

The Third EU Energy Market Package: Are We Singing the Right Song?

Jacques J. de Jong¹, February 2008

1. Introduction

The liberalisation of EU energy markets has been a key objective of EU policy makers for many years. Proposals issuing from Brussels have met with both applause and resistance from many business and political circles. Ever since the project of a “single European market for gas and electricity” began in the early 1990s, the debate has been alternately dominated by rational and emotional arguments, resulting in more or less effective compromises. That is how the 1996 and 1998 Directives for electricity and gas were negotiated. But these directives were only a first step, and for many they were not ambitious enough. New proposals materialised, and in a somewhat shorter preparation period, the almost identical 2003 Directives for gas and electricity reached the Official Journal. Soon afterward it became clear that some Member States were experiencing difficulties in finding a proper and timely implementation method, and that market participants were complaining about the behaviour of large incumbent markets. Brussels took these signals seriously – as they should – starting the two-track approach to enforcing compliance with the directives and with a full energy market enquiry under competition law. And like before, conclusions were drawn about the legal environment which led to the proposals for a (third) legislative energy market package.

This Third Package is full of strengthening regulatory instruments and devices, but also contains the far-reaching and ultimate step of ownership unbundling, requiring a full divestment of the transmission networks from the vertically integrated gas and electricity industry. This package is intended to be a fully integrated part of the Energy Policy for Europe, which in general can be considered an important and timely proposal for meeting the EU's wider energy challenges. In this third round of proposals of Energy Market Directives, however, the proposed ownership unbundling of the grids is attracting so much attention that the more fundamental energy challenges run the danger of getting lost in the highly political debates on unbundling.

This paper endeavours to question the song that is being sung by the stakeholders in the debate about whether the Third Package is the wrong one. The lyrics of the song should not be about the legal structure and governance of the physical networks of the industry, but about which steps should be taken to truly achieve integrated EU markets, first of all in electricity. The song should also include

¹ The author wishes to express his thanks to various people for their comments, notably Jan Moen (Norwegian Electricity Market Regulatory Authority), Martien Visser (Gasunie), Coby van der Linde and Stijn van den Heuvel (both of CIEP).

words on the Union's external supply security, notably of gas, and should include a refrain on the merits of certain energy market designs. Such a song should ring out loud and clear and should lure the Member States into supporting a better model of the market than the one they are defending now. The window of opportunity for changing the lyrics of the song is, however, closing rapidly. This year, 2008, is crucial, because next year a new European Commission – with its accompanying portfolio-jostling – could throw the decision making off track. Bets are therefore already out about the closure time of this window: whether it will be before or after the summer break; under the present Slovenian presidency or in the early days of the forthcoming French presidency.

Before exploring the merits of the Third Package proposals, we will first explore the implications of the integrated energy policy approach, as accepted by the European Council in March 2007.

2. The new Energy Policy for Europe

The political breakthrough in energy policy-making came with the acceptance by the European Council in March 2007 of the Energy Policy for Europe. Admittedly, the full implementation of the comprehensive policy could take quite some time. Member States may discover that the route to the European low carbon economy, which was the vision they embraced, can become riddled with practical implementation and timing difficulties. The policy implications of their March 2007 decision might also run counter to their (short term) perceived national interests. Other big European projects, such as the 1992 programme, experienced similar problems but eventually, perhaps after deft stalling strategies, were implemented after all. The EPE is thus a major step towards a different energy policy approach in the EU. It is important, therefore, to summarise the main thrust of the EPE.

In the new Energy Policy for Europe (EPE)² the three dimensions of energy policy are covered: i.e., supply security, the environment and the market, with concrete proposals for all three, underlining the comprehensive character of the package. Its aim is ambitious, even calling for a new industrial revolution to combat climate change and to boost EU energy security and competitiveness. The EPE sets a series of ambitious targets for energy efficiency and renewable energy, including a commitment to cut greenhouse gas emissions by at least 20% by 2020. Furthermore, it calls specifically for a full Internal Energy Market, with the aims of realising a real choice for EU energy users, households and businesses, and of incentivising the sector to realise the huge investment needs. It is argued that the single market is not only good for competitiveness, but also for sustainability and supply security. The Commission's analysis shows that further action is required in order to deliver these aims, namely making a clearer separation of energy production and supply from energy transmission.³ It calls for stronger independent regulatory control, taking the European market into account. It also calls for national measures to ensure delivery on the European Union's target of a minimum interconnection level of 10% among Member States, such as identifying key bottlenecks and appointing coordinators.

The proposals aimed at these three pillars of energy policy will, however, need to be underpinned by a coherent and credible external policy, the lack of which is the main weakness of the Commission's proposals.⁴ The Council did call for the development of an international Energy Policy, in which the EU speaks with one voice, as the EU cannot achieve its energy and climate change objectives on its own, nor out of context with the rest of the world. However, the development of such an approach

² http://ec.europa.eu/energy/energy_policy/documents_en.htm

³ See, for instance, the Commission's Impact Assessment on the Third Package, http://ec.europa.eu/energy/electricity/package_2007/doc/2007_09_19_impact_assessment_en.pdf

⁴ Coby van der Linde, "External energy policy: Old fears and new dilemmas in a larger Union" in: *André Sapir (ed.), Fragmented power: Europe and the global economy*; http://www.clingendael.nl/publications/2007/20070000_ciep_misc_vanderlinde.pdf

could be time consuming because the main necessary pre-condition for this policy, more cooperation in foreign and security policy, is still in a pre-infant stage.

Another pre-condition for a single-voice approach is the development of an effective solidarity mechanism for dealing with any energy supply crises and increasing Member States' comfort level with the EPE. Moreover, the EU must endeavour to develop real energy partnerships with suppliers based on transparency, predictability and reciprocity. To that extent, a network of energy security correspondents has already been established, and a whole series of concrete measures to strengthen international agreements has been proposed. These include the Energy Charter Treaty; the post-Kyoto climate regime, which extends emissions trading to global partners; and the approach of extending bilateral agreements on energy to third countries, especially through the European Neighbourhood Policy and a set of comprehensive Africa-Europe partnerships.

As stated before, the EPE was discussed at the 2007 Spring Council of the EU, at the regular meeting of heads-of-state and government. For the first time at this level, energy issues were at the heart of the agenda, and the discussions resulted in a stronger political commitment than had been expected. EU leaders were very firm in their commitment to embrace the target of eliminating 20% of the EU's greenhouse gas emissions by 2020;⁵ and in their agreement to binding targets that would both elevate the contribution of renewable energy sources to 20% of the energy mix by 2020 (compared to the current 6.5%) and set a minimum biofuel share of 10% of in overall transport petrol and diesel consumption, also by 2020.⁶

As part of the comprehensive EPE proposals, the Council also called for action on the *Internal Market for Gas and Electricity*; action to correct the still existing flaws in the system, identified as the need for effective separation of supply and production from network operations (unbundling), for a further harmonisation of regulatory powers, and for the strengthening of the independence of national energy regulators. Furthermore, mechanisms are to be established for the improvement of cooperation and decision-making by regulators on cross-border issues, together with mechanisms for the coordination of the TSOs and for a more efficient and integrated system of cross-border electricity trade and grid operation, which should enhance relevant investment signals as a contribution to more efficient and secure grid-operation. Transparency of energy market operations and consumer protection through an Energy Customers' Charter are part of this agenda as well. To prevent investment shortfalls and better understand investment needs, the quality of medium- and long-term forecasts for EU gas and electricity supply and demand should be improved. Perhaps an even more sensitive part of this proposed effort to improve the internal market is the call for an assessment of the impact of vertically integrated energy companies from third countries (i.e., Russia) on the internal market in relation to the principle of reciprocity. Finally, the agenda is completed with access issues to gas storage in the EU and the development of regional cross-border exchanges intended to enhance regional energy cooperation in the EU.

