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STRATEGY PAPER

MEDIUM TERM VISION FOR THE INTERNAL ELECTRICITY MARKET

TABLE OF CONTENTS

1. Introductory Comments..... 3

2. Overall Objective 3

3. Background and Context..... 3

4. Developing Cross Border Trade..... 9

5. Improved Interconnection Between Member States 13

6. Reduction of Market Concentration 15

7. Facilitating Competitive Choice By Customers while delivering Universal Service 19

8. Consistent Approach to Generation Adequacy 16

9. Consistent Support Framework For Renewable Energy 19

10. Removing Other Distortions 22

11. Relations With Third Countries 23

12. Strategy for Gas..... 24

13. Coal fired generation in a competitive market 25

14. Summary and Conclusions..... 26

STRATEGY PAPER

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1. INTRODUCTORY COMMENTS

This document has been compiled in response to the request and with the co-operation of participants in the "Florence" Forum on European Electricity Regulation. This subject was initially discussed at the ninth meeting of the Forum on 17-18 October 2002 at which an orientation document was produced. Several drafts of the full paper have since been prepared and participants in the Forum were consulted during February, July and October 2003 on its contents. Therefore although this paper is published as a document of the Commission services, there is a broad consensus within the industry regarding its content. Annexed to the document are a number of position papers that have been produced by various industry groups regarding the content of the paper.

2. OVERALL OBJECTIVE

The Community is seeking to create a competitive market for electricity for an enlarged European Union, not only where customers have choice of supplier, but also where all unnecessary impediments to cross border exchanges are removed. Electricity should, as far as possible, flow between Member States as easily as it currently flows within Member States.

Improved cross border flows will increase the scope for real competition which will drive economic efficiency in the sector, leading to benefits for customers both in the business and the household sector in terms of lower energy prices, improved service and products tailored to their own needs. These benefits will feed through to higher overall economic growth in the European Union.

Competitive electricity markets must deliver a secure, reasonably priced and continuous service to final energy customers. The electricity market will need to be carefully monitored and appropriately regulated in order to ensure that this objective is delivered.

3. BACKGROUND AND CONTEXT

3.1 The new Directives and Regulation

The new electricity Directive and Regulation on cross border exchanges were adopted by the Council and Parliament on 16 June 2003. Among the measures required are full market opening, legal unbundling and the introduction of sector specific regulation in all Member States in order to ensure non-discriminatory access to networks. These measures will contribute significantly to competition and this paper starts from the assumption that the required measures will be implemented rapidly and comprehensively by Member States with the same common objective of a competitive market. National Regulators, in particular, will have a vital role in setting up and enforcing most of the aspects of market design discussed in this paper, in particular by removing inappropriate technical and financial impediments. Similarly, legal and functionally independent system operators will, by providing non-discriminatory access to networks, be responsible for the day to day functioning of the electric

system. In many cases, independent power exchanges that provide transparent, non-discriminatory access to energy markets and free transactions may be responsible for the day to day functioning of the electricity related markets

Meanwhile, the Regulation on cross border electricity exchanges allows for the adoption of specific binding guidelines for cross border transactions. This will allow the development of harmonised conditions of access to the European network for those wishing to buy, sell (or trade) electricity. It should lead to coherent cost-reflective charges for the use of European transmission networks, the removal of other distortions of cross border trade, and the operation of the transmission system, in particular congestion management, so as to promote fair competition and economic efficiency.

Considerable progress towards the objective of an internal market without barriers has already been achieved. For example, from 2002, ETSO introduced a mechanism for cross border tariffs that has now removed specific transmission charges associated with exchanging electricity across most of the internal borders of the EU. In addition, voluntary guidelines for congestion management were agreed at the sixth meeting of the Florence Forum and these have been partially implemented. Finally, considerable technical work has been carried out in preparation for a more comprehensive integration of markets by ETSO, EuroPEX and the UCTE as well as the Council of European Energy Regulators (CEER).

3.2 Commission proposals on infrastructure and security of supply

On 10 December 2003 the Commission adopted a Communication and made a number of proposals relating to security of supply and infrastructure.¹ These proposals seek to address a number of the points discussed in this document, notably those in chapters 5-7. Specifically, in relation to the internal market, the Commission recommends measures to encourage an increase in the level of interconnection, to clarify the framework for security and general market design issues. The proposals will, during 2004, be discussed in the Council and European Parliament.

3.3 Legislation relating to the environment

The Renewables Directive entered into force in September 2001 and Member States have already set targets relating to consumption of renewable electricity consistent with the Directive's reference values. Member States will be required to make an initial progress report by October 2003.

The Renewables Directive did not propose a common framework for the support of renewables and the Commission must examine by October 2005 whether this is desirable. The Commission has also made a similar proposal for a Directive relating to the promotion of CHP generation.

A common position on the Emission Trading Directive was adopted by the Council in March 2003. This will lead to the establishment of a cap and trade system for the effective control of carbon emissions. An initial scheme will function during the period 2005-08 with an expanded scheme for 2008-12 in the run up to the Kyoto target deadline.

These measures will have an important impact on the functioning of the electricity market. Due attention must be given to avoid disproportionate distortions of the market, in particular through Member States adopting different and potentially incompatible policies.

¹ COM (2003) 739-741

3.4 Legislative Framework and Institutions

Following the entry into force of the Directive and Regulation on cross border trade, there will be a variety of bodies with different responsibilities in the regulatory framework. These will need to work closely together as follows.

The **European Commission** will be responsible for ensuring overall compliance with the Directives, that is, whether Member States create the appropriate legal framework. It will also have responsibility for taking the chair of the Regulatory Committee (“Comitology”) which will make decisions on cross border issues under the Regulation.

Member States’ Governments will be the voting representatives of the Comitology which will take decisions on issues of cross border exchanges. They will also be responsible for the correct transposition of the Directives and Regulation into national law.

National Regulators have considerable responsibility for setting the framework for the functioning of the electricity market. The Directive bestows a set of minimum competences on the regulators in the realm of network access and implementation of guidelines agreed under the Regulation. Regulators will also be expected to provide considerable input through the “European Group of Regulators for Electricity and Gas (EGREG). This will enable them to make a contribution in substance to any proposals to be put before the formal decision making Comitology procedure and other issues associated with a competitive energy sector.

Transmission System Operators will have a key role in developing the European electricity market by providing, in particular, the main technical input towards the formulation of new rules and guidelines. TSOs will have to ensure the day to day functioning of the electricity market, within a clear framework, harmonised at EU level and consistent with the guidelines emerging from the Comitology procedure. It is expected that TSOs will harmonise network security rules, grid codes, and access and tariff methodologies, such that trade within a region is as easy as trade within a country or TSO control area.² In this context, and bearing in mind the major system disturbances that affected European grids in 2003, the work on rewriting rules for the UCTE Operational Handbook is to be welcomed. These measures will complement cross border exchanges, the integration of the regional markets, and the wider development of the single market.

Power Exchanges are also likely to have a key role in developing the Single European Electricity market by providing transparent, non-discriminatory access to electricity trading in the European Union, insuring the proper functioning of electricity markets. Power exchanges will provide their services within the framework approved by the regulators and the guidelines emerging from the Comitology procedure. It is expected that Power Exchanges will harmonize trading arrangements so as to facilitate the final single electricity market objective.

