COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Report on progress in creating the internal gas and electricity market

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A. CONTEXT

In late 2008 and 2009, the world was hit by the financial and economic crisis. This had a direct impact on the demand for energy, causing unpredicted falls in the price of oil on the international markets. This, in turn, impacted on gas and electricity prices.

A dispute between two companies outside the EU (Gazprom of Russia and Naftogaz of Ukraine) led to an unprecedented crisis in the EU's gas supply. Between 6 and 20 January 2009, gas flows from Russia to the EU via Ukraine were interrupted, affecting several Member States.

2009 was also an important year because the third internal energy market package was adopted on 13 July 2009. The third package strengthens the regulatory framework that is needed in order to make market opening fully effective, in the interest of achieving the lowest possible energy prices, better energy security and sustainability.

This report discusses how the developments described above have impacted on the EU electricity and gas markets over the past year and how they are likely to affect market developments in the future.

B. DEVELOPMENTS IN KEY AREAS, DEFICIENCIES STILL TO BE ADDRESSED

1. Implementation of legislation

In order to complete the internal electricity and gas market and prepare the ground for the implementation of the third package, it is essential that the rules of the current Directives are implemented correctly. In June 2009, the European Commission initiated infringement procedures against 25 Member States for electricity and against 21 Member States for gas. The key violations identified lack of transparency, insufficient coordination efforts by transmission system operators to make maximum interconnection capacity available, absence of regional cooperation, lack of enforcement action by the competent authorities in Member


2 The input for this report comes in two forms: national reports submitted by national regulators and Eurostat data on end user prices. The national reports were submitted to the Commission in the second half of 2009 and they mainly cover 2008; Eurostat data were available for the first half of 2009 and were retrieved on 26/01/2010.

States and the lack of adequate dispute settlement procedures. In October 2009, the Commission launched further infringement proceedings against two Member States; these proceedings related to gas transit and storage.

The Commission's infringement actions resulted in the European Court of Justice censuring SE and BE for having incorrectly implemented the provisions concerning the competences of the national regulatory authorities with regard to network tariffs. In another case, BE was condemned for having failed to designate a gas TSO.

At the same time, the Commission is helping Member States to transpose the new Directives of the 3rd package correctly and on time (i.e. by 3 March 2011). The Commission has published interpretative notes on unbundling, national regulatory authorities (NRAs), retail issues and gas storage.

2. Market integration

Graph 1 – EU-27 monthly gross consumption of electricity

The most obvious impact of the economic crisis was the significant fall in the consumption of gas and electricity. Year on year, the EU-27 electricity consumption remained relatively stable, but fell by 12% and 7% in April and May, respectively. Consumption started to recover thereafter, but it was still substantially lower than in previous years.

Source: Eurostat Energy Statistics

6 Case C-274/08 (Sweden) and case C-474/08 (Belgium).
7 Case C-475/08.
The decline in gas consumption was even more significant. Between January and March 2009, gas consumption (in EU-27) dropped by around one fourth. This drop is partly due to the interruption of gas supplies from Russia via Ukraine, but even after the crisis in March 2009 EU-27 gas consumption was still more than 16% down on the March 2008 level.

Graph 2 – EU-27 monthly consumption of natural gas

![Graph showing EU-27 monthly consumption of natural gas]

Source: Eurostat Energy Statistics

Volumes and liquidity on wholesale market

By comparison with the significant declines in electricity and gas consumption in the first half of 2009, volumes on most of the wholesale markets have stood their ground quite well. Although liquidity in general has gone up, trading activity on the EU’s gas hubs and exchanges remains ‘thin’ compared with power markets. On the electricity derivatives markets, the financial crisis seems to have helped to produce an increasing shift towards cleared transactions as a means of reducing counterparty risk. A positive trend was the development of hub trading in DE due to the integration of entry-exit zones.

Another trend is the consolidation of European power exchanges. EEX (European Energy Exchange) and Powernext jointly launched EPEX (European Power Exchange), a spot exchange in FR, DE and CH, while APX covers NL, BE and UK. Moreover, Nord Pool Spot, EPEX Spot and OMEL (ES) have launched a project for a pan-European price coupling. Gas exchanges were created in AT and DK, while IT is planning to start a gas exchange in early 2010.
Graph 3 – Liquidity on the electricity wholesale spot market

The regulatory framework for traded wholesale power and gas markets is attracting increasing attention. With regard to existing European financial and energy regulation, there is concern that the current regulatory framework for these markets is not delivering effective oversight or sufficient transparency. The Commission is therefore examining a possible legislative initiative in this area in 2010. Moreover, the Commission launched the procedure to adopt a decision amending the transparency guidelines annexed to Regulation (EC) No 1775/2005.