With respect to *Security of Supply*, the Council uses key words such as the "spirit of solidarity" between Member States, notably in the event of an energy supply crisis, together with the "effective diversification" of energy sources and transport routes. A more competitive internal energy market and the development of a more effective crisis response mechanism are crucial in this respect. Improvements of oil data transparency, EU oil supply infrastructures and EU oil stocks mechanisms are complementary issues that are also mentioned in the Council documents. As a new element, a thorough analysis of the availability and costs of gas storage facilities is called for, to which end an

⁵ The EU is willing to increase this goal to 30% if and when the US, China and India make similar commitments.

⁶ Presidency Conclusions March 2007 Spring Council:
http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/93135.pdf

EU Energy Observatory will be established. And finally, some specific infrastructure projects will be prioritised on the basis of EU actions.⁷

Completely new in this context is the issue of *International Energy Policy*, on which a common approach was agreed with regard to consumer-to-producer, consumer-to-consumer and consumer-to-transit dialogues and partnerships. As mentioned, the EU will seek to apply a “single voice model” in the creation of a new partnership and cooperation agreement with Russia, together with intensifying relationships with Central Asia, the Caspian and the Black Sea regions, the USA, China, India, Brazil and other emerging economies. In the development of external energy policy, existing EU instruments will be applied, such as the European Neighbourhood Policy, which has the specific aim of improving energy relations. The Energy Community Treaty must further underpin relations with Algeria, Egypt and other producing countries in that region.

It should be noted that the Spring Council meeting really did form a strong and important step towards an integrated EU energy policy. But the proof of the pudding is, as always, in the eating, and the EU's record of implementing far-reaching political agreements is historically full of the ‘devil-in-the-detail’ type of problems. There is no reason to believe it should be different this time.

The September 2007 proposals for a “third legislative package”,⁸ the internal gas and electricity markets component, are instant proof of this point. The package is full of market design problems – especially when it comes to cross-border markets and their integration, but also concerning issues of market structure or the organisation of market participants. Thus, rules for more effective cross-border trading and enhancement of market transparency, together with the expansion of independent regulatory authorities, are rational and useful, but the more controversial proposals to increase and assure competition are the ones regarding industry structuring. Especially the option to unbundle the ownership of transmission infrastructures or, alternatively, to have those infrastructures operated by fully independent new entities, has the propensity to spar off intense political and national emotions on both the pro and con sides. The issue of unbundling has the nasty habit of drawing all political attention away from other issues that are important in completing the internal market, i.e., the promotion of cross-border market integration. Another controversial issue in the Third Package is the proposal to prohibit the control of network ownership by non-EU entities. This idea is interpreted as being principally directed toward curbing the ambitions of the Russian partially state-owned gas company Gazprom and directly linking internal (gas) market designs with energy (gas) supply security. Both issues could lead to more serious controversies among the Member States and decide the political fate of the Third Package, resulting in serious delays in cross-border market integration.

Whereas the EPE, as we have noted, basically has an integrated energy policy character, covering supply security, the environment and market issues, the controversial issues in the Third Package could very quickly lead to the evaporation of this integration in the first attempt to implement some of the principles agreed to in the EPE. Furthermore, the Third Legislative Package itself hardly refers to the other two policy objectives and will largely be discussed and decided upon in a sector-oriented political setting. The environmental package that will be proposed in early 2008⁹ will very likely follow a similar path of (environmental policy oriented) decision making. Unclear is what will happen with the external dimension as such and how the other two policy objectives will be integrated with it. It is therefore crucial to look at the Third Package with the other two policy objectives in mind,

⁷ EU coordinators will be nominated for the Power-Link between Germany, Poland and Lithuania, connections to offshore wind power in Northern Europe, electricity interconnections between France and Spain, and the Nabucco pipeline, potentially bringing gas from the Caspian to central Europe.

⁸ http://ec.europa.eu/energy/electricity/package_2007/index_en.htm

⁹ See http://ec.europa.eu/energy/climate_actions/index_en.htm

focussing particularly on the regional approach in electricity and on the external supply security drive for gas.

3. Regional Electricity Market designs¹⁰

The 2004 Strategy Paper...

Two years into the stakeholder consultation process in the Florence Forum, which started in 1998 and which created the road maps for integrating the national EU electricity markets into the desired outcome of a single market, it became clear that a 'big bang' approach was too ambitious. This resulted in a process of a more strategic orientation between the Commission and especially some of the more active regulators. A 2004 Strategy Paper¹¹ was the outcome, devoting significant attention to cross-border market development and to the role of regional markets. It recognised the importance of ongoing developments in those countries where cross-border interconnections and commercial relations were already reasonably strong and could be further enhanced by settling certain practical issues. Issues included the rules for bilateral trading, for standardised day-ahead and intra-day markets, as well as balancing, congestion and ancillary services, together with harmonised methods for setting transmission tariffs where appropriate. It goes without saying, however, that the difference in pace among national markets and regional markets should not compromise the objective of a single internal market. The paper shows a map with potential regional market areas, including a rigorous timetable for their realisation (Figure 1).

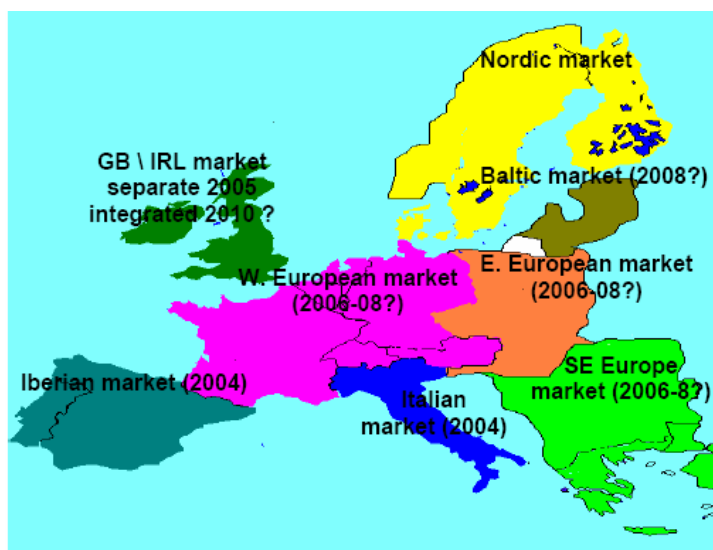


Figure 1 EU regional markets, 2004 Strategy Paper

¹⁰ This section builds upon earlier work of the author: "The Regional Approach in Establishing the Internal EU Electricity Market" ; CIEP 2005 .

