

CEER response to the Energy Green Paper

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Table of contents

1	Introduction	3
2	Creating a competitive internal energy market: a comprehensive approach	6
2.1	The development of a European Grid	6
2.1.1	Financing infrastructure investments.....	7
2.1.2	Reducing administrative obstacles to investment	9
2.1.3	Co-operation of the Network Operators (TSO).....	9
2.2	A European Grid Code and network co-ordination.....	10
2.3	A European Centre of Energy Networks (ECEN).....	11
2.4	The role of European Regulators	13
2.5	More effective unbundling	16
2.6	Progress towards a European Grid in the short term	18
3	Security and Sustainability: responding to the Commission’s priority areas	19
3.1	Guaranteeing security of supply: diversification and solidarity between Member States	19
3.2	Sustainability and Energy Efficiency	21
3.3	Energy innovation.....	25
3.4	A common external energy policy	26
ANNEX A	28
ANNEX B	32
ANNEX C	34

1 Introduction

The European Regulators strongly welcome the European Commission's Green Paper on a European Strategy for Sustainable, Competitive and Secure Energy and agree with many of its underlying premises. We are indeed in a "new energy era", characterised by the enormous challenges of security of supply and climate change – challenges that are exacerbated by the fact that the Union simply does not have single energy markets in either gas or electricity. We also agree with the Commission's core principles for a future energy strategy of sustainability, competitiveness and security - principles that can only be delivered by an effective single EU market.

Rising energy demand and diminishing domestic supply have brought increased concern about the security of Europe's energy supplies, and the implications of any over-reliance on a single source. The answer involves diversification of the energy mix and massive investment in the networks to allow gas and electricity to flow around an integrated European Grid as they do within national borders. Experience confirms that a liberalized energy market, where capital and investment follows market signals, is the most efficient and effective means of responding to such challenges. The drive to cut carbon emissions must ensure that the full benefits of innovative approaches like the Emissions Trading Scheme are achieved. Similarly we must also maximise Europe's potential for research and development into new energy efficient technologies. Open and effective competition on liberalized markets creates the basis for doing so. Ultimately, the European Regulators believe that we will not deliver competitively priced, secure and sustainable supplies of gas and electricity to the today's customers and citizens and those of tomorrow if we cannot reform our fragmented energy markets. In short, without radical action to create a genuine competitive single EU energy market, a future EU energy strategy cannot succeed.

A comprehensive approach

The question is how quickly and effectively can such a competitive, single European market in electricity and gas be achieved? Our belief is that a comprehensive approach is necessary. Whilst the Green Paper sets out a number of ideas, which are also addressed in the present response, we must not simply respond to each set of problems as they emerge from a fragmented market. We must rather establish the building blocks that together will deliver an effective single market. This modular approach must be developed upwards: from the infrastructure necessary to create an integrated Grid; the organisation of the companies that provide and operate it; through to the powers of the regulators to oversee it and all against an effectively functioning market. These elements are essential to the achievement of competition in a way that will ensure efficient and economic supply through to the customer. The approach is not new: It has been tried and tested successfully within some national markets. At European level, it is also the approach being pursued by the Energy Regulators' "Regional Initiatives", which will enable significant practical progress in the process of market convergence. A European market does not of course exist. The essential building blocks outlined above are not in place. Where it has been properly implemented the existing regulatory framework has been designed primarily to create the conditions for a liberalised market within national borders. The imperative now is to move to a framework that operates across borders and across the Union.

Based on four core principles, a truly European energy market requires an over-arching EU legal, regulatory and institutional framework:

- “European” obligations on network companies – a cross border market that safeguards supply into all Member States requires an integrated European Grid, which in turn requires significant private investment in interconnection capacity and capability. Hence the role of the network operators is vital. It is the network operators who must develop an integrated grid, based on approved standards that work in the interests of European rather than only national consumers. There must be legal obligation on network operators to pursue the investments needed to meet these standards and they should be able to make a fair rate of return on those investments.
- Improved operational co-ordination of the networks – a further obligation must then be placed on network operators to co-operate such that an integrated European network is maintained and operated in the same way as national networks, including, for example, real time organisation and emergency arrangements. In this way users will connect to a European, rather than national network.
- Regulators with the necessary powers – if there are to be European obligations on the network operators, so there must in turn be effective, independent regulators able to oversee the fulfilment of those objectives. Thus National regulators must be adequately empowered to monitor and regulate their own national markets but they must also have harmonised powers to incentivise the necessary investment, to oversee and approve European standards and take action where they are not met or delivered, to oversee competition and to ensure that markets operate efficiently at a European level. Regulators must have such powers within borders but, crucially, also – in co-operation with each other - across borders.
- Effective unbundling – to ensure the benefits of an efficient market are delivered to the end customer in wholesale and retail markets, network companies must be effectively separated from potentially competitive businesses such as generation, production and supply. In principle, the Regulators consider ownership unbundling to be the preferred method.

Outline of this Response

Our opening comments focus on the central importance of the establishment of a genuine single European energy market and examines how each of the four principles can be delivered in practice. What might be seen as a blueprint for action for the regulators, for network operators and, indeed, for the Commission is set out at Annex A. The whole approach demands a strong political commitment from us all, and new EU legislation to deliver the ambitious agenda. There are also challenges which raise institutional issues including whether new EU-level bodies are needed to fulfil roles envisaged for regulators and for network operators. Regulators need powers and duties to co-operate in ways which should extend beyond national boundaries. There are a variety of institutional mechanisms that could be established to deliver effective regulatory oversight and action at a European level and across borders. However such institutional issues may well need to be reconsidered as greater EU market integration occurs in the year ahead. Such issues are explored in greater depth. It is also clear that a complete legislative and regulatory framework will, necessarily, take time, whilst in contrast the priority challenges of security of supply and climate change demand urgent progress especially in the integration of networks. Thus Regulators argue that parallel efforts be made through their recently established “Regional Initiatives”, and also through the Commission’s proposed “Priority Interconnection Plan”, both of which should be given the strongest political backing and support.

In the second part of our response, we respond to the the challenging issues of security of supply and climate change and specifically to the other ideas and proposals raised by the Commission under the priority areas of diversification, solidarity, sustainable development, innovation and external policy. This response is founded on the principle that the most effective route to resolving all of these crucial issues is a genuine single European energy market.

2 Creating a competitive internal energy market: a comprehensive approach

2.1 The development of a European Grid

Key Recommendations:

- **European Regulators support the creation of integrated European Grids for gas and electricity through the improved interconnection and co-ordinated operation of national grids.**
- **Network operators must develop the European standards to create and manage such grids.**
- **New obligations should be placed on network operators to invest in and operate their networks in the interests of “European consumers”.**
- **The fulfilment of these obligations should be under regulatory oversight at national and EU level.**

The Green Paper proposes the creation of “a single European grid for electricity and gas”, based on common rules and standards on issues that affect cross-border trade. It identifies the need to free up capacity reserved by former incumbents under long term gas and electricity contracts. If existing barriers to cross-border trade are to be removed, if security of supply is to be strengthened, and if progress towards a single market is to be accelerated, strengthening European transmission grids is crucial.

Investment must be efficient and timely to avoid European consumers paying more for their energy than would otherwise be the case. Responsibility for identifying new infrastructure requirements, its location in the network, and its technical specification rests with network operators within national networks. The operators are the appropriate bodies to make such decisions for the integrated European Grid given their technical expertise. However the potential for capacity hoarding and of inefficient investments requires full transparency in the development and use of infrastructure.

Developing an integrated European grid in order to increase interconnection levels between national grids will require high levels of investment in the coming years investment (both within and up to the Union’s borders from external energy suppliers – particularly in gas). In order to help ensure that such investments are made efficiently, clarity is critical in the applicable regulatory framework.

Network infrastructure in Europe, understandably over the past generations, has been developed principally to serve the national needs of network operators and their customers. Only recently has the focus shifted towards greater integration and achieving a sufficient level of interconnection between member states, to allow the development and proper functioning of cross-border trade and to preserve security of supply. Investment in the infrastructure, needed for cross-border connections, has been slow to come forward. It is crucial that we focus on this major impediment to greater energy market integration by stimulating investment to come forward and be carried out in the interests of the internal energy market, its market participants, and European consumers as a whole.

Regulators have identified three areas where radical improvements are needed: financing of grid investments; grid building and authorisation procedures; and co-ordination of operating standards and grid planning amongst the network operators (TSOs).