**Infrastructure investments**

The Second Strategic Energy Review, published in November 2008, sets the priorities for the EU in the field of energy for the coming years. The priority for gas and electricity infrastructure is to develop the energy networks and, in particular, to tackle cross-border bottlenecks, congestion and missing infrastructure links.

The European Energy Programme for Recovery (EEPR) is helping to secure and speed up investments in the energy sector, and thereby has a direct impact on the EU economy and employment. It is also helping to improve the security of supply of the most vulnerable Member States and connect ‘energy islands’ to the rest of the EU energy market. This plan, which has been endorsed by Council and Parliament, makes a sum of EUR 2.365 billion available for gas and electricity interconnection projects.

**The work done in the regional initiatives**

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9 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Second Strategic Energy Review: an EU energy security and solidarity action plan COM/2008/0781 final.


11 See also "Safeguarding the move to a single EU energy market" ERGEG Regional Initiatives Progress Report – November 2009.
The regional electricity initiatives have focused on improving congestion management allocation and calculation, harmonising transparency and integrating market balancing. The Central-East, Central-South and Central-West regions will soon have a single set of auction rules at regional level. In the Central-West region, the single auction office now works on the basis of harmonised auction rules. The next step is to implement flow-based market coupling. Market coupling has also been introduced at the DE-DK interconnectors; the introduction of market coupling at the IT-SI border is being explored. A consortium of energy exchanges has started testing a pan-European price coupling concept.

The Florence Forum endorsed the work of the Project Coordination Group (PCG) for the development of a model to harmonise interregional and, in due course, EU-wide coordinated congestion management, and its work on the proposal for a roadmap including concrete measures. Future work will focus on three implementation projects under a new Ad Hoc Advisory Group (AHAG).

The regional initiatives for gas have concentrated on five priorities in 2009: new interconnection capacity, access to pipeline capacity, transparency, interoperability and security of supply. The most striking examples of progress in each of these priority areas include: the launch of an 'open season' procedure to assess market demand and allocate capacity for the FR-ES interconnector; the launch of the secondary capacity platform in DE, NL and DK offering firm capacity on a day-ahead basis; publication of daily data on transmission capacity and flows in the North-West region; exploration of ways to enhance reverse flows within the South-South-East region; and the conclusion of interconnection point agreements and operational balancing agreements, and the implementation of EASEE-gas Common Business Practices. The work on security of supply focused on improving the level of preparedness in Member States, improving access to storage and installing reverse flows.

The different levels of progress in implementing the gas and electricity regional initiatives undoubtedly contribute to further market integration. In some cases, the results are quite significant, for instance in the CWE-region. In some areas, such as balancing, it seems to be more difficult to make effective progress, despite the continued efforts of regulators and stakeholders. Moreover, progress in most regions has been insufficient to achieve full compliance with the provisions of the current Gas and Electricity Regulations – which resulted in the infringement cases being brought in June 2009.

The future role of the regional initiatives

The future success of the regional initiatives depends on how they are able to adapt to a number of challenges. The first challenge is to match the "bottom-up" approach of the regional initiatives, and the more "top-down" approach of the third package, especially in relation to the drawing up of framework guidelines and network codes. Secondly, there is the risk of divergence if different regions implement different solutions to tackle similar issues. In order to address these challenges, the Commission intends to adopt a Communication on the future role and shape of the regional initiatives, which might address issues such as the development of a common market model, the identification of an appropriate format of stakeholder involvement and the need for political support from Member States for regional integration.

A positive development is the fact that Member States are becoming increasingly engaged in regional integration. In June 2009, the European Commission and eight Baltic Sea Member States (DK, DE, EE, LV, LT, PL, FI and SE) signed a memorandum of understanding on the
Baltic Energy Market Interconnection Plan (BEMIP). In December 2009, a “Memorandum of Understanding regarding the Central Eastern European Forum for Electricity Market Integration” was signed between AT, CZ, DE, HU, PL, SK and SI.

3. Concentration and consolidation

There seems to be a slight tendency towards decreasing concentration in the electricity wholesale market in terms of capacity. In the reporting period, a decrease of the Herfindahl-Hirschman Index (HHI) was reported in no fewer than 10 Member States. This tendency was particularly pronounced in BE, SI and SK – although the market remains highly concentrated in BE and SK. Progress on the SI market resulted in a lower level of market concentration. This progress is therefore visible in individual Member States rather than in the regions. The high level of concentration on the electricity wholesale market is confirmed by the fact that the market concentration was moderate in only seven Member States12.