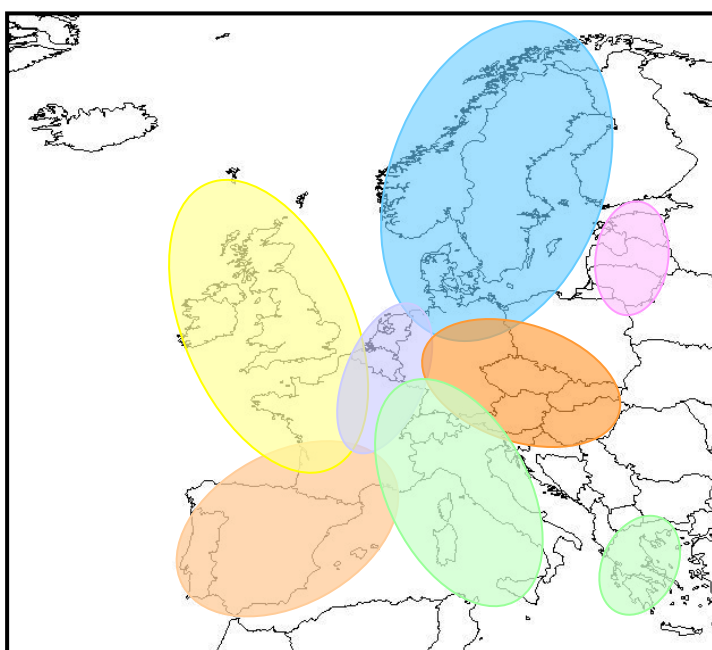
¹¹ Medium-term Vision of the Internal Electricity Market, March 2004:
http://ec.europa.eu/energy/electricity/florence/doc/florence_10/strategy_paper/strategy_paper_march_2004.pdf

...and its market design outlook.

More specifically, the 2004 paper argues in terms of cross-border trade that the overall goal for the EU would be to function in the same manner as a national market. Eventually, all system operators would use the same assumptions and mechanisms to manage their networks, and network users would face a single interface. Effective separation between the network operator and the owner would ostensibly allow system operators to co-operate more closely across political and transmission network borders, unencumbered by potential conflicts of interest regarding transmission revenue or other competitive market activities. Regarding tariffs, it was clear that for the medium-term, an approach whereby tariffs for cross-border trade were a combination of different national tariffs schemes and for which TSOs were compensated for transit and/or other cost-inducing flows, was the most sensible. However, in the longer term, a pan-European tariff mechanism/method would clearly contribute to the integration of markets. Methods for allocating capacity for congestion management and system operation should be market-based and designed to give correct signals to producers and consumers, helping to identify appropriate interconnection investment projects. It is important to note, however, that the Strategy Paper did not present a clear view with regard to the future market design, nor on the necessary decision-making and oversight framework. If regional markets are to play a role as an intermediate step in the route to full integration of the EU electricity market, one could expect the formulation of some criteria or boundary conditions for such regional markets to come about.

The ERGEG Initiatives...

Since 2004, we have seen a number of more or less unrelated developments in the regional market approach. The fact that the community of regulators, rather than the Commission, is now in the driver's seat has resulted in the ERGEG Regional Initiatives creating seven regional platforms and agendas (see Figure 2). ERGEG has also set up a procedure for checking and guarding the overall consistency of this process and has concluded that in general terms issues such as network access, balancing, wholesale markets, TSO cooperation, transparency and issues of congestion management and regulation are all on the regional priority lists.



Region	Countries
Central-West	Belgium, France, Germany, Luxembourg, Netherlands
Northern	Denmark, Finland, Germany, Norway, Poland, Sweden
UK & Ireland	France, Republic of Ireland, GB, Northern Ireland
Central-South	Austria, France, Germany, Greece, Italy, Slovenia
South-West	France, Portugal, Spain
Central-East	Austria, Czech R, Germany, Hungary, Poland, Slovakia, Slovenia
Baltic	Estonia, Latvia, Lithuania

Figure 2 ERGEG Regional Initiatives Electricity

To date, however, ERGEG has held the position that a clear assessment of mutual consistency among the regional markets could not be achieved, because 'coherence and convergence of regions will depend on the many details of proposed solutions for each topic in each region, which for the most part remain to be fully developed'.¹² We should also note that although the Regional Initiatives have provided useful fora for regional cooperation and interaction, progress has been very slow. This is partly due to the bottom-up approach, in which specific practical issues have been leading the agenda. What is missing is an overall agenda with a clear vision about the regional market concept, a clear market design and the road towards integrating them further into the Single Electricity Market.

...and the related political actions...

Interestingly, concurrent with the regional market developments, intergovernmental cooperation at the regional level also began to emerge. At the political level, it became apparent that cross-border operation of power sectors would make sense, especially when issues of energy policy and competition were at stake. Regional cooperation already existed in the Scandinavian market under a Nordic political setting. From 2000 onwards, other such regional initiatives followed. The Mibel market on the Iberian Peninsula, after a slow start at political level, is now working as a regional market. In the UK the BETTA project created a single market for England/Wales and Scotland.¹³ The 2004 Dutch initiative for a Pentilateral Forum for the Benelux, France and Germany resulted in a successful market-coupling between the Benelux and France, with Germany due to follow later in 2008. With the completion of the Norned-interconnector, the Nordpool market and Germany, a much larger NW European regional market can emerge. The most far-reaching initiative to date toward creating a regional market is between Ireland and Northern Ireland, where these markets are merging under a joint regulatory framework and body. All these developments are currently taking place and are slowly but surely developing into regional market settings. These developments underpin the necessity of some sort of political engagement.

..with no overall EU agenda.

The progress in regional market formation is not matched with progress on the overall EU regulatory front. Since the publication of the 2004 EU Strategy Paper, only one guideline has been adopted under the 2003 Electricity Regulation, namely the one on congestion management. The other two guidelines (on inter-TSO compensations and on transmission tariff harmonisation) have been subject to stakeholder fights and inter-ERGEG differences of opinion for all these years. As indicated before, the Commission is now indeed proposing a substantial strengthening of the overall framework for the internal electricity market in its Third Package, including a beefing up of the 2003 Regulation, but the emphasis is much more on structure and procedures and far less on content. Strikingly, the draft amendments hardly refer to the regional market developments, underlining the almost invisible participation of the Commission in the regional market processes.

Flaws in the Third Package...

Taking account of the regional developments on the one hand and the proposals in the Third Package in the other, we could conclude that "Brussels" may not be singing the right song. Is, for instance, ownership unbundling in transmission really the one issue that should be addressed now, risking frustration and political delays in the market integration and competitiveness? Although unbundling could be part of a wider set of solutions, and economic theory seems to underpin such an approach, a

¹² http://www.ergreg.org/portal/page/portal/ERGEG_HOME/ERGEG_PC/ARCHIVE1/ERI%20Convergence%20PC/E07-ERI-05-03_final.doc

¹³ It is to be recalled that the Scottish and England & Wales markets for electricity were separate markets until 2004.

number of warnings from the academic world can also be heard. Michael Pollit, for instance, recently concluded that 'the econometric evidence is weak due to problems with simultaneity of reform steps and a lack of studies',¹⁴ and also makes the point that 'in specific case studies evidence is compelling'.¹⁵ Graham Shuttleworth¹⁶ argues that ownership unbundling will not meet its goals unless it is combined with a number of additional policies, such as efficient dispatch and investment approaches at regional levels and the setting down of some common EU-wide standards for the design of (regional) electricity markets.

...and some industry ideas...