2.1.1 Financing infrastructure investments

The financing of grid investments is a complex issue. From the perspective of the investor there are basically two approaches to grid investments – the ‘fully regulated’ approach and the ‘contract’ approach. In both cases the present framework against which essential investments are made is incomplete, leading to unhelpful uncertainty.

Fully Regulated’ Investments

Investments made by network operators in their own network tend to be triggered by a requirement that the network must meet specific planning and security standards. Investment can also be stimulated by other factors including quality of supply and environmental ones. Security standards could include mechanisms which allow network companies to take account of market signals in making investment decisions. Provided such investments are efficient, the network operator will be allowed to earn a rate of return over the life of the asset, recovering costs through tariffs paid for by users of the network. The investment (if efficient) will be included in the regulated asset base of the network operator and earn a return equal to the estimated cost of capital over the life of the asset. Under this approach, the costs (and risks) of the investment are passed through to users of the network – if an investment became stranded the network operator would still be able to collect revenue and earn a return on the original investment. These arrangements for allocating costs and risks work well where the beneficiaries of the investment are the network users themselves.

Contract’ Investments’

In some cases investment is required which benefits network users and consumers outside the network where the investment is made. In such cases mechanisms are needed to help ensure that costs and risks are allocated appropriately. Such “non-domestic” investments can include transit gas pipelines and electricity transmission infrastructure that cross Member State borders (particularly DC interconnectors). In gas, these non domestic investments can also include upstream transit pipelines, LNG gasification terminals (where the terminal serves a number of different “markets”) and the associated LNG trains. The issue of non-domestic investment is significant in gas where around 60% of the gas consumed within the EU crosses two or more Member State borders.

Traditionally, for these types of investment, the allocation of costs and risks between shareholders and users, and between different groups of users, have been achieved through contract (although non domestic investments are also sometimes supported as a result of an inter-Governmental agreement approving the investment based on inter-TSO network studies). In simple terms, promoters of non-domestic investment seek to secure a return by selling forward capacity. Often such capacity is linked to supply of gas or electricity. These contractual arrangements provide a secure forward stream of income for the investor and allocate a share of the risk to the purchasers of the capacity. Non-domestic investments may not be triggered by security standards as is the case for fully regulated investments – but often as a result of the exploitation of a commercial opportunity.

Despite the important role that long term contracts continue to play in the development of infrastructure, concerns remain about the potential for such contracts to contain clauses which have anti-competitive effects. Regulatory oversight must be sufficient to ensure that such effects do not occur, and that the regulatory arrangements are sufficiently clear to provide regulatory certainty for investors.

Different approaches to investment in infrastructure are possible within and outside the EU and so the options for developing an appropriate framework to facilitate the development of a European grid are different.

A 'fully regulated' approach for **investment within the EU (reflecting an approach that already exists in many Member States)** requires a comprehensive regulatory framework that placed obligations on network operators to provide capacity according to pre-defined regulated security standards. Network operators would also be required to build the necessary non-domestic infrastructure, and to operate it in conformity with regulated operating standards. Efficient investment would be allowed into the regulated asset base of the network operators and they would earn a fair regulated rate of return.

Compliance with regulated operating and security standards¹ would be overseen by independent regulators who would also allow the network operators to make a fair rate of return. Regulated third party access would be mandatory for cross-border interconnections, as they currently are for domestic transmission networks. Regulators would also be responsible for ensuring that the tariffs for the use of the network are set in a way which ensured that the costs and risks of cross border investments are allocated properly to those network users that benefit from the investments. Appropriate mechanisms would be required to allocate costs and risks on an appropriate basis between groups of users.

The development of a fully regulated approach for a European grid requires consideration of other issues. In gas pipelines, network companies may compete with one another for the development project in some areas of Europe (as there may be a choice of routes, or there may be more than one network in a particular area) such competition needs to be taken into account in the final arrangements. Market mechanisms that are developed must allow signals to be sent to network companies about the long term location of generation and gas supplies. Clearly, each investment project requires a positive business case and some network congestion will remain as, therefore will some price differences between regions.

For **infrastructure outside the EU** a 'fully regulated' approach to investment is not possible, and therefore investment is likely to continue to be 'contract investment' underpinned by long term contracts (indeed some investments within the EU will also be based on long term contracts). If such contracts are to work in ways which help the development of a secure and competitive single EU energy market, then a regulatory framework must be developed which balances the need to promote competitive markets within the EU (i.e. in the downstream market) with the need to foster security of supply by creating of an attractive investment climate. Different regulatory conditions are already in place in Europe to achieve this balance (such as requiring that some capacity is made available for short term booking). Current legislation envisages the possibility of exemptions from regulated third party access requirements for certain investments. However, a more comprehensive framework of regulatory conditions must be developed with long term contracts providing regulatory certainty for investors without precluding competition in energy markets. This could take the form of guidelines issued under the current ex-ante and/or ex-post regulatory arrangements. Recent jurisprudence must be applied rigorously and consistently to

¹ Discussed in the next section on the European Grid Code.

both the electricity and gas sectors (notably, decision C-17/03 of the European Court of Justice² provides a clear ruling for certain, but not all, old contracts). The Regulators are willing to provide advice to the Commission on the content of such Guidelines to ensure consistent regulatory application across the Union.

2.1.2 Reducing administrative obstacles to investment

The second important element for encouraging the necessary investment to create an integrated European Grid is reducing the administrative obstacles to investment. Building grid infrastructure requires planning permissions and construction authorisations. The Security of Supply Directive already refers to the importance of removing administrative barriers to investments in infrastructure. However, building and construction authorisations remain crucially important and will determine the extent and speed with which network operators are able to provide and expand transmission infrastructure. The Regulators have reviewed the cross-border framework for transmission network infrastructure and are currently analysing the results. A public consultation will follow in the near future. The consultation will identify barriers to the development of new infrastructure and will enable Regulators to recommend measures aimed at enhancing the development process.

2.1.3 Co-operation of the Network Operators (TSO)

The third key area requiring action in the co-ordination of operating standards is grid planning by TSOs. It is examined in the next section.

Actions:

Network operators should be formally responsible for identifying the need for investments to support cross-border flows, for carrying investments out efficiently, and for operating their networks in a co-ordinated way. Regulators should be responsible for overseeing that these obligations on network companies are fulfilled in the interest of European consumers, and ensuring that efficient cross-border investment can earn an adequate rate of return. Regulators should also oversee the operation of markets as they become more integrated. Some of the necessary legislative and regulatory framework exists (for example, the possibility for overarching safety and operational standards is recognised in Regulation 1228/2003), but significant further legislative measures are required, particularly for the gas sector. An initial list of future detailed actions is attached at Annex A. They include:

- *Guidelines for assessing long term contracts (to be developed by the European Regulators and approved by the Commission in the comitology process)*
- *New EU legislation placing “European obligations” on network operators to develop and have in place standards, approved by regulators (to ensure the necessary investments are made in an integrated Grid and that the Grid itself is operated as such)*

² See Commission Working Document on ECJ decision C-17/03 of 7 June 2005 ‘Preferential access to transport networks under the electricity and gas internal market directives’.

- *New EU legislation giving a harmonised minimum level of powers to national regulators to oversee the integrated Grid and powers to co-operate effectively in cross-border situations*
- *Regulators to continue work on common administrative obstacles to grid authorisation (with the clear objective of developing a pan-European approach).*

2.2 A European Grid Code and network co-ordination

Key Recommendations:

- **A ‘European Grid Code’ would be different in character from national grid codes. Preferably a different term should be found to bring out the nature of the proposed new document.**
- **A ‘European Grid Code’ should specify the responsibilities of network companies in relation to the provision of a European gas and electricity grid. It should include standards on the development, maintenance and operation of the networks in this regard, as well as information sharing and information control.**
- **A ‘European Grid Code’ should be approved, overseen and enforced by Energy Regulators to ensure it operates in the interests of European customers.**

The Green Paper suggests the creation of a ‘European Grid Code’ to “encourage harmonised or at least equivalent grid access conditions”. The Regulators believe that for an integrated Grid of the sort outlined above to operate effectively, each network operator must be placed under a legal obligation to co-operate with others so its individual network contributes to the effective operation of a European network. The regulated operating and security standards referred to in 2 (i) are in effect a “European Grid Code”. However, such a ‘European Grid Code’ is not the same in character as the grid codes at national level. To avoid potential confusion for industry practitioners, consideration of a different term than “European Grid Code” is proposed (such as ‘European Network Standards Code’). However, to avoid confusion the original term will be used in this paper.

