

EUROPEAN ENERGY MARKET LIBERALISATION AND INTEGRATION: AN ASSESSMENT OF THE NEW EU ENERGY PACKAGE

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Key words: EU energy policy, gas, electricity, infrastructure, investment, regulation

Abstract

The new energy package presented by the European Commission (EC) in September 2007 contains a number of diverse, and sometimes controversial, measures aimed at bringing current European energy markets closer to the ideal of one competitive and fully integrated market. We discuss the flaws and merits of the package and signal a number of concerns regarding the ultimate effectiveness of the new energy market Directive into which the proposed package will culminate.

1. Introduction

Some years have gone by since market liberalization has been introduced on European energy markets. In these years, different Directives have been drafted and implemented with the aim to develop the patchwork of national energy markets into one European market with a high level of competition and sufficient infrastructure investment to accommodate energy flows and increase market integration. Throughout the years, new insights were gained and lessons learned, but still the original ideals of a well-functioning integrated gas market have not been reached. Last September, the European Commission (EC 2007) published its proposals for a third energy package: a third energy market Directive as a next step towards EU goals. The question is whether this new package will significantly contribute to further developments in this field: will it finally boost competition and infrastructure investments as envisioned at the start of the liberalization process?

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In this paper we aim to give an assessment of some measures contained in the proposed third energy package. First we discuss the particular flaws and inefficiencies present in the current EU energy markets that the measures aim to address. In itself, flaws and efficiencies can be identified by comparing a perceived policy goal and a desired European energy market end-state with reality. For a large part the identified flaws and inefficiencies are identified in the Energy Sector Enquiry published in 2007. We briefly point to the envisioned goals of market liberalization and ask ourselves: What is actually the problem with current European energy markets? Second we focus on the measures selected by the EC and presented in the new energy package. Vital question is, are the proper measures selected to target the identified flaws and inefficiencies, or have some been overlooked or wrongfully neglected? Are these measures going to contribute to successful market integration, true internal market competition, and sufficient infrastructure investments? We assess the major policy and regulatory measures of the third energy package. Attention is headed towards the validity of underlying assumptions, and the existence of necessary pre-conditions for the measures to prove successful. We end the paper with some concluding remarks on the proposed package.

2. What's wrong with current European energy markets?

The EC envisions one truly internal market that is successful in providing an affordable and secure supply of electricity and gas. When comparing these goals with current market functioning one can identify three particular problems.

Firstly, what is meant to become one internal market is in reality still a collection of national markets, and at best, in some occasions a regional market. Full market integration has not been reached yet. Secondly, and partly to blame for the first problem, is the fact that the level of investments in networks, especially across borders, seems to be insufficient. Even at congested parts of the network, new network investments appear to be lagging. Thirdly, competition does not seem to be come off the ground in all parts of the EU. Market concentration and vertical foreclosure issues are still on the forefront, and new market entrants are still struggling to gain a foothold on markets.

A common root for the above problems is the legacy of the pre-liberalization era and an insufficient development of sufficient market conditions. For example, member state regulation has often a predominantly national focus, with the impact of national gas market actor actions on other member states being neglected. In addition, European directives still allow for large degrees of freedom in setting certain regulation and rules. Although different processes contribute to a harmonization of procedures and regulation and such, significant differences can still be noted

between EU member states. A factor contributing to this divergent picture is the lack of coordination in policy and regulatory actions. An example of such are network investments, which often have large external impacts on other markets and network linkages. A large number European national wholesale and retail markets still exhibit high to very high levels of market concentration, with the former vertically integrated incumbent being the dominant actor.

To sum up, the workings of the current European electricity and gas market can further be improved by enhancing the regulatory environment for gas network investments, increase international coordination of actions and harmonization of policy and regulation, or effectively reduce market concentration.

3. What are the proposed solutions and will they solve the problems?

Major issues tackled in the proposals are:

- (1) the separation of energy supply and production from network activities;
- (2) enhanced powers and independence of national regulators;
- (3) the creation of an agency for the cooperation of energy regulators;
- (4) improvement of the functioning of the internal market, and;
- (5) increased cooperation between transmission system operators.

For every of the above measures we give a description, discuss the problems it aims to address, identifies potential alternative measures and, finally, qualitatively discuss and assess the measure.