In 2007, the concept of regional market integration was considered by Eurelectric, the European trade organisation for the electricity industry. In a discussion paper, they introduced the concept of Regional Independent Operators, as an alternative to the concept of ownership unbundling.¹⁷ In the RIO model, the national ISOs or TSOs work together and integrate their tasks into a regional institution. The RIO members could be either ownership unbundled TSOs or vertically integrated TSOs. The key issue would be that the RIO would have the responsibility for granting access to the whole transmission grid within its region. The RIO would be responsible for day-ahead and intra-day issues, real-time operation, system adequacy analysis and grid planning, and would play an important role in making investment decisions. The integration of activities into a RIO should start with the common calculation of grid capacities followed by other day-ahead activities, subsequently adding intra-day issues before finally including real-time system operations. In parallel, functions for grid planning and investments should be built up within the RIO so that it will be fully enabled to perform these functions when it becomes responsible for system operations. Furthermore, it is envisaged that the RIO will be set up by (EU) legislation and that an efficient and consistent regulatory process will be established to match the regional scope of a RIO. It would therefore be necessary to bestow the national regulators with responsibilities for cross-border and regional transmission issues and oblige them to take further market integration into consideration when making regulatory decisions. Sharing responsibilities between national regulators and the regional/European regulatory function must therefore be clearly defined. Finally, according to Eurelectric, the European Commission should play an active role in the establishment and development of the RIO.

...looking for a "third way"?

It would be timely for the Commission to consider alternative approaches that are more in tune with the current developments in the markets. These approaches should really help to boost market integration, maybe leaving the ownership unbundling paradigm on the shelf for later, if it is necessary at all. They should therefore again closely reflect the road map that the EU Commission formulated so eloquently in its 2004 Strategy Paper and should be much closer to stakeholder interests, take due account of the ongoing regionalisation efforts and also take account of experience elsewhere, such as in the Nordic and US markets. Nevertheless, we should realise that regional market integration in itself will have an impact on the wider energy policy options. For instance, cross-border level playing fields imply the avoidance of inconsistencies in environmental and safety requirements for electricity

¹⁴ "The arguments for and against ownership unbundling of energy transmission networks" ; Michael Pollit, Cambridge Electricity Policy Research Group, August 2007.

¹⁵ Pollit's paper, however, mentions a number of non-EU cases, and only two from the EU (the UK and Scandinavia). Every case has a number of specifics of its own. Other cases of ownership unbundling of transmission, such as the Netherlands and Spain, are still in a process of transition and do not always prove to be examples of a successful competitive market.

¹⁶ "Three measures to ownership unbundling to achieve its goals" ; NERA's Energy Regulation Insights, January 2008.

¹⁷ "Towards Regional Independent Operators: a main driver for successful market integration" , Eurelectric, May 2007.

generation. And with a strong EU-organised drive for boosting the role of renewable energy, including in electricity generation, together with the compulsory cap-and-trade system for greenhouse gas emissions, one should realise that the modalities to implement these will also have major impacts on the (regional) electricity market models.¹⁸ In looking at the various developments in regional markets, we could therefore identify in all concepts or proposals a number of commonalities based on EU law and regulations. They all share the broader idea of further developing into a larger internal European market. It is therefore sensible, if not a necessity, to approach these projects in a wider EU context. Two lines of action are further suggested here. First, the European Commission should develop a clear overall framework for regional markets. Second, a discussion should finally be started about the merits of certain market designs over others.

A market design menu....

The overall framework should be based on a vision of how best to develop the regional markets over time into the preferred ultimate solution of the single IEM. Such a vision could be based on the regional “dome” solution, connecting the regions in a flexible, volume-based way, and allowing for diversity in internal regional operations. The framework should include a set of minimum requirements for establishing a regional market and a set of requisites for market conditions to be further elaborated at the regional level. The requirements for the regional market could include a degree of physical and commercial interconnection, a common notion of the national authorities involved as to the objective of the regional market, the ability of national TSOs and national regulators to develop clear and effective cooperation schemes, mutually consistent rules for TPA to the networks, the ambition to develop an integrated regional balancing market and, finally, the ambition to develop an integrated regional power exchange. The creation of a regional platform for the enhancement of the regional market should be the procedural umbrella for these conditions. The development of improved market conditions should be furthered by the regional platform with competent regional authorities, market players and other stakeholders. These improved conditions should include congestion management, transmission tariff structures, TSO governance structures, resource planning and adequacy, system reliability, market monitoring and mitigation procedures, consistency with other relevant market rules (gas, green certificates, emission allowances), and on jurisdictional issues between the EU Commission and the national regulators. Overall EU rules and regulations should provide the boundary conditions for the more detailed regional market rules, and a procedure for EU compliance assessment by the Commission should safeguard the regional market rules with the overall EU internal energy market.

...followed by market design discussions...

In addition to the development of the conceptual framework, discussions should commence on the desired market design for electricity. Such designs were intensely debated in the USA in the early and mid 1990s,¹⁹ but such an EU-wide debate has yet to take place. Moreover, such a debate is still missing from the current Commission's and CEER's list of priorities. A market design based on, for instance, the integration of a pool-based, short-term electricity market, coordinated by a central dispatch operator, does provide a foundation for an open access system based on competition. This approach could also be used to handle crucial issues such as congestion problems and is at the same time consistent with both efficient technical operation and economic efficiency. To ensure optimal

¹⁸ It could be seen as a missed opportunity that the EC did not propose a more harmonised approach for reaching the targets in renewable energy, together with a market based design. Instead, this is basically left to the Member States, with a somewhat hybrid approach to cross-border trade in green electricity .

¹⁹ Both professor William Hogan of Harvard University and Larry Ruff from Putnam, Hays & Bartlett, Inc. proposed a market design that integrates a spot market with an independent system operator responsible for the dispatch process. These authors produced a long list of documents and reports. The main meeting place was at the Harvard Electricity Policy Group.

utilisation of the grid, locational pricing is necessary, as this contributes to optimal flows of electricity. Some countries have implemented basic elements of such a design with success. In the EU countries where debates on market design took place, they concentrated mainly on security of supply and generation capacity reserves. The point of departure for most contributors to these discussions was that no market is perfect and that electricity is no exception. Thus, the main foci became the mapping of “anticipated market failures” and the “fixing of problems”. An alternative strategy for making a robust design, which was based on locational marginal pricing in combination with central dispatch to optimise the use of resources, was rejected for these reasons. Remember, when liberalisation was introduced and “gold plating” and overcapacity were challenged, new investments were shelved or abandoned. Furthermore, investment uncertainty became an issue, and due to a difference in anticipated market failures, a capacity-market fixing debate ensued. These sorts of market failures, however, had a theoretical bias, as real data support in mature markets was difficult to find. Unfortunately, the capacity debate heavily overshadowed the overall market design debate, and as a result, core challenges and opportunities for more efficient markets have suffered.²⁰

...as part of a more coherent “third way” approach.

In conclusion, we realise that the Third Package already represents majorly revised efforts and proposals for improving the shortcomings of the current market design. The development of regional cooperation is now on the agenda, with the hope that this will foster operational arrangements in order to ensure an optimal management of networks and allow effective competition to develop. The Third Package represents a major step towards a new market design which is close to a solution of integrated spot markets. What is still lacking is an effort to coordinate all these activities into a coherent overall EU-wide market design which would be supported by proper regulation and by guidelines for implementation, together with a concrete EU-wide procedure for fostering consistency of the unstoppable regional market developments. Setting such an agenda would boost cross-border market integration more than the – in themselves also useful – unbundling approaches. The development of a competitive internal electricity market is, however, also a matter of setting priorities.²¹ A policy approach with “more integration” and somewhat “less structure” might therefore constitute a so-called third way, as an alternative to the structural options for ownership unbundling or the ISO concept that have been currently tabled. Moreover, this “third way” could also claim more coherence and vision than the “third way” tabled in January by France and Germany.²² Although the latter are making references to regional market concepts, their basic approach remains stuck in the legalistic nitty gritty of TSO independence.