On gas wholesale markets, the concentration remains high. In 10 Member States, the three largest wholesalers have a market share of 90% or more13. The share of the three biggest companies decreased in only five Member States (BE, FR, HU, IT and ES). Notable increases in the overall market shares of the largest three suppliers were experienced in RO, and especially in BG (+57%)14.

In the electricity retail market, the market share of the three largest companies in the retail market as a whole was above 80% in 14 Member States15. In comparison to the previous reporting period, the market share of the three largest companies in the whole electricity retail market decreased significantly in HU and SI. In SK, the market share of the three largest companies rose by 25%, although the total market share of the three largest companies was limited to 60%. For the gas retail markets it is difficult to gain a proper overview, because of the lack of figures for 11 Member States.

4. Price trends

The oil price on the international market suffered from the effects of the global economic crisis. Whereas the Brent crude price peaked around 92 €/bbl ($147) in July 2008, it went as low as 27 €/bbl ($37) by the end of 2008, i.e. a decrease of 70%. The Brent crude price then increased in 2009 despite a weak demand. This development reflects both supply restrictions imposed by OPEC as well as improved market sentiment. By mid 2009 the Brent crude price traded at around half of the price of the peak in July 2008.

12 See table 3.1 and 3.2 of the Technical Annex.
13 See table 4.2 of the Technical Annex.
15 See table 3.4 of the Technical Annex.
Graph 4 – Evolution of Brent price in €/bbl\textsuperscript{16}

Source: Platts

The changes in the oil price have a direct impact on gas wholesale prices, given the link between oil and gas prices in many long-term gas supply agreements. These gas wholesale prices in turn influence electricity wholesale prices.

Hub prices were substantially lower than the oil-linked prices in long term contracts due to the economic crisis, increased LNG upstream capacity and the success of unconventional gas in the United States. Although this put pressure on the price-setting mechanism of the continental European long term gas contracts, it also created opportunities for competition by flexible supplies traded on liquid gas hubs, since they were cheaper than long term contracts.

\textsuperscript{16} See also 2009 Annual Report of the Market Observatory for Energy TREN/69693/2009 Figure 30, p. 27.
The 2008 benchmarking report highlighted the increases in gas and electricity prices as a result of rising oil prices on the international market in the first half of 2008. As oil prices started to fall as a result of the economic crisis, a similar pattern was to be expected for the gas and electricity prices in early 2009.

In the first half of 2009, gas prices for industrial consumers fell in most Member States (on average by 7 to 12%)\(^\text{18}\). In LT, SE and PL the prices were down by more than 20%. In most Member States households were able to benefit from a decrease of around 8% on their gas bill. In BG and LT, on the other hand, household gas prices increased by 11% or more; this is probably due to the fact that these Member States have regulated prices and had to adapt them to market prices.

Electricity prices remained relatively stable when comparing the first half of 2009 to the second half of 2008. Electricity consumers faced more significant increases in FR, LT, LV,
PT, SI and SK (industrial consumers) and in LU, SI and PT (households); at the other end of the scale, electricity prices in CY, DK, IE, RO and SE (industrial consumers) and BE, CY, PL, RO and SE (households) decreased considerably\(^{19}\).

In a majority of Member States, however, prices in the first half of 2009 were still higher than in 2008, although the trend in the oil prices would indicate a more significant fall in end user prices. In part, this may be due to the time lag with which changes of the prices on the oil market are factored into the end user prices. However, it appears that the fall witnessed in wholesale energy costs has not been fully reflected in end user prices.

5. Independence of network operators

The number of Member States going beyond the present requirements of legal and functional TSO unbundling remained the same.

2009 saw the first example of a cross-border TSO in electricity: E.ON sold its high-voltage transmission network to the Dutch state-owned TSO (TenneT). A cross-border TSO already existed in the form of Gasunie owning GTS in the Netherlands and Gasunie Deutschland in Germany. RWE announced that it would start selling its gas grid in the first quarter of 2010\(^{20}\). These developments were taken forward under the Commission's competition policy.

At distribution level, the unbundling regime remained relatively stable, although in some Member States the number of DSOs has changed. Member States continue to make extensive use of derogations from unbundling at distribution level\(^{21}\).

It is to be expected that several Member States will have to adapt their legal framework to the new unbundling requirements of the third package.