Regulators in principle favour an overarching approach to the rules to be applied by the network operators towards their customers and towards each other. The ‘European Grid Code’ should include obligations on network operators relating to:

- the development and maintenance (e.g. outage and maintenance planning) of the European networks to specified harmonised standards, in particular in respect of interconnections and the infrastructure that is needed to support cross border flows. To achieve this, network operators will need to undertake joint planning of their networks and share information on which to base their plans. That process clearly requires procedures to co-ordinate national network operators’ activities. Transparency is clearly essential with regard to the network operators’ activities. It is proposed that network operators should co-operate in publishing annual reports on the likely development of the European gas and electricity networks over the coming seven to ten years.
- rules are needed on the operation of the networks across the Union, including real time operation, emergency arrangements, and inter-TSO co-operation. They would include, in electricity, co-ordinated outage planning in relation to network infrastructure and significant

network users (such as large generators or users), possible sharing of ancillary services including reserve, balancing co-ordination, and emergency planning. In gas it will include balancing co-ordination, flow data and emergency planning. Network operators would be expected to publish annual reports on the security of the gas and European electricity systems over the coming winter (as ETSO has begun to do and as GIE has indicated they will consider doing). Regulators would encourage this process to be developed as a matter of urgency.

- transparency of information and information control is of paramount importance to the operation of any market and for security of supply. Network operators have a major responsibility to publish data on the operation of the networks. However, as European grids become more integrated network operators will need to share information (some of it commercially confidential) for planning and operational purposes. The proper management of such market sensitive information is therefore very important. The effective unbundling of network operators is essential to ensure that market participants have confidence that sensitive information is managed correctly by the network operators. The management of information, even in properly unbundled companies (see section 2 iv) should be overseen by Regulators.

A 'European Grid Code' must be approved, overseen and enforced to ensure that it operates effectively in the interests of European customers. The public interest dimension should be safeguarded by the Regulators. At present regulators are already tackling a number of issues that would potentially form part of a 'European Grid Code'. They include: system operation (balancing, reliability rules, and congestion management); information sharing and information control; and network access. The Regulators have already prepared two sets of draft guidelines on congestion management and transmission tariffication. After extensive public consultation, Guidelines of Good Practice on Transparency and Information Management have been recently finalised. They recommend what information should be published by TSOs. The Regulators' work programme for 2007 will reflect continued effort, including the development of the Inter TSO Compensation mechanism and related guidelines, which will allow unhampered access to the cross-border electricity trade.

2.3 A European Centre of Energy Networks (ECEN)

Key Recommendations:

- **The formal responsibility for the delivery of the substance of an integrated European Grid must fall on individual national network operators, and not a centralised body.**
- **But there is an important role for a central body to facilitate co-operation between network companies at an EU-level.**
- **It is preferable to build on existing structures, rather than create new institutions.**

The Green Paper suggests that a "European Centre for Energy Networks" (ECEN) could "bring the networks together into a formal body to assist work on developing a European Grid Code". Regulators are clear that the regulatory obligation to deliver the substance of a European Grid – investment and secure operation – must fall to the individual network operators operating in a co-ordinated way. Penalties for failing to comply with the obligations which cannot be transferred to

a different body such as the proposed ECEN and must rest with each network operator. There are, however, certain (limited) obligations which network operators must fulfil at a European level.

This set of tasks will require some institutional structure to co-ordinate the activities. Co-operation between TSOs will include: the development and maintenance of European planning and security standards; providing reports including winter outlook reports; statements on the operation of the network and on future plans for the development of the European grids. Once again Regulators' oversight will be essential, thereby reinforcing the collective public accountability of network operators. Some form of 'European Centre of Energy Networks', suggested by the Commission, might provide an institutional vehicle to facilitate such cooperation, but we are hesitant to move from the principle that building on existing organisational structures (such as GIE, ETSO and UCTE) is preferable at this stage to create the new institutional arrangements.

Experience from the most advanced integrated regional grouping within the Union provides some comparison in the electricity sector. The Nordic TSOs have prepared and updated a Nordic Grid Master Plan over the last few years. Through joint, long-term analyses Nordel – the Nordic TSOs' organisation for co-operation – has created an overview of the future power and energy situation in the region and identified priority interconnections within the Nordel area. For the Nordic assessment of the value of expanding the transmission capacity of a given interconnection, Nordel has developed six criteria³ on which to base decisions on reinforcements, benefits and priorities. (The six criteria are: production optimisation and energy conversion, reduced risk of power failures, changes in losses, lower risk of energy rationing, trade in regulating power and ancillary services and, finally, the value of a better-functioning market.) The Nordic TSOs have the task to provide a robust infrastructure which ensures the smooth operation of the electricity market.

Actions:

A "European Grid Code" for both electricity and gas, and together with the creation of some form of institutional framework to co-ordinate their activities, will require certain core actions:

- *Regulators favour the use, where possible, of existing industry co-ordinating bodies as the basis of the institutional arrangements for delivering the European Grid*
- *An obligation on network companies, requiring new EU legislation, to have in place a co-ordinating body such as an 'ECEN'*
- *A legal obligation on Network companies, through the co-ordinating body, to develop and maintain an approved 'European Grid Code' containing security and operating standards applicable to cross border flows on gas and electricity networks. The 'Code' should be subject to the approval of EU Regulators to ensure it is in the interests of European consumers*
- *A legal obligation on Network companies, through their co-ordinating body, to produce reports on the development and operation of the integrated European grid.*

³ Nordel Annual Report 2003 and Nordel report "Priority Cross-sections. Joint Nordic Analyses of Important Cross-sections in the Nordel System". June 11, 2004. www.nordel.org

2.4 The role of European Regulators

Key Recommendations:

- **The powers and independence of national regulators must be broadly harmonised, without diminishing the present effectiveness of individual regulators. This may require substantive enhancement of the powers of many but should not reduce the existing powers of others.**
- **New additional powers, and a duty to co-operate across national borders, will need to be introduced for EU national regulators through new legislation.**
- **European-level regulation is needed for certain key EU wide activities.**
- **Different institutional options exist to fulfil European regulatory functions and each has advantages and disadvantages. The choice of the most appropriate arrangement should be assessed against the current state of integration of the EU energy market.**
- **To allow market rules to keep pace with market developments, flexible legal instruments (including comitology) should be more extensively used where appropriate.**

The emergence of competitive energy markets requires strong and independent regulation. Experience from successful EU national markets demonstrates that this is the case. Where strong or independent regulation does not exist market development will be inhibited. Laws and market rules will not be effective unless they are adequately monitored and enforced. The powers and independence of national regulators vary widely. The Commission itself has already recognised the urgent need to raise the powers and independence of Regulators towards a minimum level of harmonisation to ensure that each can effectively undertake its role in implementing and overseeing competitive markets. The objective of minimum harmonisation may mean increasing the ex-ante and ex-post powers of many national regulators. It is therefore important that the recent development in improving effective co-operation between sectoral energy regulators and competition authorities should continue. Such co-operative working between ex-ante and ex-post energy and competitive authorities should be formalised.

Raising the level of the national powers of regulators to a minimum common standard, though essential, will not of itself be sufficient effectively to monitor a competitive European market place. Regulators must be able to oversee the operation of the European grids to ensure that necessary investments are made, and made in the interests of European consumers, that markets are operating efficiently at a European level and that monitoring and enforcement occur effectively across European markets. As EU energy markets become increasingly integrated the impact of decisions of regulators, network operators and market participants will not be limited to national boundaries. For example, the maintenance of wholesale or retail price controls in one market, or even in one sector of a market, can create parallel markets and distortions between markets (and therefore should be avoided). Similarly, price effects might be felt in one jurisdiction that result from actions in another. Thus appropriate monitoring and oversight across national boundaries will be required. At present, the regulatory and legislative framework is not sufficient for the development of a more integrated energy market. Our existing regulatory framework, where properly implemented, is focussed principally on the conditions needed for a liberalised market within national boundaries. This approach will not alone be sufficient to achieve a single competitive EU energy market. Regulators thus need powers and duties to co-operate in ways

which extend beyond national boundaries. This should help facilitate consistency in regulatory decisions which will be important as the EU energy market becomes increasingly integrated.

There are, of course, a variety of institutional mechanisms that could be established to deliver effective regulatory oversight and action at a European level and across borders. We have identified three basic regulatory structures that are at least theoretically possible.