The discussion of these measures based insights gained in two particular projects: one concerns an impact and cost-benefit analysis of specific energy policy measures undertaken carried out for the European Commission (Ecorys/ECN/Moffatt Associates 2007), the other concerns a large study for the same principal into the investment conditions for energy infrastructures (De Joode, J. and F. Van Oostvoorn 2007, EC 2007). The major issue in the assessment will be the interdependence between the different proposed measures and the degree to which they are likely to contribute to EU policy goals.

3.1. Ownership unbundling or the creation of an independent system operator

Description of the measure

The most fiercely debated measure in the package is the ownership unbundling measure where the Commission proposes to further unbundle the interests of the producer/trader of electricity or gas from the interests of the transporter of electricity or gas. To this end, two possible directions are put forward: (1) ownership unbundling (OU) of producing/trading activities from transport activities, and (2) the creation of independent system operators (ISOs). The former solution is

preferred by the Commission, while the latter alternative solution seems to anticipate on expected fierce opposition from some EU member states, notably France and Germany, against OU.

OU implies that no person or persons in EU member states is allowed to exercise control in a supply company while at the same time exercising control (whether direct or indirect) in a network company. The proposed measure however is limited to network companies operating on the transmission network: companies operating a distribution network are, as already transposed in current legislation, only obliged to legally unbundle their business from supply and production activities. The unbundling provision applies EU-wide: no supply or production company anywhere in the EU is allowed to own shares in network companies active within the EU.

The alternative beholds the implementation of an ISO model. Under this model supply and production companies are allowed to hold stakes in transmission network companies but are obliged to transfer the management and control over the network to an independent entity which performs all functions associated with that of a network operator. Ownership of the network would remain with the integrated company.

Problems it aims to solve

The Memorandum (EC 2007) that accompanied the third legislative package presents three problems that arise in an energy market with bundled (e.g. management, functional, legal unbundling) supply and transport companies: (1) discriminatory behavior regarding network access vis-à-vis competitors, (2) integrated network companies may leak highly valuable network information to the supply part of the company, putting competitors at an information disadvantage, and (3) network companies belonging to a vertically integrated firm can have perverse incentives for network investments.

It is important to note that the measure proposed is meant to address two very different problems: the problem of market concentration on the one hand, and the problem of lack of investments on the other. These problems are largely related in certain sense: no matter how network regulation and monitoring practices are implemented, any organization with a relation between the network and supply branch will have, at least theoretically, the temptation to favor its own supply branch over other suppliers, thereby hindering full market competition. Although this mechanism can be illustrated in theory, there can be large difficulties in finding the proof for such discriminatory behavior. All in all, this type of market design puts other gas suppliers at a disadvantage in the gas wholesale market, making it more difficult for competition to evolve. In addition, the degree to which the measure can address the problem of lack of investments should be put in perspective. A lack of new investments in infrastructure within and between EU countries can

result from a number of reasons, of which the above described perverse investment incentives originating from vertical integration is only one. Other reasons for an investment level below expectancy are, among others, a lack of market-reflective price signals for investment prevailing at trading platforms across the EU, uncertainty on network access and tariff regulation, and an insufficient harmonization of network regulation across the EU.

Qualitative assessment of the measure

The effectiveness of the measures on ownership unbundling (OU) or the creation of an independent system operator (ISO) should be discussed with regards to the different problems that are addressed: the problems of network and information access discrimination on the one hand and the lack of investment in new networks on the other. For the case of non-discriminatory access to networks and information, OU is highly effective. OU permanently resolves the inherent conflict of interests when it concerns the treatment of the own supply branch versus third parties. After OU no inherent conflict of interest will remain. The ISO model appears to deliver the same level of effectiveness, since an operator independent of the former vertically integrated company operates the network in the short term, making independent decisions on network and information access. The impact of the solutions on investment incentives is less apparent. Although the independent TSO will no longer let (internal) supply interests distort investment decisions, it is not apparent that more investment will take place. Here we again point to the earlier mentioned factors influencing the willingness and capability to invest in new infrastructure. The only thing OU does effectively address is the internal incentive not to invest in order to defend supply interests. This does not necessarily imply that with this perverse incentive removed investment will come off the ground. It seems that other reasons are more important for the less than expected level of new investments. This is important to keep in mind during the discussion on ownership unbundling.