Market Participants, and especially consumers, will need to be regularly consulted on the expected and actual effects of reform proposals through, for example, the Florence Forum will retain its important role in which ideas can be debated and their practical implications considered before they are put into practice and from a broad platform for in-depth

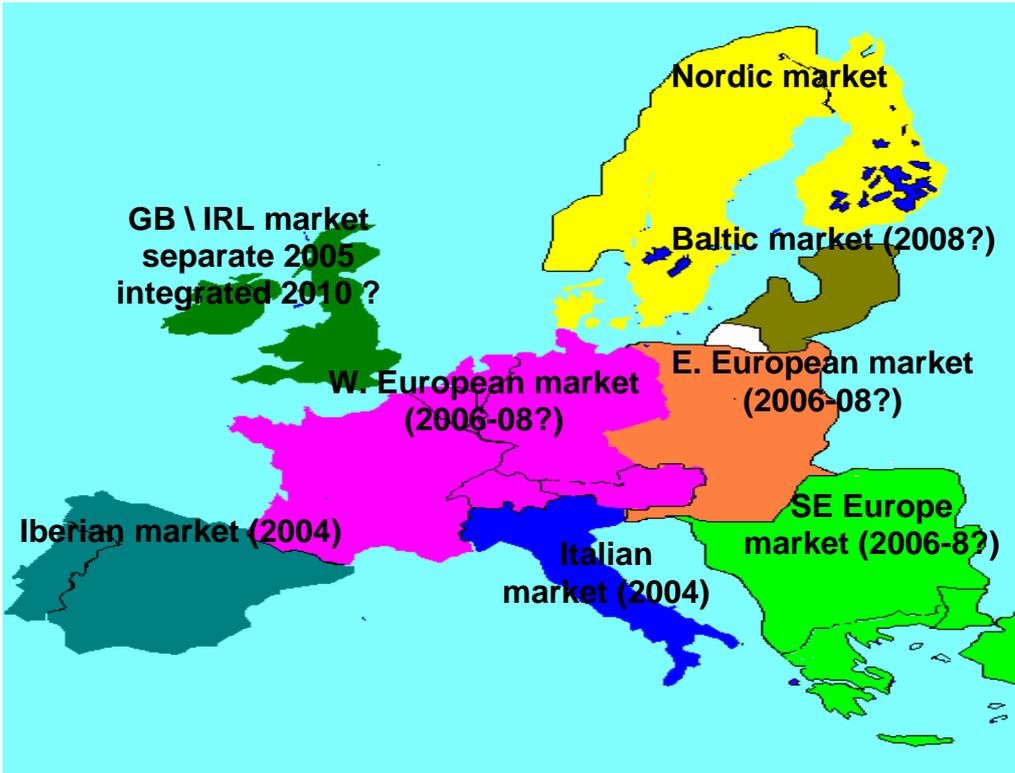
² There may be specific needs in small, relatively isolated systems for Grid Codes and network security rules which reflect the specific needs of such a system.

consultations between all above mentioned bodies in order to ensure the progressive development of the competitive framework.

3.5 Role of Regional Markets

The reality of today's electricity network is that Member States are not particularly well interconnected. In addition certain countries have already adopted common harmonised rules that, in some cases, go beyond those envisaged by the new package. Therefore, the development of regional markets containing Member States between which interconnection is reasonably strong may be a necessary interim stage. Within these regional markets, that should not be defined according to mere geographical criteria, a more developed harmonisation of the regulatory approach taken to most or all issues is expected, including; the degree of market opening, determination of transmission tariffs, the rules for bilateral trading as well as congestion management methodologies involving standardised day ahead and intraday markets. In some cases, the regulations governing balancing and ancillary services might also be harmonised to some degree. However any such efforts need to take into account, for example, the different generation plant characteristics in Member States and the costs involved in implementing such measures.

Figure 1 Potential Regional Electricity Markets within the EU



This regionalisation however may only occur to the extent that integration of markets is more rapid than that required, in any case, at European Union level. Eventually it is expected that most rules will be standardised at EU level in any event and any artificial partitioning of the EU market will be avoided. Thus, although Figure 1 sets out possible regional market definitions much depends on whether, and how quickly, the Member States concerned chose to take further measures to integrate their markets in advance of measures adopted at Community level. It is, indeed, expected that regional market areas will develop “organically” through co-operation between institutions in neighboring markets.

Thus, the objective of a single internal market will not be compromised. Market arrangements that impede trade or distort competition between regions will be prohibited. In any case, all of the regional markets will be expected to follow the same path of development in order to facilitate eventual full integration.

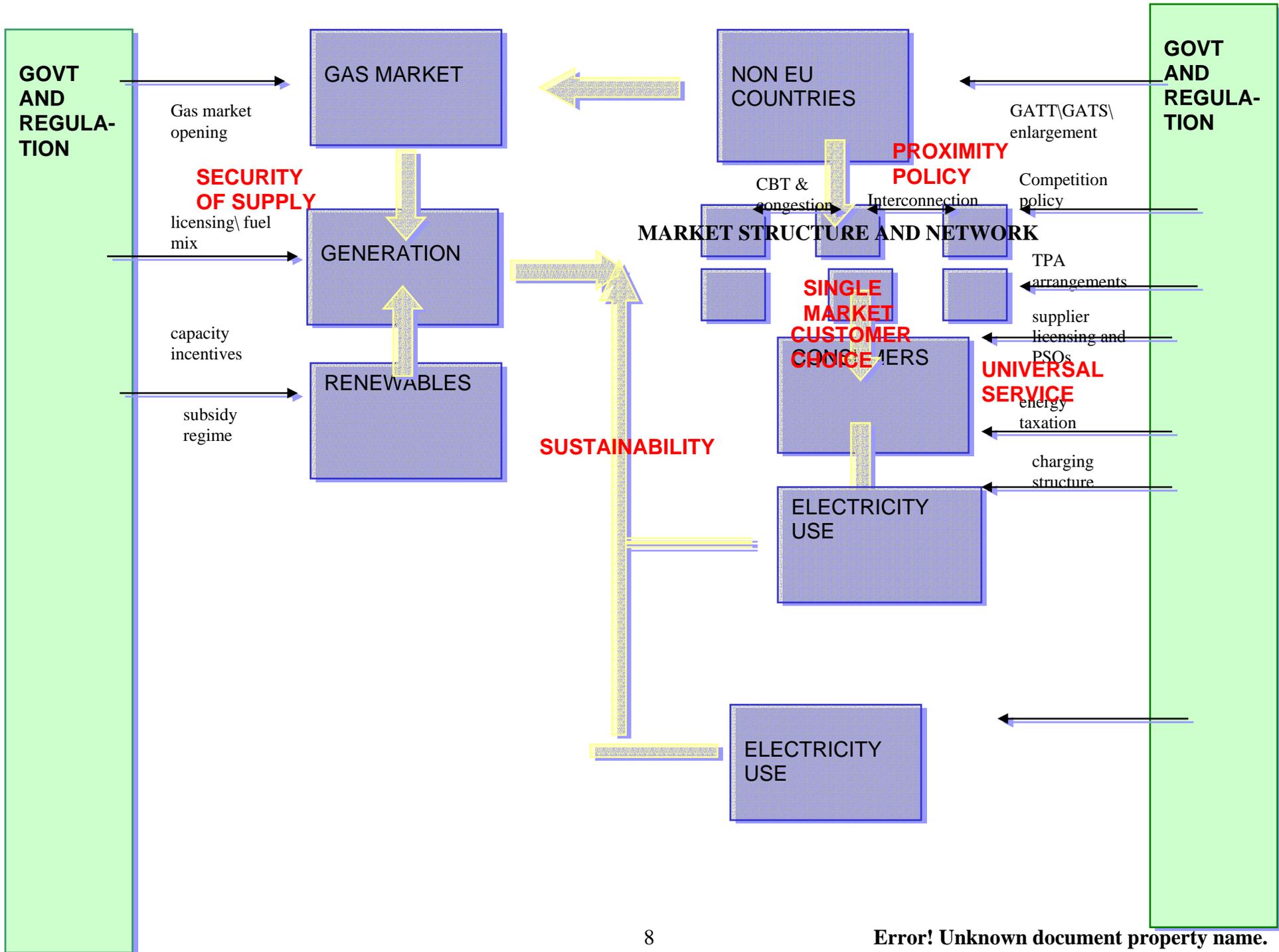
3.6 Structure of the Paper

The following chapters deal with the major issues that need to be considered in monitoring and developing the internal electricity market over time.

- setting rules for developing cross border trade (Section 4),
- market structure and interconnection in the European electricity market (Section 5),
- market structure and in the European electricity market (Section 6),
- developing a framework which encourages an appropriate level of generation and/or management of demand to guarantee security of supply (section 7),
- active promotion of customers’ rights to freely change supplier (section 8);
- ensuring that mechanisms to support renewables energy and reduce carbon emissions are coherent in the context of a single market (Section 9),
- removal of any other distortions to trade such as taxation policy (Section 10),
- establishing a framework for electricity exchanges with third countries (section 11).