The Green Paper itself raises the possibility of a “**Single European Regulator**”. Such a proposal (although not defined or explored in detail) would have the advantage, potentially, of full independence from political and national interests – from the Commission as well as from national governments and national regulators. A key consideration clearly is the extent to which the EU market is integrated to so that a common approach to pan-EU issues becomes of importance. The current structure of European energy markets is one where substantial national and regional differences exist in the fundamental design. For example, even in relatively successful competitive markets, such as in the UK and Scandinavia, the national regulator is likely better to understand the details of the country’s or region’s complex markets and its rules, including the geographical issues which may impact on the operation of networks and markets.

Energy is also of high political importance. The delivery of current national policies on fuel sources, security of supply and environmental programmes often depend on the involvement of each nation’s regulator. The creation of a European Regulator would mean that mechanisms would need to be established to deliver those national requirements, and the accountability for them, through a European regulatory institution.

A second theoretical option could be to designate **exercise of a European regulatory function to the European Commission**. For example, where DG Competition currently has powers to initiate ex-post market investigations, DG Transport and Energy might be given complementary powers as an ex-ante regulator. Such an arrangement would consolidate the policy development, regulatory and enforcement functions in a single body. Regulation which is free of direct political intervention is an important feature of any regulatory institution as is the predictability of regulatory decisions which leads to regulatory certainty. Investment in network infrastructure requires that the confidence of investors is high and this would be achieved principally through the confidence that regulatory decisions will be based on economic principles rather than political objectives. However, the debate around the role of the Commission in regulatory arrangements, including for energy, will also be influenced by the readiness of Member States to transfer power to the Commission. Institutional concern over political independence as well as the state of integration of the EU’s energy market will clearly influence the outcome of this option.

The third option is to **build upon existing regulatory institutions** of national regulatory authorities (perhaps with their responsibilities established at higher levels of power and independence at national level and extended to include cross border issues, as described above) and the European Regulators’ Group for Electricity and Gas (EREG). Enhanced responsibilities for EREG would combine local expertise and accountability with established European competence. It would have the additional benefits of mirroring the structure proposed for the organisation of the transmission sector (section 2 ii). Building on existing regulatory structures would also offer the delivery of a swift and workable solution avoiding a number of potentially tricky political and technical issues. It would provide an efficient means of managing the different flows of information from European energy markets which result from their differing market models and market rules, by avoiding the need for duplication of expertise and potentially conflicting regulatory positions. However, although the responsibilities of national regulators might be broadened to include cross border issues the risk remains that national regulatory

members would tackle European regulatory problems from a national perspective rather than a European one. Decision making on the most controversial issues could potentially be difficult to achieve. Any procedure would clearly need to address this potential difficulty.

Building on existing structures has clear advantages as well as certain potential dangers that can be seen from the organisation's brief record. Collective analysis and discussion has allowed a number of initiatives at a European level aimed at integrating markets and the development of competition. The Regional Initiatives in gas and electricity established a number of projects which, with the full involvement of stakeholders, are actively identifying and resolving issues at a regional level in accordance with principles established at a European level (for example, through the application of transparency guidelines). This, together with increasingly effective co-ordination through ERGEG central structures and the transparent reporting to the Florence and Madrid fora, should ensure that the Regional Initiatives converge towards a competitive single European market.

Whatever form Ministers decide the new regulatory arrangements should take – and that decision is an urgent priority - to deliver a competitive, integrated energy market, a number of issues would need to be considered:

- The objectives, powers and functions of the body would need to be defined;
- Whether the EU regulator should have direct powers to deal with European regulatory matters;
- Enforcement powers, which are essential for compliance with European rules;
- The nature of the advisory role in relation to the Commission, the role of the comitology process and other policy considerations;
- Constitution;
- How public accountability can be assured especially for any enhanced activities;
- The resources needed. Inadequate resources at national level have already been identified in earlier analysis. New pan-EU powers probably would pose further resource challenges not least given that to undertake its functions effectively it would need to employ specialist staff for which it would have to compete with industry.

Annex B contains the Regulator's initial thinking. These ideas will be developed further in the coming months.

It is also important to consider how in practice to implement legally a dynamic regulatory framework for competitive European single gas and electricity markets. Our developing understanding of markets suggests that the detailed rules needed by the market often require adaptation in a fair but straightforward and timely way. More use could be made of setting guidelines under Regulations to allow the guidelines to be adapted and improved under a comitology process in response to changing market needs.

Actions:

At Annex B, the Regulators outline their initial view of the basic competences that all national regulators require, together with the powers needed to co-operate on the application of regulation across national borders, to implement Europe-wide liberalised gas and electricity markets. Further work will be undertaken.

At Annex C the past work of the European Regulators through ERGEG and CEER is briefly summarised.

Actions would include:

- New EU legislation to raise the powers of national regulators to a harmonised level and establishing their duties for cross-border co-operation
- New EU legislation establishing a formal regulatory mechanism to oversee the European market and the European Grid.

2.5 More effective unbundling

Key Recommendations:

- **In principle, the Regulators consider ownership unbundling to be the preferred method. Where this is not feasible, information ring-fencing or structural separation of the system operation function of the network operators should be considered.**

Effective unbundling of the network companies from the potentially competitive businesses, such as generation, production and supply, is a prerequisite for effective competition on wholesale markets. In addition, the role of the network operators in operating and expanding an integrated European grid can only be fulfilled properly if unbundling is effective, because only then will it be certain that their interests will be focused towards the effective development and operation of the network rather than the balance of commercial advantage for the combined company group as a whole. An aspect of this is that the provision of financial incentives for network companies to encourage them to improve their development and operation of the grid has been demonstrably effective in a number of countries and could be a useful tool for the creation of an integrated European grid. However, such incentives can only be effective when proper unbundling is in place for the reasons outlined above.

The management of information by network companies is also of paramount importance and unbundling is central to tackling this issue. There are different sources of information in a well functioning market. For instance, historic data on prices and the network situation is key to allow market participants to use past events as a guide to understanding the likely effect of possible future events and to manage their risks accordingly. Data on the situation on the network at and around real time is also essential to allow the market participants to react to events such as outages, plant failures and demand peaks. Information on the future situation on the network is also important, and in different timescales. Forward information on the availability of transmission capacity, gas storage and other data on likely network constraints enable market participants to plan in the short to medium term. This is particularly important at a time of expected system stress such as during the winter period (and many network operators produce a winter outlook report for this reason). In the longer term, information on the expected development of the networks assists market participants in planning new investments. The sensitivity of such information to the operation of the market and the suspicion that it might be misused by an integrated network company can undermine the operation of the market and the development of competition. Effective unbundling is thus of critical relevance, essential for the development and proper operation of the market. The more effective the level of unbundling, the less intrusive the regulatory arrangements for monitoring needs to be.

There are different models possible for unbundling: ownership unbundling; information ring fencing (in addition to the current legal and functional unbundling requirements of the directives); and structural separation of system operation.

Ownership unbundling –the network company is in separate ownership (and has no commercial interests in) the potentially competitive parts of the market. These arrangements ensure that network companies operate their networks transparently in a truly independent way, and have no commercial incentive to abuse their privileged position in the market place. The Regulators' view is that ownership separation is the preferred way to ensure the independent operation of the networks. Without full ownership unbundling, rigorous structural and functional separation is needed, together with adequate powers for regulators to monitor and enforce compliance.

However, whilst, in principle, ownership unbundling is the preferred approach, not all network companies have the same potential to act in a discriminatory way. The approach adopted in relation to unbundling should therefore be proportionate to the risk of discrimination. In the case of network operators with active control over their networks (i.e. those that exercise control over the operations of users of the network in order to manage the network itself, such as taking balancing actions) the potential for discrimination is high and, under the Regulators' proposed approach for developing an integrated European grid, ownership unbundling would, in principle, be the most effective option. Alternatively, for network companies which are small, or do not have significant active control over the live operation of their networks, ownership unbundling, whilst in principle preferred, may be considered less as a proportionate remedy. In such cases a lesser form of unbundling might be acceptable, such as legal and management separation with information ring fencing, and this is the case in a number of competitive EU markets.

In the absence of ownership unbundling, **information ring fencing and oversight** is a way to help to reduce the possibilities for discrimination against network users. Strict arrangements for the management of information held by network companies are necessary to ensure that where possible information is put into the public domain or strictly ring fenced where publication is not possible or possible only with some delay. ERGEG has developed Guidelines with respect to information transparency and management in electricity. Similar work is envisaged for the gas sector. These Guidelines could serve as the basis for any new legislation in the absence of arrangements requiring full ownership unbundling. Compliance would need to be effectively monitored and fully enforced by regulators equipped with the necessary powers to undertake that role. Legislation could be necessary to ensure that a level playing field is established.