It is not straightforward that an ISO model will give rise to increase network investments. This is very much dependent on the relationship between the system operator and the owner of the transmission network (TO: transmission owner). The SO would have the information regarding optimal network expansion and should signal the timing and location of these upgrades to the transmission owner. But how is the contractual arrangement underlying the SO-TO relationship specified. In case the SO has the power to oblige the TO to invest according to the needs as identified by the SO, then theoretical optimal investment levels might emerge. However, it is likely that SO powers will be substantially weaker, implying more of a bargaining process on the creation of new network capacity between SO and TO. Little is known about how the EC

envisions this relationship in the proposed policy package, but the effectiveness of the proposal regarding the provision of investment incentives is crucially dependent on this.

On a different account however, an ISO-model might be more advantageous. The choice between an OU and an ISO-model impacts the manner in which European regional network integration can be brought forward in the coming years. Regional integration of transmission activities can occur through either up-scaling of current TSOs (e.g. mergers and acquisitions) or the creation of a regional ISO. A regional ISO may then operate the networks of vertically integrated TOs as well as the networks of OU companies, or a combination. In both cases implementation of harmonized codes and market rules is more easy to realize and even logical. However, some member states require TSOs to be publicly owned, which could make cross-border mergers more difficult. Unless off course mixed mergers between private and public TSOs are allowed or current public TSOs are in due to time privatized. In other cases regional network integration through regional ISOs may be the best feasible option.

3.2. Independent national regulators with enhanced powers

Description of the measure

A second area where the EC puts forward new legislation is the powers and independence of regulatory authorities. Here three specific measures are proposed.

Firstly, it provides national regulatory authorities with a clear mandate to cooperate across borders with other member state regulatory authorities and in the newly to be created Agency for the Cooperation of Energy Regulators and the Commission. Before publication of the proposals this was dubbed the 'ERGEG'+, thereby linking the new international mandate for regulators to the already existent ERGEG (European Regulators' Group for Electricity and Gas) where European energy regulators informally advised the Commission on energy policy and regulation.

Secondly, proposed legislation includes the strengthening of the formal powers of national regulators, for example regarding the monitoring of compliance with unbundling and TPA provisions, the monitoring of transparency conditions, and monitoring the level of market opening and competition. In order for the regulators to be able to optimally perform these tasks, regulatory authorities are given the powers "to investigate, to request all necessary information and to impose dissuasive sanctions". Other areas in which the regulator is receiving more formal powers are the rules on network balancing and congestion management and the like.

Thirdly, provisions are proposed that improve the independence of regulatory authorities. These include legal separation and functional independence of other public or private entities, budgetary autonomy, appropriate human and financial resources and independent management.

Problems it aims to solve

General rationale behind the measures aimed at improving the effectiveness of the regulator is the presumption that current legislation is in principle sufficient for an effective working of the regulatory apparatus and satisfactory market performance, but sufficient national empowerment and resources for the regulatory authority are lacking. Obviously and duly noted by the EC the regulatory powers and resources available to national regulatory authorities vary largely across EU member states. In member states where regulatory supervision is weakly developed on these two accounts, the proposed measure should contribute to an improvement performance of the regulatory authority for various tasks. For example, monitoring of compliance with European and national energy market legislation and assessing the performance of legislation and the need for improvement are tasks that could be stimulated via this measure. Additional resources should also allow the regulatory authority to gain more sectoral specific knowledge that can be beneficially applied when monitoring and reviewing sector performance. An example of such is the reviewing of investment plans of distribution and transmission companies.