²⁰ The FSR (Florence School of Regulation) did take up the issue about market design in its workshop in July 2004 (“The European Market for Electricity: Where Do We Stand?”). Some of its conclusions were that “the capacity margin is lower than considered adequate” ; “focus is moved to price signals, investments and generation adequacy” ; and that “ experiences show that when markets are left free to operate and send correct price signals, investments do respond” ; but that in the Security of Supply discussion, when long-term generation capacity adequacy was discussed, the solution may rest in introducing capacity support mechanisms.

²¹ An interesting argument was recently developed by Dominique Finon on consumer benefits due to electricity market integration (<http://www.energypolicyblog.com/?p=116#more-116>). He questions the benefits to French consumers when the currently low-cost, nuclear-based electricity prices will increase in an integrated regional electricity market setting .

²² See, for instance: <http://www.euractiv.com/en/energy/france-germany-table-third-option-energy-liberalisation/article-169919> .

4. Supply security and the gas value chain

Differences between gas and electricity...

Continental gas markets are fundamentally different from electricity markets in the sense that, for the most part, supplies have to be imported from countries outside the European Union. Still, because both industries are to a large degree network-bound, similar models for market organisation have been applied in the EU liberalisation process of both the electricity and gas markets. Moreover, both industries experienced a buyer's market at the onset of the liberalisation process, which could also have contributed to the similar regulatory approach. However, the buyer's market for gas switched into a seller's market at the beginning of this decade. Over the past five years, the relative bargaining power between energy exporting and importing countries has fundamentally changed. Currently, 60% of the total energy demand growth is being met by oil and gas and, as a result, the demand for oil and gas has been growing faster than the supply. Even though proven gas reserves are estimated at some 180 trillion cubic meters, covering more than 60 years of present annual consumption, the potential availability of gas for the market is a problem. This has nothing to do with the physical availability nor with the economic viability of the resources, but more with the political barriers in the market for new gas field development.

Gas resources are increasingly becoming geographically concentrated in Russia and the MENA-region, covering some 75% of world resources. These countries prefer to develop their gas resources with their (semi-) state-owned companies in the lead. Access to these resources by international oil companies or gas companies from Europe or the US has been reduced to only minority holdings or trade. In addition, the Asian oil and gas industry, which also has strong government backing or direct involvement, has further tilted the balance from a predominantly market-driven development of resources and flow of oil and gas to a much more government-dominated sector, thus also replacing multilateral frameworks with bilateral frameworks of energy diplomacy. It is against this background that the EU, as the world's largest economy, has to determine its role, vision and strategy for the gas market of the future.

Given the changing realities of the global gas markets, the EU needs to critically examine how robust the current EU market designs are in relation to global gas market developments, particularly when viewed from the perspective of security of supply.

...require different approaches to implementation...

Significant differences between gas and electricity also imply that different approaches regarding the issue of unbundling questions should be considered.²³ From the unbundling perspective, the main differences are:

- Because gas is produced in upstream fields, often located outside the EU, long haul transportation pipelines have to be built to bring the gas to EU markets. This is a fundamental difference from the electricity sector, because electricity is mostly generated within the EU and, provided that the fuel (fossil, renewable or nuclear) is available, can be generated near the customers' locations. In other words, the gas customer is structurally dependent on international transportation pipeline availability, whereas the electricity customer relies on a predominantly local grid.

²³ Based upon "Energy Transmission networks Unbundling: the different options for Europe; Capgemini, September 2007

- The development of gas fields requires large up front investments, often running into tens of billions of euros. For these investments to come about, a stable and long-term coordination mechanism throughout the value chain is required in order to secure decent ROIs. This applies both to pipeline and Liquefied Natural gas (LNG) developments. The risk and ROI management in an LNG value chain require the coordination of investments in liquefaction and regasification facilities, together with ships and terminals and the development of markets.

...especially when external supply security is at stake.

With the dissolution of the former Soviet Union and the ongoing heavy reliance on Russian gas supplies, the security of transit is becoming an increasingly important issue. The monopoly of Gazprom in gas exports and gas transportation (also with regard to Central Asian supplies), which could be considered as some sort of super-bundling in contrast to Europe's intentions to unbundle, has created a strong position for Russia in Europe's supply and delivery of gas, if Russia can overcome difficulties resulting from its heavy reliance on the Ukrainian corridor. Moreover, a situation of bargaining asymmetry could hamper security of supply to the EU, particularly in the future when Russian consumers will pay a competitive price for gas. The potential price-setting powers of Russia in at least two of the European regional markets could reduce the competitive inroads expected from new LNG supplies. The ability of Russia to route the gas through various corridors that it intends to develop should help to shore up their market power as a major supplier. The mismatch in market structures could not only impact security of supply, but also the efficiency and competitiveness of the EU market:

- Gas companies might not be able to match long-term gas supplies with long-term transportation contracts. This could, at first glance, endanger the security of gas supply.
- Ownership unbundling has the potential to disadvantage certain gas companies that have only a small percentage of their own upstream gas and that generate the majority of their profits from their pipeline businesses.²⁴

These two examples demonstrate the apparent differences in the approach to unbundling electricity and gas operations/markets, indicating that these two value chains require their own regulatory approaches.²⁵ It is therefore more than appropriate to re-focus the gas discussion away from the ownership-unbundling paradigm towards balancing downstream market liberalisation and competition with the emerging dominant organisation in upstream production.

Regional markets in gas also on the agenda....

Just like with electricity, regional market approaches of the European Gas Market were already on the regulatory agendas in the early 2000s. In February 2000, the Madrid Forum adopted a Road Map for its work programme in a Strategy Paper,²⁶ that 'is not proposing one single harmonised or unified approach to developing a fully operational internal market for gas, but acknowledges that different national circumstances must be taken into account and through a process of convergence gradually

²⁴ Operational evidence from the gas sector is harder to come by than in the electricity markets, as only a few countries have implemented ownership unbundled TSOs. In addition, there is no ISO experience in the gas market.

²⁵ The European Parliament acknowledged this in its report on the Energy Package, July 10, 2007. In its meeting on 3 Dec. 2007, the Energy Council endorsed the EU Presidency progress report that states a.o. regarding unbundling for natural gas, that 'a significant number of Member States agree that there are different levels of market development in the natural gas sector across Member States, ...and further discussion and definition at principles level is required on ...derogation periods for implementing new unbundling provisions (to) be extended for natural gas relative to electricity' .

²⁶ <http://ec.europa.eu/energy/gas/madrid/doc-5/strategy-paper-draft-28-01-2002.pdf>

develop the conditions for a fully operational single market for gas'. In the paper it is also stated that the EU gas market '...has metaphorically been compared with a "lake"'. However, rather than a single lake, a single European gas market could, in trading terms perhaps more correctly, be considered as a series of "pools" or "tanks" around national or regional demand and/or supply centers. The Forum underlined the pragmatic approach that all markets should develop according to their specific needs, and under appropriate regulatory oversight.