Other more effective measures than information ring fencing could also be contemplated and evaluated. In the US, Britain and in Ireland, for example, **structural separation of the system operation functions** of the Transmission System Operators has been applied. The Regional Transmission Operator (RTO) model in the US, the BETTA model in Britain and the Eirgrid model in Ireland require the separation of transmission asset ownership and management from system operation and those other areas of TSO activity which relate directly to network users. In this way it is possible substantially to remove the possibility of discrimination whilst leaving intact the ownership of the transmission companies together with their legitimate commercial interests. Such a focussed structural separation would also help to simplify the requirements for regulatory oversight and the regulatory burden.

Under the current regulatory framework regulators are unable effectively to monitor cross-border related unbundling where a single company located in one Member State may own a number of subsidiaries in other Member States. This is an important gap in the current framework which risks exploitation by market participants in a way that undermines the current unbundling requirements. EU level competences for regulators must therefore be established with respect to information gathering and information sharing, including monitoring cross-border unbundling arrangements.

Actions:

- *New EU legislation required on unbundling and structural separation, appropriate to the implementation of the unbundling options described above.*
- *Regulators to be given powers to monitor and enforce unbundling in cross-border situations.*
- *ERGEG will develop further Guidelines on information management and transparency in electricity and gas.*

2.6 Progress towards a European Grid in the short term

The process of agreeing EU legislation is necessarily lengthy. Any implementation of a complete legislative and regulatory framework for energy is complex and often politically charged. In parallel with any new EU legislative proposals, ERGEG will continue their work on a number of policy initiatives:

- **Regional Initiatives.** Four initiatives in gas and seven in electricity are aimed at market integration in those regions as a step towards a single European market. Freeing up capacity for cross border trade through better management of congestion is a priority topic, as is the development of new infrastructure in some regions. Each Regional Initiative will adopt rules and principles adopted at a European level in order to progress the process of market convergence;
- **The Commission proposal for a Priority Interconnection Plan.** Action from relevant Member States could accelerate the achievement of the Plan;
- **Congestion rents could be used for infrastructure investment (new infrastructure or maintenance) rather than reducing tariffs.** Art. 6.6 of Regulation EC 1228/2003 identifies three purposes for which congestion revenues can be used, including to guarantee the availability of the allocated capacity and for network investments that maintain or increase interconnection capacities. For example in February 2005, the Nordic TSOs agreed a common financing mechanism for identified priority interconnections using congestion revenues which will be earmarked for the interconnector projects in order to speed up the interconnector construction.
- **Compliance with requirements on transparency – both those in regulations and those in Guidelines;**
- **Improved co-ordination of capacity allocation and booking across gas networks, possibly by co-ordinating the timing of capacity allocations and providing centralised booking systems.**

3 Security and Sustainability: responding to the Commission's priority areas

The political imperative behind the Commission's Green Paper is the dual challenge of security and supply and climate change. Both are best tackled through the creation of a single European energy market. We now respond to the specific ideas and proposals that the Commission set out under the priority headings of Diversification, Solidarity, Sustainable Development, Innovation and Technology and External Policy.

3.1 Guaranteeing security of supply: diversification and solidarity between Member States

Key Recommendations:

- **Diversity of supply is best achieved through liberalisation, which creates commercial incentives for the necessary investment.**
- **Any review of the rules on oil and gas stocks must be comprehensive and should not discriminate between fuels.**
- **Obligatory rules on gas storage are unlikely to be the most efficient answer to security of supply concerns.**
- **The Regulators welcome the establishment of an energy supply observatory as an instrument for greater market transparency.**

The Commission has proposed a number of initiatives:

A review of the existing Community legislation on oil and gas stocks, to focus them on today's challenges

The focus of a European approach to security of energy supply should be to enable markets to deliver it. In a competitive energy market energy companies have a powerful commercial incentive to ensure that they can offer secure supplies to their customers.

Fuel stocking can play a role in helping to ensure security of supply, but it is important that any review of the rules is comprehensive and does not discriminate between different fuels. Thus, in respect of electricity generation, coal and fuel oil stocks should be treated in the same way as gas stocks, and account should be taken of the ability of some power stations to switch between gas and fuel oil, or between gas and coal.

It is crucial, however, that there is an appropriate framework in place to incentivise market players to bring forward the necessary investment on an efficient and timely basis. Possible frameworks for investment are outlined above.

Strategic EU Energy review

The Regulators welcome the Commission's proposal to present a Strategic EU Energy Review to the Council and Parliament on a regular basis. Such a Review would provide a focus for an informed public debate on European energy policy.

Gas stocking

Natural gas is becoming an increasingly important component of the EU's energy mix, and it is expected that in the longer term we will become increasingly dependent on gas imported from non-EU sources of supply. The Green Paper proposes that one way of reducing concerns about security of supply in relation to the supply of gas would be to increase the level that is kept in storage through the imposition of new rules on the level of gas stocks that Member States should hold in order to meet short term disruptions in supply. At a European level, the Regulators consider that gas stocking must be considered alongside the development of interconnectors and an interconnected European grid, as discussed, if gas stocks are to truly provide security for all areas of Europe.

Storage capacity levels across the EU are very different and range from 2-3 months of supply in Austria to just a few days in other countries like Spain. The overall working gas volume in Western Europe's storage facilities adds up to roughly 70 bcm in total – which is equivalent to around 40 days of supply.

There are a number of issues that would need to be considered in relation to gas storage:

- The impact on the wholesale gas market the criteria for the release of stored gas would need to be transparent and well framed to avoid creating an implicit wholesale gas price cap or other market distortions;
- The impact on market provision of gas storage – there is a risk that obligatory requirements on the holding of gas stocks could “crowd out” the provision of gas storage from the market which could leave Member States in the position of ensuring that there was sufficient gas storage in non-emergency circumstances;
- The costs of requiring obligatory stocks of gas to be held across the EU is not easy to calculate, as they will differ depending on the nature of the storage facility and a number of other factors;
- Obligatory rules on stocking of gas could have a significant impact on costs and consequently the prices paid by consumers. It is likely that these costs would also vary significantly across the EU – and there are some Member States that do not have access to natural potential sites for gas storage facilities;
- The levels of gas required to be held in stock to provide certain level of supply security are likely to be different across all Member States – this would mean that a single stock level for the EU would not be appropriate and that the costs would vary significantly across Member States;
- There may be a need for further increased investment in associated infrastructure – eg. investment may also be required in transportation infrastructure to ensure that gas that is held in stock can be delivered to consumers in the event of a supply disruption;
- There is a risk of stranded assets – if there is significant investment to increase the levels of gas that are held in stock then this will ultimately be paid for by consumers. If the obligatory stocks are not utilised then there is the potential that these assets could be stranded and that consumers would face higher costs without receiving any associated benefits.

There is a need to consider all of these factors in assessing whether obligatory rules on gas stocks would be appropriate. This should be accompanied by a robust assessment of the associated costs and comparison with the cost effectiveness of alternative policies, as the Regulators consider that obligatory rules on gas stocking is unlikely to be the most efficient single answer to addressing concerns about Europe's security of supplies. In addition, as is mentioned above, gas should not be considered in isolation from other fuel sources.

A European energy supply observatory, enhancing transparency on security of energy supply issues within the EU

The Regulators consider that an institution charged with providing transparency on energy issues could be a welcome development. Markets need information to react to changes in supply and demand, and the provision of essential information and analysis is therefore an important aid to the operation of the market. Such an institution could also usefully encourage academic debate on the operation and development on Europe's energy markets.

3.2 Sustainability and Energy Efficiency

Key Recommendations:

- **The EU ETS is the key instrument for tackling climate change within the energy sector and beyond, and it should be improved and expanded.**
- **Renewable schemes, including carbon capture, should be subject to rigorous cost/benefit analysis and should not distort the operation of competitive markets.**
- **The Regulators should examine the potential for improving efficiency by minimising transmission and distribution losses.**
- **The Regulators should examine the potential to incentivise demand side participation in energy markets.**

As the Green Paper says, a debate is needed into the issues and implications of climate change, but also is the need for certainty for investors. Neither Governments nor regulators should 'pick winners' – rather they should concentrate on market-based mechanisms (notably the EU-ETS) to ensure that investment in electricity generation takes into account issues such as the environmental cost of generation.