Qualitative assessment of the measure

The first part of the measures aimed the functioning of the regulator are necessary for the successful introduction of one of the other measures to discussed in the next paragraph, the creation of a new institution comprising all national energy regulators. Without the national provision of the mandate, the creation of an agency for European energy regulators will remain futile. The pros and cons of the creation of this agency are discussed in the next paragraph. The difficulty in the empowerment of national regulators, as well as the idea to increase the level of independency of the national regulator from national government, is the political willingness to go that far. Under current legislation, national governments easily retain the ability to retain the speed of market liberalization and integration, and the degree of regulatory prudence through the level of resources devoted to the regulators. By restricting the amount of financial and human resources, governments impact the effectiveness and scope of regulatory activities. Apart from this, some basic regulatory procedures that could best be overseen by regulatory authorities, often still reside with government. Other (national) public goals can often provide a rationale for this 'apparent' legal design, where national policy goals outweigh the European goal of the creation of a well-functioning internal market. How far are national governments prepared to go in properly assigning the national regulator with those responsibilities and duties that it should be

doing when the creation of a competitive internal market is concerned? It is likely that (some) governments will try to retain decision-making powers on for them vital issues such as the process for granting exemptions from third-party access regulation to new infrastructure investments. Another example is the possible independence of regulators to determine (jointly with neighboring countries) the type of network regulation. The third measure aimed at properly equipping regulatory agencies with 'proper' resources will particularly be difficult to validate. What is the appropriate size of the regulatory authority in terms of human and financial resources? Is an international comparison possible and sensible at all? What should be the benchmark?

3.3. *Agency for the Cooperation of Energy Regulators (ACER)*

Description of the measure

The energy package proposes to create a separate and independent entity, an agency for energy regulators, devoted to the implementation of more effective regulation. It is stressed that the role of the agency is complementary to the national regulatory authorities. The agency is to perform the following tasks:

1. Provide a framework for national regulators to cooperate, by laying down procedures for cooperation between national regulatory authorities (for example regarding information exchange).
2. Provide regulatory oversight of the cooperation between transmission system operators, where the agency is able to review investment plans put forward by TSOs and its correspondence with long-term network planning in the region.
3. Retain individual decision powers regarding regional (cross-border) issues, for example on exemption requests concerning TPA regulation, and the applicable regulatory regime for infrastructures crossing borders.
4. Perform the role of general advisor to the EC concerning regulatory issues or the impact of national regulatory decisions on the European internal market.

Problems it aims to solve

The drive for the creation of the regulatory agency is mainly rooted in the large variety in regulatory regimes and procedures across the EU. The existence of this variety is concerned to be a barrier in a transition towards a truly internal market. This effect runs through different channels. It relates to market and balancing rules that impact the effectiveness of trading across borders and stimulating internal market trade on the one hand, and to the impact on infrastructure

investment across borders, enabling further market integration, on the other. In the vision of the EC the creation of this new institution should speed up market integration and effective competition in one European energy market.

Qualitative assessment of the measure

On the creation of a European regulatory agency we have some concerns. The advantages of the proposed agency are twofold. Firstly, when indeed the agency would be created with the necessary powers some important issues *could* theoretically be dealt with more effectively and swiftly (such as regulation of cross-border investment, harmonization of regulatory procedures, etc.). Secondly, the existence of a regulatory authority that has some distance to the national regulatory authorities could lead to more effective regulation in the sense that national biases in regulation could be removed. An independent agency for regulators could therefore contribute to more independent regulation and thereby reduce one of the other identified problems of insufficient dependency of national regulatory authority's vis-à-vis national governments.

One may however have concerns regarding this measure that is proposed to deal with different problems related to the 'patchwork' of national rules and regulations and the lack of coordination in cross-border and regional issues.

Firstly, we doubt whether this measure is proportional with respect to the problem. Although the problem is clear, some questions could be posed regarding the sense of urgency to deal with this problem at this moment, in this manner. Undoubtedly, current differences in national rules and regulations are still hindering further market integration, but for the last couple of years, things have been changing for the better. In this respect one needs to mention the regional approach under the ERGEG started in 2006 (ERGEG 2008a). Under this regional initiatives approach all relevant stakeholders in the energy market together work on reducing and removing inefficiencies that hinder market integration and development. This occurs within a limited number of gas and electricity market regions, with each region comprising several countries. The frustration of the EC with the speed at which different national institutions are converging is apparently such that the creation of a new European institution seems the right way to go. However, the creation of a new institution doesn't guarantee a smoother harmonization and market integration process. The question is whether this institutional approach will outperform the current 'regional approach' taken by ERGEG? On some issues it might prove substantially easier to work cross-borders on harmonization and integration issues on a gradual and regional basis than a uniform approach based on a new bureaucratic organization where all EU-27 members are represented.