Given that the electricity and gas markets are likely to become very closely inter-related it is also worth recapping the main points of the Commission’s strategy paper for gas which was submitted to the fourth meeting of the Madrid Forum in July 2002. This is included as section 12. Meanwhile section 13 discusses the possible evolution of coal fired generation over the coming years.

There are also clear linkages between all of these issues which also interact with wider aims of energy policy such as sustainability and the environment, the question of services of general economic interest and external policy. The graphic overleaf seeks to describe these interactions.



4. DEVELOPING CROSS BORDER TRADE

This section discusses the objectives for the management of the European network relating to cross border exchanges. This subject includes; compensation between Member States' TSOs for hosting cross border flows, the introduction of harmonised transmission tariffs with locational signals, and finally non-discriminatory congestion management. These objectives will be pursued through the Regulation on cross border electricity exchanges. This section of the paper discusses some broad medium and long term objectives for the Regulation without going into very detailed points which will be dealt with in the discussion of the detailed guidelines.

The overall goal is for the EU and wider market to function in the same way as a national market. Eventually, therefore, all system operators should use the same assumptions and mechanisms to manage their networks and network users would face a single interface. Greater cooperation between system operators to across political and transmission network borders, unencumbered with potential conflicting interests regarding other competitive market activities, forms a key element for the achievement of this objective.

Regarding tariffs, it is clear that for the medium term, an approach whereby tariffs for cross border trade are a combination of different national tariffs schemes and where TSOs are compensated for transit and/or other cost inducing flows is the most sensible. However in the longer term, a pan-European tariffication mechanism, may contribute to the further integration of markets.

For congestion management, and system operation more generally, methods for allocating capacity should be market based and designed to give correct locational signals to producers and consumers. Such price signals may also help regulators and/or investors to identify appropriate interconnection projects, depending for example on the volatility of the signals. Congestion management methods should also be non-discriminatory so that all participants should have an equal chance of obtaining capacity, whether it is for long term or short term transactions or for large or small customers. Finally there should also be an automatically functioning use-it-or-lose-it rule. These objectives imply co-ordination of the congestion management process with that of day-ahead OTC and power exchanges and eventually other wholesale markets, including the intraday and balancing market, as well as ancillary services. Such harmonisation efforts imply a review of network security rules, grid codes, and access and tariff methodologies, such that trade within a region is as easy as trade within a country or TSO control area.

Finally, in this context it is important to review the rules used by TSOs to deal with internal transmission congestion. TSOs should not, in general, be permitted to systematically transform internal constraints into constraints at borders. As such reasonable balance must be drawn between the needs of national network users and those from other Member States. Incentives for doing this be reduced for example where incentives or penalties for dealing with internal constraints are equal to those for dealing with external constraints, bearing in mind the need to create consistent price signals in terms of reference to time and place either side of the constraint.

The difference of treatment between internal and cross border congestions was an essential flaw of the Californian market model and that is potentially present in some already existing regional European markets. This essential issue can in principle be solved by for example the nodal pricing model coupled with Financial Transmission Rights currently in use in the North

Eastern part of the USA and recommended as a Standard Market Design by the FERC, or other models. A sound comparison of these different models and their accuracy for the European context should be completed to avoid misleading or poorly informed choices.

The following specific objectives should be pursued in the context of the Regulation.

In the medium term;

- inter TSO compensation should allow for suitable compensation between Member States for, as a minimum, transit flows and other cross border flows in some cases;
- transmission charges on generators should be harmonised within a fairly narrow range with, if appropriate, some locational signals introduced at EU level;
- interconnection capacity to be allocated by non-discriminatory, market based mechanisms consisting either of either:
 - within **regional markets**, a single common co-ordinated market-based mechanism which allows for both “market coupling” encompassing existing day-ahead and possibly intra-day spot markets via the adoption of a common timetable, as well as long term financial hedging³;
 - between **regional markets**, specific market based mechanisms which as far as possible allow for coupling of wholesale markets;
- a high degree of transparency should be provided to network users, including the publication of necessary data relating to transport capabilities of interconnector lines. This is a crucial issue for enabling further third party access and new entry to markets.

In the longer term;

- both tariffs and inter TSO compensation should be based on a single common model of the European network with, ultimately, zonal based transmission charges at EU level covering, as a minimum, losses and also potentially, fixed investment costs,
- **regional market areas** may be served by a single wholesale market (allowing both day ahead and within day nomination) which would contain different price areas in the case of persistent congestion.

In addition to these points:

- **transparency** must form a key part of system operation in Europe with network users having access to an appropriate harmonised set of information on both the transmission networks and on the behaviour of producers and consumers in the electricity market,
- mechanisms to allocate capacity should be designed to avoid manipulation by, and/or collusion of, those generators with a dominant position in

³ Any such approach would need to address the complexity of the physical flows which cause congestion in central Europe

certain regions, effective monitoring of market behaviour is essential which also requires transparency measures to apply to market participants;

- where congestion management is based on short term wholesale markets, participants should also have the scope to make longer term arrangements to obtain financial certainty for longer term contracts through the use of hedging instruments. Such arrangements will be facilitated by a high degree of wholesale market liquidity;
- system operation should be fully co-ordinated, for example, cross border capacity should be increased through redispatching within the national network and through the separation of national markets into different price areas;
- the use made of revenues from congestion, or any other constraint resolution scheme to be clearly regulated and audited, and preferably used for the removal of congestion. The distribution of the revenues should be made dependent on TSOs undertaking measures to reduce congestion.

Clearly, such a degree of co-ordination cannot be reached immediately. The initial steps on the way to this objective can be taken once the Regulation enters into force in July 2004. Subsequent steps are identified in the indicative timetable below.

Indicative Timetable

2004

- voluntary removal of “T component” [TSOs]
- entry into force of Regulation, adoption of first set of guidelines, for entry into force on 1 January 2005 including [Comitology]
- pilot project on co-ordinated congestion management in “W. European market region) [TSOs and power exchanges]
- establishment of single GB wholesale market
- establishment of Italian wholesale market

2005

- agreed methodology for inter TSO compensation in force [Comitology]
- agreed rules for initial harmonisation of transmission tariffs [Comitology]
- introduction of congestion management based on non discriminatory and co-ordinated market based mechanisms for all congested interconnectors [Regulators\Member States]
- UCTE handbook (and operational rules of synchronously connected regions) ensuring an appropriate trade off between safety in operation and flexibility required by the development of national and international trade involving a large number of actors to be approved by regulators (or as part of the congestion

management guidelines) and become legally binding. [UCTE\Nordel etc. with **Regulators**]

- TSOs to provide audited report on amount and use of proceeds and reconciliation with TSO unbundled accounts (ongoing). [ETSO\CEER]
- establishment of single Iberian market
- establishment of new Irish wholesale market

2006

- Market participants in all Member States to have access to a relevant functioning power exchange by this date [**Member States**]
- congestion management methods to be co-ordinated between Member States and allow for market coupling by the power exchanges concerned within regional market areas. [**Comitology**]
- Feasibility study on integration of balancing mechanisms

2008

- review of inter TSO compensation mechanism
- possible introduction of locational signals at European level [**Comitology**]
- introduction of regionalised wholesale markets [**Comitology**]
- establishment of south East Europe single wholesale market
- establishment of Baltic market

2008-10

- integration of intra-day and balancing markets [**Comitology**]

2010 onwards

- Progressive integration of all regional groupings [**Comitology**]

5. IMPROVED INTERCONNECTION BETWEEN MEMBER STATES

The legacy of national and centrally organised electricity supply is a high degree of concentration within many Member States and a low level of interconnection between them. The two main consequences of this are; firstly, congestion in the European network leading to large differences in wholesale market prices; and secondly, the potential for competition to be constrained if previous incumbents retain a high share of generation capacity in the Member State concerned. There are also implications for security of supply.