The Regulators would agree with the Green Paper's focus on the need to take an integrated approach to tackling climate change (as set out in section 2.4), and would stress the need to tackle these issues within the framework of a properly functioning competitive market. The Regulators' comments on the topics of EU Emissions Trading Scheme, energy efficiency, renewables, and carbon capture are as follows:

The EU Emissions trading scheme

The Green Paper identifies the EU Emissions Trading Scheme as a flexible and cost-efficient framework for more climate friendly energy production.

The Regulators generally have statutory objectives imposed by their national governments to protect the interests of consumers and to promote markets. Consistent with this, we support in principle the use of market-based instruments, such as emissions trading, as the most cost-effective way to achieve environmental objectives in a manner that is compatible with the development of liberalised European energy markets.

The Regulators call on the Commission to give priority to the Emissions Trading Scheme as the key instrument to tackle climate change within the energy sector and beyond.

However, although the ETS is intended to deliver lowest cost abatement, there are a number of elements of the design which may reduce its potential to do so. The most important limiting feature is the lack of clear long term signals, which may not provide sufficient incentive for investment in large capital intensive carbon abatement technologies that have long lifetimes. The features of the EU-ETS which contribute to this uncertainty include:

- the organisation of the scheme in phases which span only five years – and the need to set new caps for each phase, the caps are therefore set only eighteen months in advance of the start the phase;
- the cap being set by the aggregate of the national allocation plans of 25 Member States rather than centrally;
- the scheme being relatively new and a number of the features evolving, e.g. definitions, coverage, market arrangements, relationship with Kyoto flexible mechanisms;
- the uncertain political environment, i.e. the Kyoto protocol and the lack of a successor agreement from 2013;
- late information on actual emissions.

Other design elements which reduce the potential of the scheme include:

- the restricted coverage of the scheme, which may prevent low cost abatement options from being exploited;
- free allocation of allowances, which creates distributional impacts and distorts competition; and
- new entry and closure rules, which may distort the incentives of the scheme and increase costs.

The Regulators support the view of the Green Paper that the Commission's current review of the Emissions Trading Directive provides an opportunity for expanding and further improving the functioning of the scheme in the third phase, running from 2012 - and in later years. The review should consider options for a more effective allocation mechanism and consider ways to avoid unnecessary price volatility and to achieve greater transparency. To achieve this, the review will need to address the following issues in particular:

- the need to establish long term signals for low carbon investment;
- the need to establish certainty in the setting of emission targets and caps including greater harmonisation;
- the greater use of auctioning as an allocation methodology to remove the potential for windfall profits;

- increasing the breadth of coverage of the scheme; and
- the greater harmonisation in coverage and the setting of new entry and closure rules.

The efficacy of the EU ETS is potentially further undermined by the lack of fully liberalised markets. The Regulators are wholly committed to the vision of a competitive, liberalised and well-functioning EU energy market, established for the benefit of all energy consumers. Liberalised markets provide the vehicle by which the price signal provided by the EU ETS is acted on by market players. Conversely, delay and incomplete transposition in some cases of the gas and electricity directives can have the effect of limiting the capacity of the market to respond to the signals provided by the EU ETS.

Further development of liberalised markets, including the measures to ensure non-discriminatory access to cogeneration and distributed generation (as required under the various Directives) ensure that competitive firms will react to market conditions when taking investment decisions, including location and technology choice. Issues like the transparency of the market, regulatory environment and future prices will have direct impact on investment decisions. The Regulators therefore consider that greater progress in the creation of a single energy market in Europe will maximise the benefits of the ETS, and ensure that its benefits are delivered at least cost.

Making more from less: leading on energy efficiency

The Green Paper proposes a goal of saving 20% on energy use by 2030 through a series of measures, including financial instruments, a white certificates trading system, minimum performance standards, and initiatives to bring clean and renewable energy sources closer to markets.

As a direct instrument that targets generators and other major emitters, the EU ETS does not provide direct incentives for electricity transmission, distribution operators and consumers (in their role as electricity consumers) except through the price signal. In theory, the effect of incorporating carbon dioxide emissions in prices should send signals to increase efficiency among electricity consumers.

However, the potential incentive provided by higher electricity prices (and less consumption by end users) is arguable. First, the mechanism by which the cost of a carbon dioxide allowance is passed on to electricity prices depends on a number of issues. Second, the demand side of the energy sector is often not responsive to price incentives, especially in the short term. For this reason it is appropriate that Member States, individually and through European initiatives, develop energy efficiency action plans that include measures that address the barriers to the adoption of cost effective improvement in energy efficiency, several of which are outlined in the Green Paper.

These issues have been considered recently in the Commission's Green paper on Energy Efficiency. In general it is the Regulators' view that any measures to promote energy efficiency should be subject to rigorous cost-benefit analysis and implemented in a way that minimises the cost to consumers and the impact on liberalised energy markets.

For example the consideration of a white certificate scheme is a market based measure that may be further explored. There are, however several factors that would need to be considered before implementation of such a scheme including:

- the development of harmonised definitions and measurements;

- the incidence of a white certificate scheme (for example would it create an obligation on suppliers, distributors, consumers, a currency for use in existing national or international schemes);
- the cost of accreditation and auditing of measures;
- the cost of administration and operation of registries
- the need to ensure additionally; and
- interchangeability with other schemes such as the ETS.

It is also noted that many of the programmes proposed for the promotion of energy services, and other matters concerning supply to end consumers, such as metering and billing, are included in the Directive on Energy Efficiency in End Use and Energy Services. It is the Regulators' view that implementation of the Directive should be the first priority for action in this area.

The Regulators' response to the Energy Efficiency Green Paper⁴ outlined our particular issues of interest to energy markets and regulators and proposes specific action. These are:

- the potential for increasing efficiency through the minimisation of transmission and distribution losses - the Regulators support the Commission's suggestion that they undertake research in this area; and
- actions to incentivise demand side participation in energy markets - the Regulators propose to undertake a study to determine the scope and practicality of greater demand side participation, especially for small and medium consumers.

Increasing the use of renewable energy sources

The Green Paper states that the Commission will bring forward a Renewable Energy Road Map, covering key issues for an effective EU policy on renewables. The Road Map would be based on a thorough impact assessment, assessing renewable energy sources against the other options available. There is considerable potential for separate and potentially conflicting regimes to be set up under the three existing or proposed Directives covering support for renewable energy: in electricity generation; in the direct provision of heating and cooling; and in transport fuels. These interrelationships may be further complicated by the interaction with the internal market Directives in electricity and gas, and other environmental Directives such as the Water Framework Directive and the emissions trading scheme.

The Regulators welcome a coordinated approach to support for renewables and to the recognition of the need to ensure rigorous assessment of the costs and benefits of proposed programmes and their alternatives. Lack of coordination of programmes can lead to conflicting objectives.

⁴ CO5-ENV-04-05 (http://www.ceer-eu.org/portal/page/portal/CEER_HOME/CEER_PUBLICATIONS/CEER_DOCUMENTS)

The Commission's communication last year stated that there would be no immediate moves to harmonisation of support for renewable electricity generation. The Regulators recognise this, however the further development of renewable electricity support schemes needs to recognise the ongoing development of a single market in electricity, and ensure that the potential impact on that market of a substantial proportion of electricity generation being insulated from market signals through fixed price contracts.

The Regulators have identified a number of issues arising from the implementation of renewable incentive schemes. These need to be addressed by the Commission in the development of targets and programmes:

- variation in the level of incentives offered to different technologies and locations should reflect genuine variations in technology costs;
- the regulation and charging for relevant aspects of the electricity chain, such as connection and balancing costs, should be harmonised to the extent necessary to support the transition to a single energy market;
- incentive schemes should not be used to provide protection measures for certain consumers or production categories other than the environmental benefit;
- there is a need for better co-ordination and harmonisation between the different targets of EU environmental policy.

Carbon capture and geological storage

The Regulators note the comments made in the Green Paper on the potential for carbon capture and storage. This technology represents one potential method for avoiding the emission of greenhouse gases. As for any technology used to avoid or mitigate the emission of greenhouse gases, it is important that programmes to support this technology are subject to rigorous cost benefit analysis, and are implemented in a way that minimises costs to consumers and is compatible with liberalised energy markets.

3.3 Energy innovation

The Regulators support R&D in the energy sector as a means of fostering technical innovation, and support the proposal for a strategic energy technology plan. It is important that public funding for R&D is additional to, rather than a replacement for, R&D carried out (and paid for) by energy companies. Liberalisation of, and effective competition within, European energy markets will deliver increased efficiency, in part by accelerating innovation and technical progress. A copy of the Regulators' response to the energy themes in the Commission's proposals for the 7th Framework Programme 7 (FP7) is available from the CEER website⁵.