ERGEG has welcomed the third legislative package as a complementary process to the on-going regional initiatives approach. If a regional approach is really the logical intermediate step between the transitions from national markets towards one European market, it is questionable whether the costs of creating a new European institution are really worth it.

Secondly, it seems that chances are that amendments due to member state opposition (mainly regarding the transfer of power) will substantially weaken the to be established agency. This would give rise to an agency with no real powers while European bureaucracy is further increased. A possible outcome is that instead of a transfer of tasks from national regulators to the agency a duplication of tasks will evolve in the amendment process, making the agency (partly) duplicative instead of complementary to national regulatory activities.²

Another critical note on ACER concerns the rules of governance envisioned for ACER. Whereas the EC proposes full independence of regulatory authorities from national governments on a national level, the EC seems to violate this principle on a European level by allocating the right of drafting the list of candidates up for the position of agency director to itself.

Part of the added value of ACER could result from its delegated task to review network investment plans on a regional and European scale. Up until now, network planning for especially natural gas has been largely based on national reporting and monitoring³ but the impact of new network investments is often not limited to one country. New network connections impact the availability of already existing connections within and across borders. Therefore, the planning of optimal network expansions need to be reviewed on at least a regional basis in order for optimal network solutions to be found for current network bottlenecks. New network investments resulting from national planning procedures can be suboptimal when reviewed on a higher (geographical) level. On this important aspect, ACER will review the planning activities performed under the umbrella of the new to be founded European Network of Transmission System Operators (ENTSO), which is another proposal in the package discussed later in this paper.

² A concern also raised by Ranci (2008).

³ For electricity, the UCTE publishes yearly monitoring reports on infrastructure conditions and new investment requirements.

3.4. *Measures to improve market functioning*

Description of the measure

Under the header ‘improving market functioning’ several adaptations to already existing legislation concerning market functioning are addressed. It involves several different market aspects. The measures encompass:

1. Drafting guidelines for the application of exemption from TPA.
2. Extend transparency requirements
3. Measures aimed at improved non-discriminatory access to gas storage:
 - a. Legal binding of the ERGEG Guidelines for Good Third Party Access Practice for Storage System Operators (GGPSSO).
 - b. Legal and functional unbundling of storage system operators from supply undertakings.
 - c. Enhance powers of regulatory authorities to overview access to storage.
 - d. Require clarity on the regulatory regime applied to storage facilities.
4. Measures aimed at improved non-discriminatory access to LNG terminals.
5. Developing a framework contributing to the establishment of a European retail market.

Ad 1) Current legislation provides for an exemption regime from TPA access conditions for new network investments, where the exemption is assessed on a case-by-case basis following a number of predefined conditions (EC 2004). New legislation will see a ‘streamlining’ of this exemption regime through the drafting of guidelines on the basis of which regulatory and Commission authorities can decide upon exemption granting.

Ad 2) Already existing transparency requirements for market information is broadened with additional datasets such as gas stocks, forecasts of demand and supply, costs for balancing the network and trading.

Ad 3) Regarding access conditions to gas storage facilities the EC proposed to transpose existing non-binding guidelines into formal legislation in order to increase clarity and transparency on access conditions across EU member states. Another measure aimed at improving gas storage market competition is the move towards unbundling. In essence, gas storage follows the regulation of distribution and transmission networks. As essential facilities, gas storages and distribution and transmission networks are comparable. Integration of gas storage and gas trading activities within one company per definition tempts the company to reduce availability or worsen conditions of gas storage services to competitive gas companies. While this problem was tackled earlier for distribution and transmission networks, gas storage is now following.

Ad 4) Across the EU there is considerable uncertainty regarding the applicable regime for LNG-terminals. Although most of the newly invested LNG terminals are exempted under Article 22, some older terminals are supposedly subjected to TPA. In order to provide full transparency in the access conditions to LNG terminals, ERGEG drafted guidelines for LNG terminal access conditions. The EC proposed to make these guidelines legally binding, and in addition, extend regulation with how LNG terminal operators should provide access (capacity allocation and congestion management).

Ad 5) Finally, envisioning the ultimate creation of a European retail market, the Commission proposes to create a forum that brings together all stakeholders in the EU retail market in order to bring forward the gradual development towards this goal. The forum should be formed in analogy with the Madrid and Florence forums for gas and electricity and gas wholesale market competition respectively.