The congestion that currently exists in the European market often leads to prices for wholesale electricity that vary by a factor of two or three depending on the Member State. This mainly results from the characteristics of the generation park in each country. In these cases it is clear that new interconnection would therefore provide significant and immediate benefits. At the same time, however, it must also be recognised that circumstances may change in the generation sector and price differences will not necessarily remain unchanged over time. Long distance transmission of electricity is costly and potentially less reliable. Regulators should therefore be encouraged to develop a sensible appraisal policy to guide their approach to new investment of this type. Furthermore, it must be taken into account that measures to improve interconnection capacity could become stranded investments after the harmonization of national legal frameworks is achieved.

A second pre-occupation is that, regardless of price differences between Member States, the Community must avoid the situation where the right to choose supplier is meaningless. Former incumbents must be subject to the competition, or at least, a realistic threat of competition in a contestable market. One way to achieve this, of course, is to create larger regional markets by improving the use of existing infrastructure and increasing the level of interconnection and the associated internal links.

Finally, increased interconnection allows for the improvement of security of supply by, for example, allowing a more diverse mix of primary energy sources and a larger pooling of risks of incidents on the generation or demand side. There may also be clear benefits to the environmental objectives of the Community from increasing interconnection, for example by allowing the use of renewable energy developed in large offshore facilities, and the better use of the Community's hydro-electric generating capacity.

Greater co-ordination between the TSOs and improvements in the regulatory framework in Member States should already increase the level of cross border exchanges and accordingly competition. In a number of cases, however, these improvements are unlikely to be enough to significantly reduce congestion and market concentration and some new investment will be needed. As a result of the Infrastructure Communication, a modest target of 10% was established for the level of interconnection between Member States. However, there are a number of Member States where a higher degree of interconnection may be desirable in order to help deliver meaningful competition. For example, increased interconnection can be expected to dramatically improve market structure in smaller Member States. In this context it should also be noted that internal bottlenecks within a country may have effects on trade between countries. Consequently, it may not be sufficient to increase the capacity on the interconnectors but to increase the capacity of the transmission grid within a country in order to improve the conditions for international trade.

Many obstacles exist to new investment in infrastructure associated with the decision making process, the regulatory framework and environmental concerns. The Commission has now

proposed a Directive on Infrastructure and Security of Supply⁴ as well as a revision of the TEN-E guidelines which envisages the following approach:

- a clear and straight forward decision making process and administrative procedures regarding key interconnection projects requiring the co-operation of TSOs, regulators and governments at EU level: ideally this should include a common cost/benefit analysis framework;
- certainty for investors in terms of the regulatory treatment of profits and/or losses from interconnector projects and the allocation of costs between the countries affected;
- a wider European view must be taken to ensure that key projects are undertaken in the required time frame.

In this context, the CEER's recent paper to the Commission "*Regulatory control and financial reward for infrastructure*" sets out a choice of regulatory frameworks for interconnectors. The choice between these will be very much dependent on local market circumstances and structures. There are clear differences for example between making extensions and new interconnector infrastructures within meshed AC systems, and large sub sea DC interconnector projects.

In general it is expected that most projects will be undertaken as part of an overall investment programme agreed between regulators, other relevant authorities and transmission system operators in close collaboration. In such cases the costs would be funded from the generality of network users with no systematic charges for using particular interconnectors. This implies the separation of the question of financing interconnections from the mechanisms of allocation of capacity. This means that Regulators should also ensure that funds are made available for efficient transmission reinforcement even if congestion revenues are inadequate, and that TSOs do not gain from windfall profits if congestion revenues happen to be excessive. This does not necessarily imply an inflexible centrally planned approach to infrastructure. For example TSOs may have incentives embodied in the formulae used to decide regulated charges in order to encourage investment.

However the proposed Directive specifically requires regulators to co-operate when considering the investment programme put forward by TSOs and to take action to be taken in the case of delays. In this context, especially projects that have been declared of "common European interest" should also be prioritized at national level. It is considered by the Commission that this strategy should explicitly identify cases where the use of underground cables may accelerate the implementation of projects.

In some exceptional cases, as set out in the Regulation, it might be envisaged that interconnectors could be constructed on a merchant basis where the costs of the transmission line in question would be expected to be covered by the users of that particular line. However the "merchant" model is not considered suitable as a general model for interconnector investment in Europe.⁵ Even where a merchant model is considered, in order to promote an efficient development of the market, the use-it-or-lose-it principle should also apply. Ideally congestion rents, rather than explicit access fees should also finance such lines.

Finally, concerning the increasing installed generation capacity in wind energy, the Union is well aware of the need of important investments in infrastructure, in the network, in the

⁴ COM (2003) 740

⁵ Various problems with the use of a "merchant" models are discussed in, for example, Tirole and Joskow (2002)

control systems and in the complementary generation units required for balancing the stochastic power output of the wind generators. Of course all the costs due to these efforts will have to be socialised in an appropriate way.

Indicative Timetable for Implementation

2004

- adoption of common methodology for evaluation of interconnector projects **[Regulators]**
- Adoption of proposed Directive on infrastructure and security of supply **[Co-decision]**
- Revision of TENs guidelines **[Co-decision]** and identification of priority projects **[Commission]**

2005

- agreement of investment programme and expected regulatory treatment **[TSOs\Regulators] - ongoing**

2005-10

- Implementation of investment programme **[TSOs]**

6. REDUCTION OF MARKET CONCENTRATION

A number of new interconnector projects will be completed over the next few years. However, interconnection and new investment is unlikely to significantly erode historically entrenched positions in other than the smallest, most isolated, Member States. It is therefore likely that many Member States will remain subject to significant market concentration for some time. Increasing interconnection could, in any case, in these markets, also be seen as an expensive way of resolving the market dominance issue and, furthermore, there are some cases where, despite a high level of market dominance, infrastructure is already available and not used.

In such cases, therefore complementary measures need to be taken. In particular, Member States should seek to dilute the market power of dominant generating companies and/or to prevent the abuse of dominant positions as follows:

- divestment and capacity release could be used in some cases to reduce the level of concentration, with reciprocal measures between two or more Member States with similar concentration problems;
- appropriate design of mechanisms to allocate interconnector capacity should mitigate and not add to market power problems within certain Member States and regions;
- market design should encourage an appropriate mix of both short term trading and longer term bilateral arrangements in order to avoid encouraging collusion;
- the relevant authorities should, on the basis of the necessary information provided by TSOs and power exchanges, monitor the behaviour of market participants closely and should act, using, inter alia, existing competition law and other

relevant legislation, to protect consumers from manipulation: ad-hoc intervention in the market should be avoided and this points to the embedment of appropriate market rules designed to prevent undesired manipulations;

- generators should be required to make transparent, in a consistent manner at European level, their decisions on the availability of generation plant and, where appropriate provide forecasts of availability;
- demand side participation in wholesale and balancing markets should be encouraged in order to significantly increase the elasticity of demand for electricity within individual settlement periods and thus reduce the scope for abuse of dominant positions.

Despite the need for some measures to reduce market dominance, it is also important to acknowledge that some of the expected benefits of competition are likely to arise from consolidation to take advantage of the economies of scale and scope that exist in this capital intensive industry. Electricity companies should not, in principle, be prevented from taking such actions to improve their performance provided that customers are protected from monopolistic or oligipolistic practices and that new entrants and smaller companies are not unduly disadvantaged.

Indicative Timetable for Implementation

2004

- Adoption of proposed Directive on infrastructure and security of supply [**Co-decision**]
- ongoing VPP auctions in France Belgium and Ireland [**Member States**]

2005

- Code of Practice to be published by relevant authorities setting out their approach to wholesale and balancing market surveillance and control including the obligations to be placed on generators regarding transparency. [**Member States\Regulators**]

7. CONSISTENT APPROACH TO GENERATION ADEQUACY

Although most Member States currently have adequate reserve capacity, there are certain regions such as Ireland and Greece where there is both limited interconnection with other regions and where reserve margins have been severely eroded. Both these countries have had to launch a tender to ensure that adequate generation capacity is available in coming years. Over the coming years, increasing demand, the retirement of some capacity at the end of its life, and the effect of the Large Combustion Plant Directive will mean that there will be a more general need to closely monitor the supply-demand relationship.