⁵ (http://www.ceer-eu.org/portal/page/portal/CEER_HOME/CEER_PUBLICATIONS/CEER_DOCUMENTS)

3.4 A common external energy policy

The Regulators support the Commission's view that there is a need to define the aims of an external energy policy. The Regulators welcome the efforts made by the European Union to extend the principles of liberalisation by building a common regulatory space around Europe through the Energy Treaty with South East European partners, and encourages the EU to go in the same direction with the EuroMed partners. The Regulators continue to support these initiatives with practical and technical assistance. We have established a dialogue with the United States regulators through NARUC and are developing, on a seed funding basis, an international database ('IERN') to enhance the effectiveness and efficiency of all regulators internationally. We have also established ongoing relations with eastern European regulators in ERRA, and intend to extend our international dialogue with other important supplier countries, notably Russia and Algeria.

Many Member States rely on exchanges of energy with non-EU countries. Therefore, in order to avoid distortions of competition, one of the main priorities for the coming years is to develop greater compatibility between EU regulation and that of non-EU countries (as is now underway in the South East Europe region). However, the Regulators agree with the conclusions of the Energy Council that due account should be taken of the risk of abuse of market position resulting from dependency on a single supplier and the importance of reciprocity to ensure a level playing field in terms of access to markets and infrastructure, and in terms of environmental standards and safety.

The adoption of European principles of open and competitive markets are ones which, if adopted and implemented by supplier markets to the EU (as proposed by the EC in the ongoing co-operation agreement with Algeria), would improve the benefits of trade to all and create around Europe the necessary harmonised regulatory framework which is needed for the creation of a competitive internal energy market and favourable investment climate.

The Commission have made a number of proposals on a clearly defined external energy policy:

Identifying European priorities for the construction of new infrastructure necessary for the security of EU energy supplies

As above, investment in new infrastructure will come from private companies. The key focus should be on the removal of political and regulatory uncertainty relating to such investments.

Developing a pan-European Energy Community Treaty

The Regulators fully support the steps that have been taken to expand the 'energy acquis' through the SEEE and EUROMED processes. To the extent that the practicalities of gas and electricity networks require it, the Regulators would support further extension of the energy acquis as necessary.

A new energy partnership with Russia

The Regulators support any measures which reduce risks to market participants, both regulatory and political.

A new Community mechanism to enable rapid and co-ordinated reaction to emergency external energy supply situations impacting EU supplies

The Regulators support the suggestion of a mechanism to co-ordinate emergency responses. Energy regulators have a role to play in ensuring that network operators undertake adequate planning and make appropriate preparations to respond to emergency situations. Regulators are fully prepared to participate in a Community mechanism.

ANNEX A

Initial List of Actions proposed to address grid investment and grid use issues within the “Fully Regulated” approach and the “Contracts-based” approach

A regulated approach

Issue	Regulatory framework
<p>Develop and adopt European security and operational standards that are applicable to transit and cross-border infrastructure. Such standards should apply to infrastructure and operational matters that affect cross border trade. To avoid unnecessary investment they should not apply to networks in their entirety. The standards would be subject to regulatory approval and oversight to ensure they were in the interests of European consumers.</p>	<p>There is currently no binding security and operational standards in either gas or electricity for cross border or ‘non domestic’ infrastructure (in electricity, a limited legal basis may exist under Article 8 of the Regulation, and the UCTE Operational Handbook could provide a basis for developing formal arrangements in electricity). Nothing currently exists in gas.</p> <p>TSOs would need to undertake, co-operatively, joint system planning studies and to share information. As some of this information will be commercially sensitive, proper unbundling will be required. TSOs will need a joint body (a form of European Centre for Energy Networks) to co-ordinate this work.</p> <p>New legislation would be required to impose a clear obligation on TSOs to develop and maintain approved security and operating standards. Regulators at a European level would need to be given the obligation and powers to approve them. Penalties on TSOs for failing to have in place approved standards would be needed. In this way TSOs would remain responsible for the stewardship of the networks, overseen by regulators who guard consumers’ interests. Within this framework improvements to the standards could be made on an evolutionary way.</p>
<p>Place an obligation on TSOs to comply with European security and operational standards and to construct and maintain networks to these standards. Such obligations must take account of possible competition between network companies and the need for market signals to inform investment decisions. Regulators would be given powers of oversight.</p>	<p>There are currently no European regulatory obligations on TSOs to comply with any European security standards and new legislation would be needed. Regulators at a European level would need to be given the function of monitoring and enforcing compliance with the standards. Appropriate penalties for non-compliance would be required.</p>
<p>Regulators to develop appropriate incentives on TSOs to bring forward investment where companies are properly unbundled. Regulators’ responsibilities would need to be extended to take account of cross border, or even European, consumer interests to undertake this function.</p>	<p>TSOs would respond to incentive arrangements relating to efficient investment in infrastructure, as well as maximising the utilisation of existing infrastructure – but only if proper unbundling is in place. As explained in the document, CEER considers that further measures on unbundling are required.</p>

Issue	Regulatory framework
<p>Mechanisms to allocate costs and risks fairly between shareholders, users and groups of users are required for cross-border investments. Fully regulated investments in infrastructure should be paid for by those network users that benefit from them. Similarly, the risks associated with the investment – such as the risk of the investment becoming stranded – should be borne by those that were the intended beneficiaries. Rewards for shareholders should reflect the risks they are exposed to.</p>	<p>An ITC mechanism exists in electricity to recover the cost of cross border investments from those that benefit, but further development is needed to improve cost and risk allocation. This could be developed by regulators in conjunction with TSOs. Nothing exists in gas where reliance is placed on the cost reflectivity of entry-exit tariffs to ensure appropriate cost allocation. Reliance on the tariffs in gas to be cost reflective suggests greater co-ordination in tariff setting is required. An alternative mechanism could be developed. Depending on the mechanism, new legislation may be needed.</p>
<p>Principles driving network tariff methodologies should be sufficiently specific and binding so that network tariffs (including connection charges) are non-discriminatory.</p>	<p>Tariff setting principles may be required to ensure that the way in which costs for accessing networks and connecting to them are recovered, does not create barriers to trade. ERGEG are developing tariff setting principles relating to cross border flows.</p> <p>Information on available capacity on cross-border infrastructure (for gas, on all relevant points including entry and exit points) needs to be made available by TSOs on a non-discriminatory basis alongside tariff data. This would help network users take commercial decisions about the location of new investments. This is likely to be assisted by the entry into force of the gas regulation.</p>
<p>Arrangements for access to the European grid to be in put in place (including tariffs) to ensure non-discrimination.</p>	<p>The European Grid should be seen as one grid, by grid customers. This means harmonised or at least equivalent conditions and rules to be applied by the TSOs for the use of grid. In this context the next steps of tariff harmonisation need to be addressed. Access arrangements to networks across Member States should not create barriers to trade. The financial firmness of the rights that network users hold in return for the payment of the access tariff should be harmonised so that the risks and costs that users face is similar. This could probably be achieved through the development of the congestion management guidelines under the existing gas and electricity regulations. Arrangements for connecting to networks should be subject to performance standards to facilitate new entry by market participants.</p>
<p>Establish effective European level arrangements for the regulatory oversight of the development and operation of the European Grid, and of cross border market interactions. The issues to be addressed include:</p> <ul style="list-style-type: none"> • information gathering powers • monitoring • enforcement • jurisdictional issues 	<p>Article 25 of Directive 2003/55/EC and Article 23 of Directive 2003/54/EC require Member States to designate one or more regulatory authorities and specifies a minimum set of responsibilities they should have. Member States have implemented this requirement in different ways and as a result there are currently significant differences across the EU in the roles and responsibilities of regulators – as well as appropriate powers to co-operate across national borders.</p> <p>National regulators need a common high level of national powers and political independence to fulfil these</p>