Problems it aims to solve

This fifth element in the third energy package deals with a large variety of problems, all put under the header of 'improving market functioning'. However, the measures proposed under this header are certainly not measures aimed at structurally improving for instance market competition by targeting existing market concentration problems. The measures are more (marginally) directed at improving transparency on different elements in the value chain, provide basic clarity regarding already installed legislation and regulation (and thereby reducing regulatory uncertainty), and enforce an increasingly harmonized approach in access conditions for infrastructures (networks, gas storage facilities and LNG terminals). The last proposed measure aimed at European retail markets foresees a forum where stakeholders discuss the way in which competition on European retail markets can be speeded up. While the functioning of the wholesale markets in Europe has received wide attention in both public debate and legislation competition in retail markets is only slowly and gradually evolving.

Qualitative assessment of the measure

It is difficult to fully assess the large variety of measures presented under the header of improved market functioning but we try to discuss them at the basic level at least.

One of the current instruments for the encouragement of new infrastructure investments is the exemption regulation that allows network operators investing in a new network connection to operate without third party access regulation. It is considered to be quite successful, but the differences in the application of the exemption rules exist across EU member states. This is

caused by the large discretionary room provided in current legislation. The problem with the different applications is that it leads to different conditions for exempted investments across the EU and regulatory uncertainty regarding the possible exemption granted to new network investments in the future. By ‘streamlining’ this piece of legislation, with more specific procedural guidelines, more uniformity in application will result. A good starting point is the consultation paper on Article 22 guidelines prepared by ERGEG (2008b). The creation of ACER gives another new input in the exemption procedure since ACER would be able to assess new investments on their ‘exemption worthiness’ with additional information on network conditions and planning in the region where the investment is taking place. Hence, it can be expected that new exemptions conditions provided to new investments in European gas and electricity networks are more uniform across the EU and will overall contribute to energy market performance in a more socially optimal way.

The second measure aimed at creating more transparency on European energy markets seems a proportional measure that does not require far-reaching new legislation. For this measure to effectively lead to an improvement in market conditions it is necessary that the actor overseeing the compliance with transparency requirements has teeth and is willing to prosecute in case of limited compliance based on full political independence. In the further specification of additional transparency requirements the assistance of ACER is desirable so as to ensure a harmonized and effective transparency framework for the whole EU.

The measures aimed at the gas storage market will reduce the differences in the (regulatory) treatment of gas storage facilities and therefore result in improved level playing field conditions between EU member states. After all, with increasing interconnection and market integration the gas storage market will get more and more a regional market. In order to guarantee fair competition in the gas market legal unbundling of gas storage and gas supply activities for a large part will remove the incentives for the integrated owners to put competitors at a disadvantage. An increase in gas market efficiency is the foreseen result of implementation of this measure.

For the measures aimed at harmonization of regulations on LNG-terminal access the line of reasoning is equivalent to the above mentioned gas storage access conditions. Also here, current legislation has created large differences in access conditions for LNG terminals across the EU, which is undesirable from the perspective of the ultimate creation of one European market.

With the creation of a multi-actor forum of different stakeholders the EC rightfully targets the progress in retail market competition. Based on the success of the Madrid and Florence forums for gas and electricity markets, this is a sensible move. At relatively little administrative/bureaucratic costs stakeholders from all over the EU are encouraged to meet and

discuss ways to bring forward European retail competition. Albeit the success of the earlier mentioned forums one should loom for the danger of a discussion platform with not real results, where only guidelines are produced that fail to be implemented on a voluntary basis. In any case, at least the fact that real discussion on this topic is properly started is appraisable and should meet very little opposition.

All in all, the measures produced under the header of improving market functioning are not far-reaching and are in essence logical next steps given earlier legislation. However, the success of these additional measures is dependent on the more crucial point of credible and politically independent national regulatory authorities and a credible and politically independent European regulatory authority (ACER). As argued in the paragraph on the creation of ACER, the largest danger is that the credibility of especially this European regulatory authority is severely weakened in the process of drafting the new final Directive. This is especially harmful for the effective implementation of the measures related to network, gas storage and LNG access conditions (e.g. the application of exemption regulation).