One of the benefits of market opening is that competitive pressures will prevent over-investment in reserve generation capacity. However, this means that the balance between supply and demand will be more delicate and brings about concerns that, because of the long lead times for investment, wholesale electricity prices, especially on spot markets, may tend to follow an erratic path.

Periods with relatively high prices will be required from time to time to encourage investors into the market and to cover the fixed costs of those already there. However, this volatility may create undesirable conditions for customers if they are not expecting it. Such volatility

may also create pressure on governments to intervene in markets at times where prices are high, which will increase regulatory risk and lead to further uncertainty for potential investors, making the problem worse. It is therefore necessary for Member States and Regulators to decide what approach they intend to take to the issue of supply-demand and stick to it. Ad-hoc intervention in electricity markets should be avoided.

The Commission's proposed Directive on Infrastructure and Security of Supply therefore requires Member States to publish their approach to such issues. A clearly stated approach to this issue is vitally important to give a stable "market design" at national level in order to encourage the appropriate investments. The proposal also seeks to clarify the responsibilities, in particular, of transmission system operators in ensuring the ongoing balance between supply and demand in real time.

In this context it is of note that many Member States' take the approach that, provided markets are sufficiently liquid, they should be allowed to run its course. It is argued that increases in wholesale prices will bring forward investment and constrain demand; meaning that episodes of inflated prices will be short lived. Such a market based approach requires significant political commitment to the market mechanisms on behalf of the regulators concerned as well as a process of informing customers of their responsibilities. This was demonstrated relatively successfully during winter 2002-03 in the Nordic countries.

An active demand response is an important component in this strategy. This may either means that prices to final consumers should be based on the spot market price so as to create additional elasticity, thereby reducing the scope for monopolistic behaviour. Such customers must also have the necessary information and equipment to respond to high spot prices. Alternatively, customers may choose to avoid being exposed to such volatility by entering into longer term fixed-price arrangements with suppliers. These will in turn enter into longer term contracts with generators which will also make investment in generation more likely before an extreme position is reached. Interruptible contracts may also be a means of reducing volatility in short term wholesale markets.

The alternative is some degree of intervention to introduce mechanisms to smooth out the potentially volatile price cycle. This can be achieved in a number of ways; for example, capacity payments to generators or price floors (for which a tender approach is an extreme example), or obligations on retail suppliers or the TSO to purchase reserve capacity. The main effect of all of these mechanisms is to provide an incentive to invest earlier in new generation capacity so that peaks and troughs in prices are reduced. Clearly this second mechanism has the potential to distort competition if the specific schemes that are adopted by each country are not harmonized. Incentive based measures such as capacity payments have also been criticised due to their excessive cost and uncertainty about their appropriate level.

In general, the market opening process and the introduction of competition implies a presumption in favour of a reliance on market mechanisms and the encouragement of an active demand side. This requires more active participation in the market by customers in terms of making a definite choice about the structure of their supply contract (fixed or variable price, duration etc.). Since customers are not used to thinking in this way about electricity contracts, an education process may be needed.

The proposed Directive does not, at this stage, explore a more fundamental question about whether the issue of security of supply should be dealt with at national or regional level. This is important since intervention could mean some distortion of the internal market for electricity. For example capacity payments have the effect of reducing charges to generators.

These questions also relate to the issue of diversity of primary fuel sources. Currently, this is a choice to be made by Member States in the context of their over-arching energy policy. However in the context of an integrated market any intervention by one Member States in the decisions to build generation, for example through authorisation policies, will spill over into the functioning of the market in neighbouring regions.

From the point of view of economic efficiency it is clearly of benefit if Member States can share reserve capacity since it means a lower level of reserve is needed in each Member State. Thus within **regional market areas** it may eventually be appropriate for groups of Member States to arrive at a common approach to security of supply for generation. A common approach would remove the risk of distortions of trade between Member States and allow for sharing of reserve capacity. However at the very least, in an integrated market, a strong unilateral approach to security of supply would not be appropriate. This has implications for treatment of interconnection capacity if one country is relying on another to provide reserve capacity. It also means that there needs to be a clear code of conduct on TSOs wishing to take action to restrict cross border flows in emergency situations.

A different issue relating to generation investments are the procedures required in terms of authorisation and planning approval. The process may be unnecessarily heavy in some Member States and be an unnecessary obstacle to investment. A more streamlined and harmonised process would remove such obstacles. It may be that a comparison of the authorisation and planning process between Member States would allow for the spread of a best practice approach.

Indicative Timetable

2003

- publication of Commission Communication on Infrastructure and Security of Supply [Comm]

2004

- Adoption of proposed Directive on infrastructure and security of supply [Co-decision]
- review and comparison of planning and authorisation procedures in each Member State for new generation [NRAs\Comm\Eurelectric]
- examination of the distribution of risks and returns between producer-supplier-customer implicit in the contractual arrangements for electricity supply [CEER]

2005

- Member States to publish their approach to security of supply policy with a particular emphasis on increasing the demand side response [Member States\Regulators]
- development of an overall European balance forecast [ETSO\UCTE]

2006

- Code of conduct for emergency situation in the different synchronous areas [UCTE, NORDEL etc]

2008

- Implementation of common approach within **regional market areas**.

8. FACILITATING COMPETITIVE CHOICE BY CUSTOMERS WHILE DELIVERING UNIVERSAL SERVICE

Although electricity is apparently a technically a homogenous good it is nevertheless expected that, as has occurred for financial services, competition will deliver innovation in terms of the types of product available. Customers may, for example, prefer different payment options. They may have different preferences about whether prices are fixed or variable, or they may benefit by choosing to use electricity at different times of day. New metering technology will facilitate such innovation. It is also necessary to mention that the optimal generation mix can strongly depend on the consumer portfolio load curve to be served, thus signalling the economic and commercial heterogeneity of the electricity good.

For all retail customers to have a real choice there needs to be a considerable amount of preparatory work. Customers should be able to switch reasonably frequently between retail suppliers without implying a significant cost to either themselves or the new supplier. Procedures should also be in place to minimise the administrative burden on final consumers, especially for households. At the same time an appropriate balance also needs to be made between the ease of switching and the costs placed on system operators (and hence the customer base in general). Some consideration must also be given to the possibility that longer term contracts between customers and suppliers could pass more effective price signals to producers which would reduce wholesale market volatility.

In order to ensure universal service at a reasonable cost, as required by the Directive, it is expected that Member States will have some form of default supplier arrangements in the case that their chosen retail supplier withdraws from the market for whatever reason. Regulators may also wish to retain some control on the prices charged to some domestic customers by the default supplier, even after full market opening. This may imply costs on such suppliers for which they will need to be compensated. Such end-user price controls should complement and not impede the development of retail competition, for example by not being set so low as to remove all scope for competition. In the longer term it is expected that such controls will be removed, especially for non household customers.

Customers must also have the confidence that the quality of service they receive will be maintained regardless of whether they choose to switch or to remain with the incumbent supplier. Consumers also need to be confident of the duties of market participants relating to balancing and the obligation of the TSOs to ensure overall balance. Final customers should not be liable for penal charges for the purchase of balancing energy⁶ in the event that their supplier goes bankrupt or withdraws from the market.

A regulatory structure should therefore be established whereby retail suppliers have similar obligations to maintain a certain standard of service to all energy consumers; for example in terms of billing, dealing with complaints, disconnections, payment possibilities to vulnerable customers etc.

⁶ Unless they are themselves balance responsible parties.

Indicative Timetable for Implementation

2004

- confirmation of default supplier arrangements including, if considered appropriate, a price ceiling for certain customers [**Governments \ Regulators**]
- appropriate load profiling and customer exchange information to be put in place in anticipation of non household market opening [**Governments\TSOs \ DSOs**]
- agreed definition of minimum best practice for customer switching procedures without unreasonable costs to either the customer or new supplier [**Eurelectric\CEER**]

2006 onwards

- progressive removal of end user price controls for non households and eventually for all customers

9. CONSISTENT SUPPORT FRAMEWORK FOR RENEWABLE ENERGY

One of the prime functions of the renewables Directive is to deliver the overall Community objective that 22% of electricity will be generated from renewable sources (RES generation) by 2010. Member States have been required to set national targets for the consumption of electricity produced from renewable sources. Indicative values were set out in the Annex to Directive 2001/77.