6. Effective regulation by regulators

Regulators should be given the necessary powers to enforce compliance. That is why the Commission's infringement exercise in June also dealt with the absence of effective systems of penalties at national level in the event of violations of the electricity and gas Regulations. The third package has the potential to change this situation, given the existence of detailed rules governing the duties and powers of regulators. Regulators are required to promote a competitive, secure and environmentally sustainable internal market for electricity and gas in the Union. Moreover, the Agency for the Cooperation of Energy Regulators (ACER) will ensure regulatory oversight of cross-border issues.

Also, TSOs are preparing for the implementation of the third package. The European Network of Transmission System Operators for Electricity (ENTSOE) became fully operational in July 2009. For gas, ENTSOG (The European Network of Transmission System Operators for Gas) was created in December 2009. Both organisations will require their statutes and rules of procedure to be approved as soon as the Regulations come into force in March 2011.

\(^{19}\) See tables 5.7 and 5.9 of the Technical Annex.
\(^{21}\) See figure 7.4 of the Technical Annex.
The third Package gives the Commission a role in identifying priorities for framework guidelines and network codes, after consulting the Agency, ENTSOs and other stakeholders. In the Madrid and Florence regulatory fora\(^{22}\) held in 2009 it was agreed that the work would start with pilot projects, in order to learn how to make the process effective and efficient. For gas, there will be pilot framework guidelines and a network code on congestion management; and for electricity there will be a pilot framework guideline on grid connection. The Commission will also launch the work on other framework guidelines and codes.

### 7. Customer dimension

The second Citizens’ Energy Forum, which was held in London in September 2009, considered a range of issues designed to improve the retail market for consumers.\(^ {23}\) One measure considered was the production of template bills and recommendations on best practices for billing. The Forum endorsed recommendations for good practice in billing, which aimed to provide EU consumers with simple, clear and informative bills for their gas and electricity. The recommendations build on good billing practices in several EU countries. In addition, the Forum focused on complaint handling, smart metering and the role of DSOs.

**Consumer response — switching**

It is difficult from the information provided on switching rates to gain an overall picture of switching across Member States. For electricity, in those Member States that provided information, overall rates for the whole retail market have remained roughly similar to 2007, except in DE where the rate rose by 1.4% and SE where the rate increased to 11.3%. The annual switching rate for large industry was quite significant in CZ, at 45%, which was up 12% on the previous year. SE, NL, IT and GB saw the highest switching rates for small industry and households\(^ {24}\). Taking annual switching rates per volume into account, switching rates of more than 10% were reported for large industrial users in AT, BG, DE, LU, PL, RO and IE\(^ {25}\).

For gas, there are few consistent figures available on supplier switching. Of the countries that reported switching numbers by eligible meter point for the whole retail market, NL and FR - with 9.1% and 9.8% respectively - posted the highest levels. GB, FR and NL are the most active markets in terms of switching for small industry and households, with rates of 18.9%, 9.8% and 9.1% respectively\(^ {26}\). For the countries that reported figures by volume, the DK rate on the whole retail market decreased from 29% to 16% and ES showed a similar decline to 6%. HU, where 11.8% switched supplier, is the most active market for small industry and household customers\(^ {27}\).

Switching levels vary considerably across Member States, with some mature markets - such as the UK - experiencing relatively high rates and a number of others showing little or no activity. At the level of small industry and households, the reported figures suggest that electricity consumers tend to be more active than gas consumers.

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\(^{24}\) See table 2.2 of the Technical Annex.

\(^{25}\) See table 2.1 of the Technical Annex.

\(^{26}\) See table 2.4 of the Technical Annex.

\(^{27}\) See table 2.3 of the Technical Annex.
Regulated prices

It is still quite common in Member States for open energy markets and regulated energy prices to coexist. More than half of the Member States have regulated prices. The Member States that have regulated prices for electricity and gas are: BG, DK, EE, FR, EL, HU, IE, IT, LT, PL, PT, RO and SK. In LV and CY there are regulated prices for electricity, but not for gas. With regard to household customers, the number of households covered represents a significant proportion of the population in some cases, such as FR and IT. In most Member States price regulation is not confined to household customers\(^\text{28}\).

Moreover, the Commission sent letters of formal notice to EL, LT, PL, PT and RO for maintaining a system of regulated prices in violation of the EU directives on electricity and gas\(^\text{29}\). Other infringement cases on regulated prices are pending against EE, IE, IT and FR.

Task Force for the implementation of smart grids in the internal energy market

The implementation of more active and intelligent transmission and distribution systems in the form of smart grids is central to the further development of the internal market for energy. The role of the Task Force - which was launched in November 2009 - is to advise on policy and regulatory directions at European level and to coordinate the first steps towards the implementation of smart grids under the provisions of the third energy package. The task force will take stock of technology visions and developments by other groupings of stakeholders. It should submit its final report in the first half of 2011.