3.5. Efficient cooperation between transmission system operators

Description of the measure

This measure encompasses the creation of yet another European body: the European Network of Transmission System Operators (ENTSO). This institution would build further on existing institutions that are voluntary in nature. Here we mention the European Transmission System Operators (ETSO), Gas Transmission Europe (GTE), the Union for the Coordination of Transmission of Electricity (UCTE), and the European Association for the Streamlining of energy Exchange (EASEE). The EC recognizes the contribution of these organizations to the development of the internal energy market, but at the same time concludes that, among other factors, its voluntary nature has on numerous occasions led to differential member state performance with regard to guideline adoption and implementation, and further harmonization of procedures surrounding energy transmission.

The newfound organization would resort to the following main tasks:

1. The development of market and technical codes, including monitoring of implementation.
2. Coordination of network operations.
3. Coordination of network investments (via long-term investment planning plans).

The functioning of ENTSO would fall under the auspices of the Agency for Cooperation of Energy Regulators (ACER).

The EC proposal clearly states that the creation of ENTSO would not reduce the importance of cooperation at regional level, as is already undertaken in the Regional Initiatives led by ERGEG and independent initiatives such as the Pentilateral forum in Northwest Europe.

Problems it aims to solve

Again, as for the proposal for a European regulatory agency, the formalization of tasks currently performed by self-regulatory organizations targets the slow process of implementation of the voluntary existing guidelines drafted by earlier mentioned organizations. A more European formal approach in market and technical codes is thought to speed up European harmonization in rules and thereby contribute to further market integration. A specific problem addressed with the creation of ENTSO is the need for international coordination in network investments. Network investments impact network operation within and across borders and therefore warrant a European, or at least regional planning approach. This approach is institutionalized in the proposed ENTSO, and should result in more (socially) optimal network operation and investments. In addition, under the regulatory control by ACER, ENTSO is more formally obliged to develop, encourage, and monitor implementation of a harmonized set of technical codes and rules.

Qualitative assessment of the measure

An impact assessment of this measure shows quite positive results due to a positive impact on investment levels and consequently on the development of competition on energy markets. However, there are several elements in this particular measure that deserve some comments.

For example, it mentions an implementation of a uniform set of codes and market rules but lacks the consultation on the proper set of codes and rules with other stakeholders.⁴ As it is currently formulated, the codes and rules will turn out as unilaterally decided upon, possibly to the advantage of network operators and the disadvantage of other stakeholders. Consider for example the adoption of uniform pricing principles and tariffication methodology. These have a large impact on the functioning of the market and hence, warrant involvement of other stakeholders in drafting codes and rules. The mentioning of this important consultation process is therefore a vital omission.

Regarding the success of this measure in increasing network investments, across-border interconnection and market integration, it should be realized that the new institution alone is not

⁴ An omission also noted in CEER (2007).

be sufficient in achieving this. For investment in network investments other conditions matter (De Joode and Van Oostvoorn 2007). One of these is the unbundling of transmission and supply activities discussed earlier. Other vital conditions relate to the regulatory regime of network activities and the degree to which market prices can be considered proper signals for investment. Current uncertainty in markets on whether market prices are really market value reflective is caused by differences in market rules and the like on the one hand, and market concentration and the consequential abuse of market power to manipulate prices on the other. Network regulation especially regarding the treatment of investment costs due to new network connections sets the business case for any network expansion. Different regulatory design leads to different investment-decisions (regarding for example timing, capacity, etc.) taken by network operators and different network performance. A specific issue in this respect is the way that regulation deals with network investments that facilitate gas transit. Some work has already been done on this aspect by for example GTE (ref), but further steps can and need to be taken. Here an important role could be played between both ENTSO and ACER, with consultation with other stakeholders. Summarizing the above, increased cooperation between TSOs will not in itself definitively solve the problem of too little investments.

