of harmonisation among the different penalty regimes which are going to be set up at national level. Furthermore, the issue of the provision of sufficiently clear and harmonised rules to market participants will have to be addressed, since this will inevitably affect their ability to comply with the new Regulation. For instance, the fact that national obligations are not restricted in light of the REMIT and Member States may impose additional data collection requirements, exposes market participants to a considerable level of heterogeneity concerning the nature of the data

collection requirement, the submission method, the format as well as the language. Similarly, the REMIT introduced a registration regime which is not going to substitute the different national licensing procedures in force nowadays. The lack of agreement on the implementation of the EU Trading Passport failed to reduce the administration burden for market participants, and most importantly showed that Member States were not willing to accept a single and common

administrative tool for the registration of market participants.

The extent to which the potential of the REMIT will be fully exploited, to the benefits of European energy markets and consumers, will depend on how efficiently these implementation challenges will be addressed in the near future, and on whether such implementation will guarantee a sufficient level of harmonisation across the EU.

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