... with less focus than on electricity...

The drive towards the more pragmatic regional approaches in gas, however, seems to have lost momentum when compared to developments in electricity. The regulators in ERGEG started their Gas Regional Initiatives in the spring of 2006 (Figure 3) with three regions. The initial prerequisites of coherence and convergence in gas, however, are not as pronounced as in electricity. This is due to the limited number of regions, with two very large ones accounting for the bulk of total gas consumption in the EU; and a third region which is not significantly connected to the rest of Europe in terms of gas flows, due to the limited interconnection possibilities and a significant proportion of its supply being met by LNG. As a consequence, there are rather insignificant trade flows between the regions. In addition, the level of market integration within the regions is less advanced than in the electricity market, because there are fewer regional gas exchanges, and there is less interaction in the balancing of national markets. Nevertheless, each of the three regions has identified priorities, and all three are focussing on the more generic issues of interconnection and capacity, market transparency, network interoperability and the development of gas hubs. Also, the regulatory initiatives are to some extent matched with initiatives at the political level. For instance, the Pentalateral Forum (Benelux, France and Germany), together with the UK, has agreed to intensify the development of a regional gas market. Issues like market-coupling, transparency and infrastructure are among the issues on the agenda. A comparable approach is ongoing in the Mibgas project, in which Spain and Portugal are working together on the Iberian gas market.

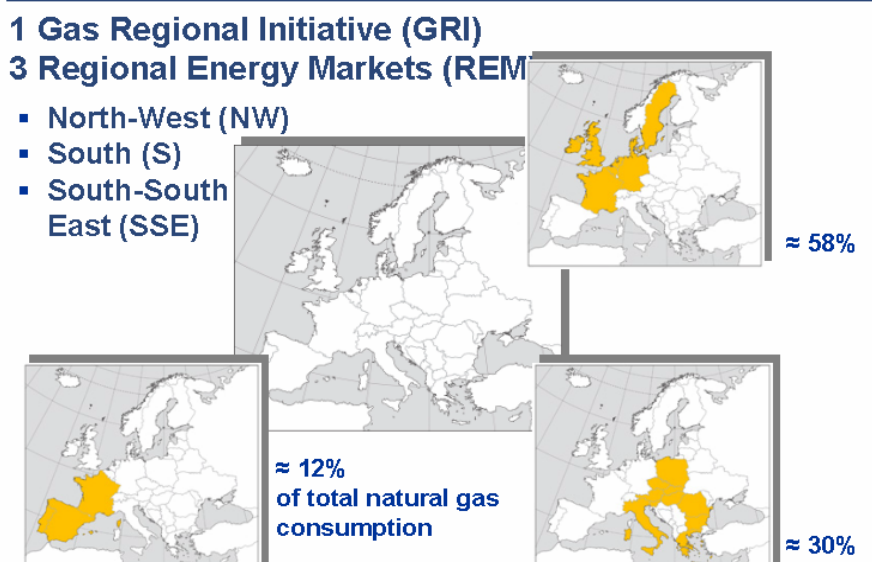


Figure 3 ERGEG Gas Regional Initiatives

...and some interesting recent developments.

In 2007, some interesting developments emerged from industry initiatives. Dutch TSO Gasunie bought BEB, one of the German TSOs. Gasunie and BEB are connected, and the objective is to integrate the two neighbouring TSOs into one cross-border entity. This will challenge the Dutch and German regulators, which have different approaches and modalities in regulating gas-TSOs, to coordinate or even harmonise their regulatory schemes. This will further boost the NW-European regional regulatory developments. Another promising example is the recent initiative from the Hungarian TSO MOL to combine 8 SE-European TSOs into a single corporate framework under a regional regulatory environment. This framework, the New Europe Transmission System (NETS), covering the Hungarian, Austrian, Slovenian, Croatian, Bosnian, Rumanian, Bulgarian and Serbian TSOs, could address challenges such as complete unbundling and a unified grid code and tariff system to facilitate the development of an efficient regional market.

A menu for further market design discussions on “power balancing”...

Taking a more general look at the interplay between EU gas markets, the value chains and the balance of power between sellers and buyers, a number of issues come to the fore that warrant a deeper scrutiny of the interaction between markets and regulatory frameworks.²⁷

- *Coordination tools along the value chain and investment.* Because gas is a commodity with specific characteristics (in terms of quality, production modalities, transport - pipelines or LNG - and further distribution, storage - be it for seasonal, market or strategic requirements - and the market place dilemma's), where capital intensive and long term projects and investments are the rule of the game, where production is located in sometimes very difficult and remote production areas, the ability to coordinate, manage and share risks throughout the whole value chain is crucial. Coordination tools and mechanisms, ranging from full, vertically-integrated entities (from source to burner tip), long-term contracts, other commitments or arrangements among functionally and vertically-separated entities and spot market devices, should be further analysed and assessed in the context of the final market outcomes with respect to security of supply and demand for consumers and for producers. This would require a deeper investigation into the impact of different market structures within the EU and the role of its competition policy.
- *How to get the gas to the market?* EU gas imports will either come via long-haul pipelines or via overseas LNG vessels crossing international borders, and sometimes must pass through difficult natural, logistical or politically-sensitive choke points. The importance of the point of delivery in the EU market has to be further analysed, together with the possible consequences for the various stakeholders in the value chain. The degree of internal market integration plays a crucial role in this respect, with large differences between the netback model with specific destinations *versus* the Hub/Pond model. Delivery points could range from the entry point of the European grid at an EU border or at a specific destination at an exit point within a national or sub-national market. Market structures, contractual terms, pricing and investment decisions might very well depend, in part, on the dominant model chosen for delivery points. This would also have implications for the various contractual models for investment in infrastructure, taking note of the legal and regulatory issues, and of industry structures and geography, as well as the interaction with electricity markets. It is important with regard to regional security of supply that the effectiveness of the EU gas industry, in terms of leverage and bargaining power towards the state-owned national gas companies, be taken into account.

²⁷ Reference is made to earlier work from CIEP in 2006 (The paradigm change in international natural gas markets and the impact on regulation; see http://www.clingendael.nl/publications/2006/20060600_ciep_misc_wgc-regulation-report.pdf).

- *Commodity and capacity interactions.* Natural gas supply has both commodity and capacity aspects. Especially for pipelines, various stakeholders have different views with respect to how capacity should be allocated in the market. The impact of alternative models for capacity allocation differs on the various stakeholders, such as TSOs, shippers, traders, suppliers and users. Also, different models could be prudent for new and existing infrastructures in commodity/capacity interactions. If the commodity comes before the capacity, outcomes and conditions might be different from when it is the other way around.²⁸ Long-term capacity rights might be conditional for new investments to come about, with specific access issues such as the application of the UIOLI principle. The regulatory treatment of transit is another question requiring specific attention. It is also in this context that it can be useful to explore the various models for inter-TSO coordination, including the idea of (regional) ISOs.
- *Storage and Balancing.* The structural changes in the EU gas market will have a major impact on the technical features of the overall gas supply system. The functionality of storage will increase, with its different perspectives ranging from seasonal storage and/or short-term flexibility to the more strategic components of meeting supply shortfalls or other system deficiencies. In addition, the balancing requirements within the whole infrastructural supply system will increase, where transmission, regasification, storage, conversion and market operators will all have to play their role. These functionalities should be further analysed in terms of capacity and investments, access and regulatory devices – all in relation to their impact on market outcomes and efficiency.
- *Long-term contracts.* Although the importance of long-term supply contracts has – again – received wide acceptance in the EU, their role as effective coordination mechanisms throughout the value chain is to be deepened and reconfirmed. Integrated long-term supply and transmission contracts have traditionally been used to distribute the risk associated with the development of large-scale, capital-intensive natural gas projects, usually assigning the volume risk to the purchaser and the price risk to the producer. While this is true today for large volumes of gas, and contributes to the viability of new investments, the aspect of long-term contracts providing volume security to the purchaser is worth underlining. Producers are required to provide the quantities agreed upon, regardless of whether other opportunities arise for them in the meantime, either in export markets or for domestic sales. Stability is therefore key, and new laws and regulations should, in principle, not intervene in these stable contractual relations.