Issue	Regulatory framework
<ul style="list-style-type: none"> organisations: a regulatory organisation for dealing with cross-border and cross-jurisdictional disputes and co-ordination 	<p>functions effectively. This would require legislation.</p> <p>On cross-border issues different institutional options are available including enhancing the role, responsibilities and powers of ERGEG, the creation of a new institution, or powers being taken by the European Commission. Any formal arrangements (which would be necessary to ensure regulatory certainty and consistency) would require new legislation.</p> <p>CEER consider that the institutional arrangements for European regulation should be defined in response to the institutional arrangements decided for the European networks.</p>
<p>Establish effective arrangements for the development and operation of networks so that they, collectively, form a European Grid with the result that no barriers to trade are created by the way in which neighbouring TSOs operate their networks and in the interaction of key aspects of the market framework. Key issues to be addressed include:</p> <ul style="list-style-type: none"> transparency emergency planning connection planning outage planning and information on network performance gas quality balancing co-ordination and harmonisation congestion management co-ordination inter TSO- information exchange the establishment of a network organisation for dealing with co-ordination between TSOs 	<p>Some of these areas, but not all, seem to be adequately addressed in the current regulatory framework.</p> <p>Guidelines on the availability of technical information in the gas regulation, for example, could probably be developed further to meet the objective of transparency. However, in some areas further measures are needed, such as transparency in relation to gas storage and transparency in respect of the electricity market. The current legislative framework relies on actions by Member States in emergency situations which is inconsistent with the proposals on 'solidarity' in the Green Paper.</p> <p>Emergency planning by TSOs would be an important factor and legislation would be needed in some areas if effective and efficient operational co-ordination between networks in this and in other areas is to be achieved.</p> <p>Operational rules applying to the electricity and gas networks often have to be changed to meet changing market needs, technological developments and improvements in operating techniques. CEER considers that the development and modification of such rules should be managed in such a way that changes to them can be made in a flexible way. The use of obligations on TSOs to have in place rules approved by regulators and, where necessary, comitology procedures, would provide for flexibility and appropriate accountability.</p> <p>Different institutional options are available to help ensure that the necessary co-operation between TSOs is facilitated – such as building on existing institutions such as GIE, ETSO and UCTE, the creation of a new independent body or even a single TSO. The outcome should be that the networks of the TSOs are operated so that they appear as a single European grid to network users.</p> <p>New legislation would be needed for formal arrangements. This is discussed in the main body of the response.</p>

Contracts based approach

Issue	Regulatory framework
<p>Long term contracts are used to underpin investments in infrastructure outside of the EU, but also within the EU in some areas (such as LNG terminals in some cases). Investors need certainty about the reliability of such contracts, the conditions that may be imposed, and the circumstances in which an exemption from regulated third party access may be appropriate. Ex ante and ex post regulators need to be sure that such contracts allow for the development of competition, whilst providing for a suitable investment climate. No complete commonly understood framework for taking such decisions exists.</p>	<p>There is a need to ensure that the conditions applied to long term contracts used to underpin investments, and, where relevant the use of TPA exemptions, are applied according to consistent principles across the EU. This could be facilitated through the development of guidelines for assessing long term contracts relating to infrastructure. The role and application of TPA exemptions⁶ should be clarified within the guidelines.</p> <p>Guidelines would provide more certainty for investors in infrastructure which is essential to the security of supply of the EU. Such guidelines should be issued by the Commission as they have a regulatory role in the issuing of exemptions under Article 22 Directive 2003/05/EC, and Article 7 of Regulation 1229/2003/EC, on advice from ERGEG.</p>
<p>Ongoing monitoring of cross-border infrastructure (electricity and gas) and entry/exit points (gas) to gain assurance that market is not being foreclosed.</p>	<p>Legal basis of regulatory monitoring and enforcement powers would need to be strengthened to ensure that information could be gathered and shared, and that enforcement action could be taken in a way which overcome jurisdictional obstacles. Particular focus would be needed to ensure that regulators could monitor/enforce the market across national borders.</p> <p>Formal arrangements would require legislation.</p>

⁶ Article 22 of Directive 2003/55 and article 7 of Regulation 1228/2003 provide that in certain circumstances “the regulatory authority may on a case by case basis decide on the exemption (...). However, Member States may provide that the regulatory authorities shall submit for formal decision to the relevant body in the Member State its opinion on the request for an exemption. This opinion shall be published together with the decision.

ANNEX B

Necessary basic powers and competences of national regulators

Competence	Monopoly Networks Activities	Competitive Market Activities
Regulate monopoly activities	Approve compliance with basic rules for access to (and ongoing use of) the system, plus oversight of the more detailed rules	
	Set or approve tariff methodologies for use of the system and connection. Set overall revenue limits, with the ability to incentivise network operators to improve service levels/identify additional capacity	
	Determine disputes between network operators and market participants/customers on key issues such as terms for network access and charges	Determine disputes between network operators and market participants/customers on key issues such as terms for network access and charges
Oversee and enforce market rules	Set or approve the provisions of balancing regimes and monitor compliance with balancing rules	Set or approve compliance with the basic market rules for wholesale market trading (and oversee changes to the more detailed rules), including rules relating to the operation of balancing markets, settlement rules, imbalance arrangements and credit requirements. Monitoring of behaviour. Provide information to and co-operate with national and European competition authorities.
Oversee and enforce transparency and information management	Oversee that transparency and information management – e.g. that data held by network operators is effectively ringfenced (through effective unbundling) or released to the market on a non-discriminatory manner	Oversee market transparency and appropriate provision of data to market
Information gathering powers	Retain ability to require information and data from network companies in order to be able to monitor orderly market functioning	Retain ability to require information and data from all market participants in order to be able to monitor orderly market functioning

Competence	Monopoly Networks Activities	Competitive Market Activities
General market oversight and efficient market functioning	Impose sufficient controls on market players to: <ul style="list-style-type: none"> ○ ensure compliance with market rules in order to protect the interests of customers and promote effective competition ○ ensure non-discriminatory treatment ○ promote security of supply and safety 	Impose sufficient controls on market players to: <ul style="list-style-type: none"> ○ ensure compliance with market rules in order to protect the interests of customers and promote effective competition ○ ensure non-discriminatory treatment ○ promote security of supply and safety
Cross border powers / co-operation	Ability for regulators to act jointly to oversee TSO investment in and operation of cross border transmission capacity, including system planning and emergency planning.	Ability for regulators to exchange information, pursue or request investigations of activities that occur in one territory that affect markets in another

ANNEX C

Summary of past work of CEER and ERGEG

ERGEG Reports and Papers:

- ERGEG Guidelines for Good TPA Practice for Storage System Operators (GGPSSO), March 2005.
- ERGEG Global Assessment of the Results of the 1st Series of Mini-fora on Congestion Management and Potential Impacts on the Draft Guidelines, March 2005.
- The Creation of Regional Electricity Markets – An ERGEG Discussion Paper for Public Consultation, June 2005.
- ERGEG Guidelines on Transmission Tariffication, July 2005.
- ERGEG Guidelines on Congestion Management, July 2005.
- Gas Balancing: An ERGEG Discussion Paper for Public Consultation, July 2005.
- ERGEG Position and Recommendations on the UCTE Operational Handbook, September 2005.
- ERGEG Report on Customer Protection, September 2005.
- ERGEG Report on the Customer Switching Process, September 2005.
- ERGEG Report on Transparency of Energy Prices, Bills and Contracts, September 2005.
- A Preliminary Assessment of the European Energy Market by the European Regulators' Group for Electricity and Gas (ERGEG), November 2005.
- Roadmap for a Competitive Single Gas Market in Europe - An ERGEG Discussion Paper for Public Consultation, November 2005.
- ERGEG Final 2005 Report on Monitoring the Implementation of the GGPSSO, December 2005.

ERGEG Internal Reports and Papers

- ERGEG Position on Balancing Mechanisms Compatibility, August 2005.

CEER Published documents:

- CEER Report on The South East Europe Natural Gas Market, February 2005.
- CEER Report on Investments in Gas Infrastructures and the Role of EU Regulatory Authorities, May 2005.
- CEER Comments on European Commission Discussion and Consultation Note regarding the European Commission note “Electricity Transition Strategy for the Energy Community of South East Europe”, May 2005.
- The Creation of Regional Electricity Markets - An ERGEG Discussion Paper, June 2005.
- CEER Submission to the European Commission on the Review of Directive 2001/77/EC, September 2005.
- CEER Regulatory Benchmarking Report for South East Europe 2005, November 2005.
- Roadmap for a Competitive Single Gas Market in Europe – An ERGEG Discussion Paper, November 2005.
- CEER Third Benchmarking Report on Quality of Electricity Supply, December 2005.
- CEER Regulatory Benchmark Report, December 2005.

CEER Internal documents:

- Competition assessment in energy sector – selected issues, CEER Internal document, March 2005.
- Indicators measuring competitiveness, efficiency and integration in electricity and gas markets, CEER Internal document, September 2005.