The effectiveness of ENTSO can further be considered to be dependent on the evolution of the discussion on OU or ISOs. When the decision is taken for ownership unbundling, the designated principles and tasks for ENTSO are laid down. However, if the ISO-model is chosen, the organization and effectiveness of an ENTSO are very different. Since ENTSO is involved in both operational and investment matters of network operation, an ISO-model would require both ISO and transmission network owners to get involved in ENTSO. The relationship between the ISO and the TO is yet to be defined but is of crucial importance for the optimal development and operation of networks. For example, how can ISOs push for new investments undertaken by TOs? The problems in this relationship will be reflected on the European level as well. In the ISO-model, ENTSO would encompass all member states ISOs and TOs, instead of TSOs, thereby increasing the bureaucratic cost of this proposed institution. When both options of OU and ISO fail to materialize in the final Directive and vertical integration of transmission and supply activities will prevail this would seriously undermine the effectiveness of an ENTSO. Vertical integrated TSOs will then have all possible means to frustrate progress made by ENTSO in the fields where it is envisioned to contribute. In short, any result less of OU would require serious thinking from the side of the EC about the desirability and design of ENTSO.

4. Concluding remarks

The package is not all revolutionary

Apart from three specific new elements the proposed energy package contains a large number of quite logical legislative rules that follow-up on earlier drafted legislation. Examples are the measures specified under the header of improving market functioning: increasing transparency requirements, a harmonization of the application of different regulatory regimes applicable to gas storage and LNG terminal facilities, and more powers and independence to regulatory authorities. The more 'path breaking' measures are OU, and the creation of two new institutions ACER and ENTSO.

Trend towards formalization and centralization

On the whole, the package breathes the spirit of more formalization of rules and procedures (more bureaucracy) on a centralized (European) level. This transition undoubtedly will raise transactions cost (e.g. the costs of bureaucracy) as a result. In return, the EC hopes to boost a quicker development towards a single European gas and electricity market. In order to assess whether this in general makes sense one would need to compare the costs and benefits of the 'bureaucratic and centralized' approach with the costs and benefits of a 'more voluntary/discretionary and regional' as currently prevails. The costs and benefits of the latter amount to the question: what can the regional initiative approach do, and what can't it do? This is a question that hasn't been posed in the run-up to the presentation of the new legislative proposal but could provide an interesting answer.

The package misses a link between the functioning of markets and security of supply

A critical note on the contents of the energy package as a whole concerns the role of security of supply. A better integrated European market with large degree of harmonized regulations and market rules is more robust in accommodating failures somewhere in the gas or electricity value chain, which warrants a focus on the creation of integrated and harmonized markets. However, earlier European and national legislation concerning security of supply can have large impacts on the degree and development on the various submarkets of the gas and electricity market. For example, strategic gas storage requirements can influence the functioning of the market. As such, it would have been recommendable to deal with both competition and security of supply measures in an integrated proposal for energy market legislation. The third legislative energy package is a missed opportunity in this sense.

Interdependencies highly influence the success of the separate measures

In the continuing process of ‘negotiations’ towards the drafting of the final Directive all involved policy-makers should be aware of the interdependencies that exist within the total package of measures: successful implementation of the one can be crucially dependent on the successful implementation of the other. We have distinguished a number of these interdependencies.

Firstly, none of the separate measures (e.g. ENTSO cooperation, OU) will successfully deal with the problem of too little investment. They are useful, but not sufficient conditions. The decision on whether and under what conditions to expand current network capacity depends on a large number of factors of which the type of regulatory regime and its treatment of new investments, and the price signals of investment received from competitive markets are important.

Secondly, the creation of an effective ENTSO is dependent on ultimate decision-making in the OU or ISO discussion. When an ISO-model is opted for, the organization and designated tasks of ENTSO need to be seriously reconsidered since ENTSO would then have to operate in a quite different (and more complex) world.

Thirdly, the effectiveness of ENTSO in for example planning optimal regional and European network investments is dependent on the credibility of the European regulatory authority, ACER. When ACER has not been delegated to ‘heavy’ powers to direct optimal network investments on the basis of the planning received from ENTSO there will still be some risk that network investment are still not conform socially optimal levels and timing.

All in all

It is going to be interesting to see how the difficult political issues (OU, transfer of regulatory powers) will impact Brussels decision-making regarding the final Directive into which the proposed energy package will culminate, and what is going to be the real value of that Directive in the strive for EU public goals of competitive and integrated energy markets. Given the fact that some of the major elements in the proposal are interrelated it will be difficult to balance the different member state national goals and to draft a still consistent and concise piece of legislation.

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