In addition to the transmission component, which would probably require new thought in relation to existing EU rules, regulations and EU Court decisions,²⁹ it is also worthwhile to underline that the EC further defined its position on long-term contracts in the gas supply chain in October 2007.³⁰ In assessing their compatibility with competition rules, the following five elements will be considered: (i) the market position of the supplier, (ii) the share of the customer's demand bound by the contract, (iii) the duration of the contracts, (iv) the overall share of the market covered by contracts containing such binding stipulations, and (v) efficiencies. The explanatory memorandum accompanying the Third Energy Package underlines this approach by stating that the EC will provide guidance in an appropriate form

²⁸ For instance, there is a large difference between the concepts for the Nordstream and Nabucco pipelines; commodity comes before infrastructure in Nordstream, for Nabucco it's the other way round.

²⁹ See, for instance, the EU Commission's opinion in http://ec.europa.eu/energy/electricity/legislation/doc/sec_2006_547_en.pdf.

³⁰ See the Commission's ruling on the Distrigas case, <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/07/1487&guiLanguage=en>.

regarding the compliance of downstream bilateral long-term supply agreements with EC competition law. Because the discussion on long-term contracts and competition law is also going on in the USA, it is worthwhile to consider the role of this coordination mechanism in a more principled manner. In a recent discussion note,³¹ the point was made that exploring the way principles and values embedded in contract, regulatory and competition law mix and match in different legal systems helps to gain a thorough understanding of energy markets and could help to develop more consistent policy signals.

- *Win-win outcomes of producer and consumer dialogues.* The interaction between producer and consumer countries and their rent-seeking behaviour within the value chain needs much more attention. Security of supply has to be put in relation to security of demand and vice versa. Existing relationships between stakeholders in consumer and producer countries should be further explored, and understanding these relations could help to employ them at wider governmental levels. Particularly the role of governments in commercial negotiations, or in helping such negotiations to succeed, either in a more bilateral or more multilateral setting, is differently perceived, not only between producers and consumers, but also within the consumer family. The EU framework could even add a further dimension. Issues surrounding reciprocity, cross-border public and/or private ownership, investment protection and market access are very much at stake in this context.
- *Emergency response measures.* Making gas markets more resilient against supply disruptions not only increases the operational security of supply, but also makes it more difficult for outside producers to exercise political pressure through the explicit or latent threat of withholding gas supplies. It might be advisable to define some EU-wide standards for gas supply security. EU-wide standards would provide similar security levels in emergency situations to all European citizens and also avoid 'weak spots', countries that feel more vulnerable to political and economic pressure, particularly when the distribution of exposure to disruption risks are asymmetric among the regional markets. Standards should not be defined along instruments or fuels, but rather should define the threats that need to be dealt with, leaving the choice of instruments to the Member State and in accordance with the local circumstances. Holding strategic stocks might be a feasible option for certain countries, while in other countries other measures, such as installing dual-firing capacities and holding alternative fuels in stock, are more likely to be much more efficient solutions.³² More efficient, more flexible and tailor-made choices for Member States and their specific energy security needs and their specific dependencies are then possible policy options.³³
- *Infrastructure flexibility.* The European Union might want to reassess the capability of networks to accommodate an internal market in crisis situations. Increasing interconnection capacity and promoting gas to be able to move in both directions make spot market purchases

³¹ See Giuseppe Bellantuono remarks in <http://www.energypolicyblog.com/?p=112#more-112>

³² Gas stockholding is generally more expensive than storing crude oil or oil products, given its much lower energy density and gaseous form. Therefore, strategic stocks will be much lower in the ranks of efficient measures to mitigate emergency situations for gas markets than for oil markets. Other measures that could be considered are, for instance, interruptible supply contracts to final customers, fuel switching or emergency demand restraint regulations. See in this context also the 2003 CIEP paper "The case for gas is not self-fulfilling", http://www.clingendael.nl/publications/2003/20030100_ciep_paper.pdf

³³ Steps in this direction can be found in the Commission's proposals for a gas security framework issued in 2002. Cf. CEC 2002. The proposals defined threats that consumers needed to be protected from and left the choice of instruments to the Member States. The key points of the proposal have never been implemented. As a further step, one might think about developing an energy security framework that approaches energy security from an integrated perspective, rather than from a fuel-by-fuel perspective. Initial thoughts have been developed by CIEP and ECN in a recent study (De Jong et. al., 2007): http://www.clingendael.nl/publications/2007/20070400_ciep_misc_dejong-maters-et-al_update.pdf.

and physical delivery of gas possible in the event of a disruption in a certain part of the market. Regulatory conditions, especially tariff regulations, might have to be adapted in order to promote investment in additional and reverse connections between markets. It is likely that pipelines that are not currently being constructed, but that are desired by politicians and proponents of increased market flexibility, will be used to only a limited extent. The tariff regulation of these types of pipelines would therefore need to explicitly allow for the recovery of those costs.³⁴ Another option is to adapt the regulatory systems to allow for the socialisation of such extra costs. These examples show that a thorough cost-benefit analysis is recommended. It is possible that other measures, such as fuel switching and demand measures, would be more efficient instruments in dealing with issues of gas supply security. In cases where existing pipelines are only capable of accommodating flows in one direction, the additional investment to facilitate 'reverse flows' might be limited and thus worth considering first. Even if such an investment is considered to be efficient for improving supply security, allowing the pipeline companies to recoup their investment through socialisation of the cost might not be a sufficient incentive for this investment to take place. In some cases legislation might have to explicitly provide for an obligation to invest in such measures, if the owners of the pipeline company have a (suspected) interest in withholding the investment, even if they could recoup the investment through regulated tariffs.³⁵

...and some industry structure reflections...

In addition to these more regulatory-oriented issues, there is a more general issue with respect to industry structure. The current consolidation of Europe's energy industry does help to improve the European bargaining power, because the customer base of the merged entities represents larger volumes and the interdependence between individual importers and external producers is growing. Moreover, with European gas importers becoming more European in ownership structure, the interest of individual Member States' governments with respect to external gas matters will move towards more alignment, improving the scope for common external energy policies. It is important, however, to withstand the temptation to loosen internal competition policies in order to improve external bargaining power. Eliminating or restricting competition in the internal market does not appear to be the right answer to the strong market positions of external producers, because competition policy could discipline both the larger European industries and the foreign-owned companies to not attempt to abuse their market position.