Member States are expected, in setting their national indicative targets, to take account of the amount of RES generation they are likely to import or export from other Member States. Hence the targets, although based on consumption, will also imply a national target for the amount of RES generation production capacity to be installed in the Member State concerned. To a certain extent, therefore, the issues relating to compatibility of support mechanisms and the desirability of not distorting cross border trade are concerns which are secondary to the main objective of ensuring a certain level of RES production in each Member State on the basis of individual national targets. It is therefore permitted by the Directive, and associated guidelines on state aid that subsidies to RES electricity generation may vary by Member State in terms of both the level and the support mechanism. The CHP Directive proposed by the Commission follows a similar approach, by obliging Member States to report on the potential expansion of CHP but without setting indicative targets.

There are three main types of support mechanisms being used for RES in Member States at present. The first type is a fixed feed in tariff whereby all renewable energy\CHP injected into the network is automatically dispatched and receives a guaranteed price, usually much higher than normal market prices. The costs of this obligation are then passed on to customers through transmission or distribution tariffs. Such an approach clearly reduces the overall scope for competition at Community level between RES generators since it means that a certain proportion of generation may be outside the market, depending on the exact form of mechanism adopted. On the other hand it gives certainty to investors about the price that will be received and is therefore an effective means of support.

Under the second approach, suppliers or customers are given an obligation to source a certain amount of their energy from renewable\CHP sources. Often this is termed a “green

certificates” approach since the supplier is given a certificate when renewable production is used. If the required amount is not achieved, then the supplier will be fined according to the deficit between the required and actual amount of certificates. In theory, this approach may seem more in line with a competitive market. However, because the targets adopted under the Directive are on a national basis, it is often the case that green certificates are only valid for RES generation that is produced in the Member State in question. Indeed where such rules have not been adopted, RES energy may be able to achieve a double subsidy from two different Member States by exporting from a country with a feed in tariff regime to another with a certificates type approach.

The final option is a straight subsidy from the government to cover a proportion of either capital or operating costs.

Although this is not a requirement of the Directive, Member States are encouraged to develop schemes to promote renewables which are the least distortive of competition and which are consistent in terms of the basic framework and include mutual recognition of energy generated from renewable resources. This would have the advantage of establishing competition at two levels; that is, in the generation market for conventional fuels as well as, separately, in the green market and this would be expected to increase the cost effectiveness of support. Existing support schemes should therefore be reviewed with a view to bringing them further in line with market mechanisms.

As well as mechanisms to support renewable energy, other initiatives are being taken to establish market mechanisms to reduce carbon emissions. A common position was recently reached to establish such an emission allowance trading scheme for greenhouse gases at EU level⁷. Emission allowance trading is essentially a reverse version of green certificates in that undertakings involved in carbon emitting activity are given a target for the amount of emissions they can release in a time period (overall cap). The operator of an installation is then allocated allowances. If the company intends to emit more than it has been allocated as allowances, it is then possible to purchase additional allowances from those who have been able to exceed their allocation (trade). In this way it is expected that reductions in CO₂ emissions will be made in the most efficient manner. The current proposal applies to large industry and energy activities, including electricity generation.

It is important to consider the interaction of emission allowance trading with the market for electricity. In particular, it must be ensured that new investors in generation are not disadvantaged by the scheme. In particular the allocation of emission allowances should not discriminate in favour of incumbents⁸.

Indicative Timetable

2004

- Possible entry into force of CHP directive [**Codecision**]
- Entry into force of greenhouse gas emissions trading directive
- Identification and removal of all double subsidy possibilities for either RES or CHP [**Member States**]

⁷ One MS is running a voluntary scheme (UK) and the other a mandatory (Denmark).

⁸ MS can allocated according to historic emissions – see <http://europa.eu.int/comm/environment/climat/030401nonpaper.pdf>

- First Commission report on compatibility of national targets with overall EU objective, possible mandatory targets [**Commission**]
- Member States submit first national allocation plans for allowances to be allocated 2005 to 2007 to the Commission [**Member States**\ **Commission**]

2005

- Commission Report on the implementation of the renewable directive in terms of compatibility of different support schemes and possible proposals for support framework [**Comm**]
- Implementation of emission allowance trading scheme: first period with free allocation of emission allowances subject to Commission review [**Member States**]

2006

- Possible voluntary adoption of common framework for renewable support within regional markets [**Comm**]

2008

- Second phase of emission allowance trading scheme.

10. REMOVING OTHER DISTORTIONS

Differences in the treatment of taxation of primary energy will have similar effects on the competitiveness of generation capacity in different Member States. Excise duties on primary fuels, if these cannot be recovered in the same way as VAT, will directly affect competitiveness. As in all sectors with non harmonised energy taxes, this will put the user industry in the higher tax country at a disadvantage. This underlines the importance of some harmonisation of energy tax systems in different Member States as applied to electricity generators.

Although harmonisation has proved difficult to agree through Community legislation, it may be possible that Member States can agree on a voluntary basis to achieve this objective relating to the electricity sector. The starting point might be a review of the potential distortions and some discussion relating to possible solutions to this issue.

A second issue relates to the VAT treatment of cross border exchanges of electricity. On 5 December 2002, the European Commission adopted a proposal to amend the rules on the place of taxation of natural gas and electricity to facilitate the functioning of the Single Market for energy. The proposal is to eliminate current problems of double taxation and non-taxation and distortions of competition between traders by changing the place of taxation of natural gas in pipelines and of electricity from the place of supply to the place of consumption.

Under the proposed rules, where the buyer is a trader reselling the supplies, the place of taxation will be the place where the buyer was established. Where the sale was to a final consumer, the place of taxation will be the place of consumption. For transmission services closely linked to the supply of gas and electricity, the proposal contains a corresponding clause providing that taxation will take place in the country where the customer was established. Member States should rapidly approve this amendment to the VAT Directive to remove this barrier to cross border transactions.

Finally, state aid to primary fuels may also create distortions between Member States and competition among the different primary fuel types. In addition to the issue of renewables discussed above, state aid is also an issue in the coal industry and relating to gas infrastructure. The complicated taxation arrangements for the extraction of oil may also be relevant. The Commission produced a first assessment of the extent of state aid in the energy sector in the form of a staff working paper. This work will be updated in order to ensure that the implementation of Community law is not systematically favouring any particular type of primary fuel unless, as for renewables, there is a clearly defined policy in favour of that energy source.

Indicative Timetable

2004

- Review of potential distortions created by excise taxes, state aid and other factors. [Comm]

2005

- Adoption of voluntary guidelines to minimise or remove non-price distortions [Member States]

11. RELATIONS WITH THIRD COUNTRIES

The Regulation requires the Commission, in adopting guidelines, to indicate what actions it has taken with respect to the conformity of rules in third countries, which form part of the European electricity system for the guidelines in question.

The first consideration is the position of Switzerland which occupies an important position in the European electricity network. Although the idea of market opening has been rejected for the time being in Switzerland, this would not necessarily rule out legislation relating to a partial opening of the market and the adoption of congestion management rules compatible with the EU. Furthermore, in the meantime, pragmatic solutions based on voluntary agreements for questions of cross-border-trade, transits, congestion management are expected to be possible. It is highly necessary that such voluntary agreements comply with the principles underlying the European directives and regulations in order to promote competition between Swiss and EU companies. Then a reciprocity principle in the electricity trade between Switzerland and the EU should be taken as a basis of the commercial relationship.

Accession countries will be required to implement the new acquis relating to the opening of the electricity market. They will also need to participate fully in the new structures being established to manage cross border transactions under the Regulation in terms of inter TSO compensation, transmission tariff harmonisation and congestion management. As the new package is likely to be adopted after the signing of the Accession Treaty, there may be certain transition arrangements in place. However it is to be expected that accession countries will participate fully in the internal market for electricity by 2007.