C. SECURITY OF SUPPLY

Directive 2005/89/EC concerning measures to safeguard the security of electricity supply and infrastructure investment focuses primarily on the monitoring and reporting aspects of transmission and adequacy of generation. The aim of the Directive is to align policies in Member States, so that significant differences between the policies of the Member States are not likely to lead to distortions of competition. In 2009, all Member States notified full transposition of the Directive's provisions into national legislation.

As part of its monitoring exercise, the Electricity Cross-border Committee\(^\text{30}\) discusses short term adequacy of electricity supply. The analysis indicates that generation-load balances in most countries are generally regarded as adequate for secure system operations under normal conditions.

For gas, the Commission proposed a new Regulation on 16 July 2009\(^\text{31}\). The Regulation will also repeal Directive 2004/67/EC. It focuses on both preventive actions and preparations for crisis management so as to be able to act efficiently and in a coordinated manner across the EU in cases of crisis and disruption of supply. It also establishes an infrastructure standard (n-1 indicator), a supply standard and reverse-flow mechanisms. The Commission is confident that this Regulation will be adopted in 2010.

\(^\text{28}\) See tables 2.5 and 2.6 of the Technical Annex.

\(^\text{29}\) See IP/09/1035


A major challenge in the context of the economic crisis is to maintain the investments in energy infrastructure. The financial crisis risk resulting in postponed or annulled energy infrastructure investments and as a result the EU faces an increased risk of lack of or delay in construction of infrastructure to meet future supply needs. This is a particular concern in a situation where the energy sector needs to be reshaped to address the challenges of climate change and energy security. In order to help to address this risk and to help economic recovery, the EU is facilitating the financing of energy infrastructure projects via the Economic Recovery Plan. In particular, the Plan includes €2.365 billion to support a number of key electricity and gas interconnection projects. The Commission's commitment to encourage infrastructure investments will continue with the adoption, at the end of 2010, of an infrastructure package.

D. CONCLUSIONS

The financial crisis had a significant impact on the internal energy market during the reporting period. On the one hand, the crisis puts pressure on planned investments – due to possible financing difficulties and uncertainties affecting the supply side – and has resulted in a fall in demand, which is more pronounced for gas than for electricity. On the other hand, it has created new opportunities for competition, since more gas is available at lower prices on liquid hubs. Furthermore, the situation with excess supply in gas markets may pave the way for final consumers to see gas prices that are based on the supply and demand for gas rather than on the price of oil.

Although reduced gas and electricity consumption has had an impact on end-user prices, the fall witnessed in wholesale energy costs has not been entirely reflected in end user prices. Overall, prices in the first half of 2009 were still higher than in the first half of 2008. The trend in retail prices was quite diverse, suggesting perhaps an insufficient level of market integration at retail level.

The work of national regulatory authorities tends to shift the focus towards the consumer, including the roll-out of smart meters as the key to smart grids in the internal energy market. This is a welcome trend for the deployment of active participation by customers in the internal energy market and increased energy efficiency and large-scale integration of renewables, as well as additional energy services, increased market transparency and easier supplier switching.

Additionally, cooperation between European power exchanges, as well as the ongoing trend of increasing trade, is a promising sign of functioning markets. However, even if there are positive signs on the retail and wholesale level, the degree of market concentration has not changed very much.

Against this background, the Commission is providing incentives to invest. This will be reflected in the infrastructure package. The third package adopted in 2009 also provides for clearer sector specific rules and thus for incentives to invest. The Commission is preparing for the application of the third package in developing, together with ERGEG and ENTSO-E and ENTSO-G, pilot framework guidelines and codes. A demonstration of Member States' commitment to the internal energy market will be the timely and correct implementation of the third package into national law. Meanwhile, the Commission will assist Member States in implementing the third package and will continue to pursue the full and correct implementation of the second package, including through formal infringement procedures.
Not only investments but also the implementation of more active transmission and distribution systems in the form of smart meters and smart grids are central to the development of the internal market for energy.

If needed, the Commission will not limit its action to energy regulation and will not hesitate to use its powers under competition law.

The EU is facing major challenges in its strategy for a sustainable, competitive and secure energy policy. A properly functioning internal energy market is essential in order to send the right investment signals and to be able to react to the general economic downturn. The Commission is taking action to ensure that the energy market brings clear benefits for electricity and gas consumers across the EU.