In some circles the establishment of a 'single buyer' for gas imports or the stronger coordination of import contracts is being discussed.³⁶ In the case of the single buyer model, such an entity would be the counterpart for all new imported gas, which could then be auctioned at the EU border to downstream companies. Although such an approach would probably help, to some extent, to set a counterweight to the bargaining power of major suppliers in tight markets, we find it a rather problematic suggestion. Such an approach would establish a strong role for a European public body (the single buyer), would very much interfere with long-term established relationships between producers and current importers, and would probably add a few more layers of bureaucracy. More

³⁴ See, for an initial analysis of bottlenecks in pipeline connections, Van Oostvoorn, Frits (ed), Long-term gas supply security in an enlarged Europe. Final report ENGAGED project. ECN-C—03-122, 2003.

We wonder, however, whether this kind of support would not lead to demands for comparable benefits for all infrastructure projects bringing gas to the European market and how the efficiency of spending could be ensured.

³⁵ Compare Lang, Kai-Olaf, in *Polens Energiepolitik*. SWP-Studie S13. June 2007, who suggests, for example, that the necessary investment for reverse-flow capabilities of the so-called Yamal pipeline through Poland had actually been withheld once already as Gazprom, as co-owner of the pipeline, would not agree to the investment. Lang op.cit., p. 16.

³⁶ Finon, Dominique and Locatelli, Catherine, Russian and European gas interdependence. Can market forces balance out geopolitics? Working paper. Centre International de Recherche sur l'Environnement et le Développement, February 2007.

importantly, such an approach perhaps fits in an environment of tight markets and producer power, but it would likely be difficult to abolish in times when the market environment shifts back to a buyer's market. A single buyer could, however, also socialise the cost of inefficient purchasing, and the market would lose an important incentive for competition and investment. Nevertheless, because this option keeps resurfacing, it is worthwhile to study its merits in greater depth.

With regard to bargaining power and unbundling, it is often argued that security of supply would decrease.³⁷ Surprisingly little academic work has been done to assess the impact of unbundling on efficient investment in infrastructure, on security of supply and, in particular, on the bargaining power argument. Bargaining power is also used in the so-called reciprocity clause on infrastructure ownership by non-EU companies that is proposed in the Third Package. It could be used, if established, to strengthen the negotiating position vis-à-vis third countries, when their industries would hold meaningful interests in energy infrastructures within the EU. Recent announcements by Gazprom³⁸ to enter directly into the downstream markets in the EU, however, might bring further complications. And here again, a more thorough analysis of the role of competition law and policy might be useful in assessing abuse risks of market dominance in this context.³⁹

...with the supply security dimension...

Security of gas supply plays an important role in current discussions on European energy policy. Recently, concerns have been raised about sufficient investment in the upstream to satisfy demand, but also about the possibility of market or investment manipulation by a prospective gas cartel and with respect to the use of natural gas as a tool to achieve foreign policy objectives. It remains very difficult to assess how real some of these fears are, and the perception of a threat can be very powerful in discussions among politicians and governments. The cartel-like threats and the gas-foreign policy interaction is discussed elsewhere.⁴⁰ The infrastructure question has, however, a more direct relationship with the unbundling proposals in the Third Package. It is especially in this context that the relationship with the EU's policy objective of (external) supply security is missing.

...and the wider competition policy context.

As always, it is useful when discussing energy policy and energy markets to assess the effectiveness of the core competence of the EU, i.e., competition law and competition policy. Certainly, competition policy cannot solve all the energy dilemmas, but in a discussion about intervening in the organisation model of the energy firm, perhaps the competition policy can prevent the abuse of market power as efficiently as the break-up of the value chain. Very recently the Commission proved its creativity with its new guidelines for state aid in environmental protection,⁴¹ constituting one of the instruments to implement the Action Plan for the new European Energy Policy. It explicitly points out that the Treaty of European Union, in Article 2, states that sustainable development is one of the main objectives of the Union, and that Article 6 mentions the need to integrate protection of the environment into all Community policies. There is no reason why this would not apply as well for the other components of

³⁷ Some MS governments subscribe to such views, while others underline the benefits of ownership unbundling. See 'Rettungsaktion für Energiekonzerne' *Financial Times Deutschland*, 30 July 2007.

³⁸ See, for instance, the 28 January 2008 report in the International Herald Tribune (<http://www.ihf.com/articles/reuters/2008/01/28/business/OUKBS-UK-RUSSIA-BRITAIN-GAZPROM.php>)

³⁹ Reference could be made of the Gazprom-Centrica takeover rumours in 2006 and the UK government reaction that such an attempt would face robust scrutiny under Competition Law.

⁴⁰ See, for instance, "Perspectives on security of supply in European natural gas markets", Christoph Tönjes and Jacques J. de Jong; CIEP working paper, August 2007.

⁴¹ These guidelines were adopted on 23 January 2008; see http://ec.europa.eu/comm/competition/state_aid/reform/environmental_guidelines_en.pdf.

the Community's energy policy, i.e., market design and the supply security dimension. Creativity should guide the balancing act between various treaty and policy objectives.

5. Concluding remarks

Although all the economic arguments on full ownership unbundling may be present, there is a risk that the debate will take more political energy than we will gain. For instance, in the heated Dutch debate about full distribution network ownership unbundling that has taken place over the past 3 years, there has been almost a complete stand-still on discussions of any other energy policy issues. But more importantly, there is a distinct possibility that the rational discussion on the industry structure will be totally sidestepped by the emotional discussion on ownership – whether public or private, national or foreign.

The golden triangle of “market integration, network cooperation and Europeanising regulations” requires a balance, and this balance-seeking should govern the electricity discussion much more today than it has in the past, including ideas to look at the regional model for ISO-type arrangements. Market integration based on ongoing developments in regional markets could, if combined with new concepts for regional ISOs, bring interesting political momentum to the EU debate on the Third Package. This would especially be the case if support for these ideas is discussed further in the Pentalateral⁴² Forum, which could act as a testing ground. Learning from cross-Atlantic experiences on regional ISO models would be worthwhile as well.⁴³ On this basis, a wider EU discussion on electricity market designs would be a logical next step and would pave the way for a real and effective competitive electricity market in the EU.

The discussion and the arguments on ownership unbundling tend to focus on electricity alone, and although in theory there are arguments that there is no reason to treat gas differently, in the EU reality there is. With declining domestic supplies in the EU, gas supplies will reach the EU market increasingly through long-haul pipeline-based infrastructures. New pipelines need to be constructed and filled with gas, which requires a complicated coordination mechanism throughout the whole value chain in order to manage and share the risks and benefits involved. It is very unclear if and how the exemptions to the unbundling proposals and to the new infrastructures can be considered appropriate answers. There is a need for more creativity in the discussion, managing the right balance on the “Madrid-Moscow axis”, and seeking an effective EU gas market design in harmony with a reliable gas supply security system.

We therefore make a plea to continue the discussion along the lines that were suggested here. We would like to challenge politicians, policy makers and industry stakeholders to think about “the golden power triangle” and to think “Madrid/Moscow” in gas. Singing these songs would really contribute to securing competitive EU markets with a reliable external supply security, and with a neat refrain about competition law and policies completing the song.

⁴² Specifically noting that both Germany and France are participating together with the Benelux countries. Cross-border relationships are also developing with the Scandinavian market and the UK .

⁴³ Reference is also made to a mini-seminar, organised at Clingendael in November 2007 (<http://www.clingendael.nl/ciep/events/20071122/>).