Another consideration is that parts of the existing and enlarged EU are somewhat isolated from other Member States both geographically and in electricity terms. This suggests that the establishment of similar market structures in neighbouring regions is desirable, particularly in the Balkans region and the Mediterranean ring. This would both anticipate further accession and recognise the reality of the existing grid interconnections.

Finally the special position of Russia versus the other CIS countries and the Baltic States needs to be resolved. Many accession countries retain the possibility of a significant degree of interconnection with the Russian grid. This potentially has mutual benefits. At the same time it is clear that there remain a number of system security considerations in establishing a permanent synchronous interconnection with the CIS/Baltics network. In this context, preliminary studies by UCTE have already assessed that additional East/West power flows (both commercial transactions as power flows due to frequency control) would have to cross severely congested borders in the UCTE grid and replace generation capacity in accession countries. There are also questions of reciprocity to be resolved, both in terms of market opening and on environmental and on nuclear safety issues. These issues need to be clarified in order to set the context for trading arrangements between the enlarged EU electricity market and Russia and other former Soviet Union countries.

Indicative Timetable for Implementation

2004-7	Accession countries implement new Directive [Member States]
2006	Establishment of south east Europe market,
2007	Results of the feasibility study on the synchronous interconnection of CIS/Baltics [UCTE]
2008	Agreed approach to trade with Russia and other CIS/Baltics countries

12. STRATEGY FOR GAS

The key points arising from the gas strategy paper and their relevance for the electricity industry are discussed below. Since it is expected that an increasingly significant proportion of electricity generation capacity will be based on gas, electricity generators must be able to depend on exercising their right to choose between different suppliers and sources of gas based on non-discriminatory access to the gas network.

As for electricity, the achievement of a competitive European gas market requires a number of key steps;

- a coherent and cost reflective system of charges for use of the European network based on actual physical flows, with recognition of backhaul, and allowing the removal of transaction based charges,
- a transparent and non-discriminatory methodology for the allocation of network capacity which ensures effective use can be made of the network by all participants,
- liquid wholesale markets for gas that will give a transparent and reliable price signals,
- clarification of the roles and responsibilities of the different parties in the gas market relating to security of supply,
- measures to ensure the required development of the gas network to meet defined output standards which may require a robust governance framework and non-market based regulatory safeguards as well as a to ensure a stable regulatory environment and an investment climate conducive to new infrastructure investments,
- continued extension of the European gas grid to peripheral areas and to third countries.

13. COAL FIRED GENERATION IN A COMPETITIVE MARKET

Coal fired generation continues to make a large contribution to the level of electricity production in the European Union, and this will increase following EU enlargement in May 2004. There are a number of factors likely to affect the extent to which this contribution will be maintained in the coming years.

Firstly, it is important to remember that there is already a very developed and competitive international market for coal. The development of the international coal price relative to the prices of other primary fuel sources of oil and natural gas will be a key determinant of the contribution of coal to the generation park.

The effect of the need to reduce carbon emissions will also be a major influence on the future use of coal, as coal produces relatively high levels of CO₂ emissions. Carbon emissions trading will help to mitigate this increase, particularly if the Kyoto Protocol's Joint Implementation and Clean Development Mechanisms are implemented in the most cost-effective way. Much also depends on whether new, more efficient coal-fired technologies become available to allow carbon emissions from coal fired plant to be reduced. Over the longer term, carbon capture and carbon sequestration may offer a solution to this problem.

A final consideration is the possible desire of Member States to ensure a certain diversity of primary energy sources. The electricity Directive, for example, permits Member States to give dispatch priority to indigenous fuels for up to 15% of production. Governments may also, when licensing and authorising generation plant, take account of the need to ensure some diversity in range of primary fuels being used.

14. SUMMARY AND TIMETABLE

The possible timetables set out in the individual sections above imply the following work programme for the next few years in relation to the construction of a single internal electricity market.

	Cross border trade	Inter-connectors and concentration	Generation adequacy	Customer choice and PSO	Renewables etc.	Other distortions
2003		Commission communication	Commission communication			
2004	Adoption of guidelines. Pilot project on co-ordinated congestion management	Adopt Directive and Revise TENS guidelines Agree common evaluation methodology	Adopt Directive. Review and comparison of authorisation procedures Analysis of supply contract structure	Confirm USO arrangement Best practice for switching	Cogen directive and emission trading. Directives in force. National allocation plans for emission permits.	Review of other distortions
2005	Guidelines in force in all Member States Congestion by market based mechanisms UCTE operational handbook approved and binding 1 st TSO report on congestion revenue	Code of practice on market monitoring and transparency General agreed investment priorities at EU level	Overall EU balance forecast MS to publish approach to wholesale market and supply demand balance	Standard supply licence structure	Commission progress report on RES directive Emission trading starts	Agree voluntary guidelines to remove distortions.
2006	Greater integration of capacity and PX markets Feasibility study on integration of balancing mechanisms	Implement projects	Code of conduct for emergency situations	Gradual removal of end user price controls	Possible common framework for RES	

2008	review of compensation mechanism possible introduction of locational signals Regional wholesale day ahead markets	Implement projects	Adoption of common approach to supply demand balance		Second phase of emission trading	
2008-2010	Regionalised wholesale markets with integrated day ahead and intra-day market	Implement projects			Phase 2 of emission trading starts	

Nordel comments on the European Commission Strategy Paper Medium Term Vision for the Internal Electricity Market

Nordel welcomes DG TREN invitation to submit a position paper on the final version of the European Commission Strategy Paper Medium Term Vision for the Internal Electricity Market, to be included as an Annex to the published document.

Generally, Nordel agrees to the vision for the internal electricity market outlined by the Commission. The Strategy Paper provides clear objectives and the framework for the integration needed to reach the overall goal of a single market. The Strategy Paper will put pressure on involved parties to speed up the integration process.

Role of Transmission System Operators

Transmission System Operators have a key role in developing the European electricity market by providing the main technical input to the formulation of new rules and guidelines. TSOs will also have to ensure the day-to-day functioning of the electricity market by providing a cost-efficient and secure infrastructure.

Nordel has already succeeded in harmonising network security rules, grid codes and access and tariff methodologies, which are main reasons for the rapid integration and success of the Nordic market. However, there is an ongoing need for TSOs to improve such rules and guidelines to further develop the market.

The Strategy Paper seems to advocate for TSOs to separate the functions of network operator and network owner (chapter 3). In this context Nordel wishes to point out the rationale for a strong integration between the functions of transmission and system operation. These functions are interlinked and clear – and harmonised - responsibilities to TSOs are key to the success of the common market.

Role of regional markets

Nordel shares the view of the Commission that the development of regional markets containing Member States between which interconnection is reasonably strong is a necessary interim stage towards the overall goal. This approach is probably the most practical in order not to hamper further development in some regions, for example the Nordic market. However, it is important to keep focus on how different regional markets can coexist and allow for non-discriminatory trade between market players in adjacent regional markets.

Developing Cross Border Trade – harmonisation of tariffs

Regarding tariffs Nordel supports to give priority to developing a mechanism that compensates TSOs for transit flows, rather than launching a pan-European tariffication mechanism in the medium term. But, as the cross border tariffs are removed from 2004, the focus on harmonisation in the different regions should increase to improve the market efficiency

Nordel harmonised its national tariffs for generation (G) in 2000. Nordel believes that all generation in general should pay a tariff to feed power into the transmission system. However, G-tariffs in a surplus area could be higher than tariffs in deficit areas, giving a signal to the generators where there is need for new generation capacity.

Consistent approach to Generation Adequacy

A truly functioning, integrated European market requires investment both in transmission and generation. In this context a well functioning price mechanism is key to provide appropriate signals to market players. Nordel wants to stress demand response and market price cleared by the players as the main driving forces for market development. Any regulatory initiative that affects the price formation in the open electricity market should be undertaken with the highest possible level of harmonisation.



GEODE POSITION ON THE COMMISSION STRATEGY PAPER, MEDIUM TERM VISION FOR THE INTERNAL ELECTRICITY MARKET

I.- OBJECTIVE

GEODE totally supports the Commission objective to create a competitive market for electricity where all unnecessary impediments to cross border exchanges are removed and electricity flows between Member States as easily as it flows within member States. Such a competitive market would lead benefits for customers both in the business and household sector in term of lower energy prices and improved service.

II.- GENERAL OVERVIEW

GEODE considers that the objective to create a European energy single market is far to be achieved. There is not a sufficient number of independent suppliers and large companies do not compete between them. National markets are still isolated and energy exchanges between Member States are not enough.

Therefore in practice, final consumers can not use their right to choose their supplier. Necessary measures should be adopted to avoid liberalisation takes place without real and effective competitive conditions. Otherwise liberalisation could be worse than the former regulated market, leading to the reinforcement of big monopolies. As a result of this process, final customers may see prices increasing as tariff regulation disappears.

III.- EUROPEAN SINGLE MARKET AS AN OBJECTIVE TO GUARANTEE CUSTOMERS CHOICE

GEODE considers that, at European level, the total number of players is enough to have a market; the problem is that large companies do not compete between them, maintaining dominant positions in their national markets and keeping national markets close. The effective solution is to create a real European single market.

GEODE agrees with the Strategy Paper about which are the barriers that keep national markets still closed. These barriers have to be overcome:

- **Congestions:** they are an excuse used by big monopolies to keep national markets closed. **GEODE** considers that congestion could be dealt by using

counter-trading or redispatching mechanisms as it is being done at national level by national TSO's.

- **Unbundling:** unbundling between transmission system operation and commercial activities has not taken place. TSO's have to be independent as it is established at the new energy directives but a derogation could be applied by Member States until 1st July 2007. Unbundling provisions not being applied lead to a lack of transparency on management of network access and specially on the use of the interconnectors.
- **Lack of a European TSO:** a European TSO, as a European body, is needed to facilitate energy transactions at European level.
- **Lack of a European Regulator:** a European market needs the application of common rules permitting players to fulfil transactions.

IV.- CONGESTIONS

As the Commission points out in the strategy paper at the European market there are congestion points and **GEODE** supports any measure to remove them. However **GEODE** considers that congestions can not be used as an "excuse" to close national markets as it has been done to block the market.

GEODE agrees, in principle, with the Strategy paper as considerable progress to remove barriers has already been achieved, for example charges associated with exchanging electricity across borders have now been removed from 1st January 2004, facilitating a more reasonable use of the interconnectors.

a.- cross border electricity trading charges mechanism: **GEODE** supports this system and it is a progress specially as it removes charges associated to electricity exchange from 1st January 2004.

b.- inter-TSO compensation mechanism: **GEODE** supports this mechanism as the concrete way to allocate charges according to real energy flows. This mechanism should be submitted to the control of regulators.

c.- single price areas and regional markets: **GEODE** agrees with the Commission proposal of introducing redispatching mechanisms between single price areas but, it is necessary to go a step further by introducing redispatching at regional markets too, when the Commission proposes to use market based mechanism to deal with congestions.

d.- auctions mechanisms: **GEODE** agrees in principle with the idea of using market based methods for allocating capacity being non-discriminatory so that all participants should have an equal chance of obtaining capacity, whether it is for long term or short term transactions or for large or small customers.

Groupement Européen des entreprises et Organismes de Distribution d' Energie

General Delegation: DELAS & PRAT- Paris, 205- 08008 Barcelona - Spain - Tel. (34) 93 414 22 77- Fax (34) 93 209 53 07- e-mail: geode@retemail.es

GEODE-GEIE: 49-51 Rue de Trèves Bte. 1-B-1040 Brussels. www.geode-eu.org

The problem is that market based mechanisms are very complex systems and small distributors and independent players can not afford to deal with them, avoiding small players and new players to trade at European level as only large companies linked to TSO's have access to these mechanisms.

To deal with market based mechanisms needs to have access to information about capacities, lows and generation, information that is only available to TSO's, creating two different levels of traders: high level traders —normally linked to TSO— with capacity to have information and resources and lower level traders, that have not.

Then the use of auction systems to solve congestion is a way to contribute maintaining national markets closed and dominated by national players.

At the same time, market based mechanisms are an incentive to TSO's not to solve the lack of capacity, as they implied additional profits to the interconnector owners. Therefore there is no incentive to remove congestions.

e.- redispatching or counter-trading mechanisms: **GEODE** considers these mechanisms should be usually used to deal with congestions. Of course it implies costs that should be included in the transmission tariffs and therefore paid by all consumers as all them benefit from the effects of a European single market.

These mechanisms are a real incentive to remove congestions, opposite to other market based mechanisms referred. Redispatching mechanisms are a cost pressure to the TSO. Therefore even if the Commission proposes to use these mechanisms just at the single price areas, **GEODE** considers they should be applied to al regional markets as a first step and then very quickly to all European Member States.

GEODE recommends European Commission to launch an study to evaluate the cost of using redispatching mechanisms where there is a lack of capacity in the interconnections, in order to demonstrate that benefits for consumers being able to choose their supplier are higher than the costs of using redispatching mechanisms.

V.- UNBUNDLING

GEODE agrees with the Commission that unbundling between functions of network operator and network owner is a key point to create a single market, as it would potentially avoid conflicting interests regarding transmission revenue or other competitive market activities.

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A real single European market could only be achieved if TSO are totally independent.

VI.- EUROPEAN TRANSMISSION SYSTEM OPERATOR

The Strategy paper points out the key role of TSO's and **GEODE** agrees that it is needed greater co-ordination between TSOs. Improvements in the regulatory framework in Member States should already increase the level of cross border exchanges and accordingly competition: It is a first step for a European TSO, that guarantees transactions between Member States, managing European market as a national market.

VII.- EUROPEAN REGULATOR

GEODE supports the Commission proposal of establishing a European Regulatory Committee for Electricity and Gas (ERCEG). The European market needs "common rules" permitting players to make transactions within a clear framework.

VIII.- IMPROVING INTERCONNECTIONS

GEODE agrees with the Strategy Paper about the need of improving interconnections. **GEODE** considers that introducing redispatching mechanisms could be an incentive to improve interconnections as these mechanisms oblige TSO to afford a cost, while auctions mechanisms provide them significant revenues coming from maintaining lack of capacities.

Therefore the modest target fixed by the Commission of increasing the interconnection level between Member States should be, at least, in the range between 10%-20%. In certain Member States with very concentrated generation facilities, a higher degree of interconnection is desirable.

IX.- MEASURES TO DILUTE MARKET POWER CONCENTRATION

GEODE totally agrees with the Commission measures propose to dilute market power of dominant generating companies and to prevent the abuse of dominant position. However the most efficient way to fight against market concentration is a European regulation that obliges large companies to compete between them at European level and that avoid them keeping national markets blocked.

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GEODE-GEIE: 49-51 Rue de Trèves Bte. 1-B-1040 Brussels. www.geode-eu.org

Barcelona, 7th January 2004

Groupement Européen des entreprises et Organismes de Distribution d' Energie

General Delegation: DELAS & PRAT- Paris, 205- 08008 Barcelona - Spain - Tel. (34) 93 414 22 77- Fax (34) 93 209 53 07- e-mail: geode@retemail.es

GEODE-GEIE: 49-51 Rue de Trèves Bte. 1-B-1040 Brussels. www.geode-eu.org



**Union of the Electricity Industry – EURELECTRIC Comments on the
Commission’s Strategy paper “medium term vision for the internal
electricity market”**

June 2003

**Union of the Electricity Industry – EURELECTRIC Comments on
the Commission’s Strategy paper “medium term vision for the
internal electricity market”**

June 2003

These comments have been drafted by the EURELECTRIC Working Group
"Market Regulation " on May 2003:

Members of the Working Group " Market Regulation" are:

Gunnar LUNDBERG (Chairman) (SE)

Abdelalli BADACHE (DZ), André BALDAUFF (LU), Ayse CANSIZ (TR), José CASAS
MARIN (ES), Nathalie CHADEYRON (FR), Laroussi CHEBBI (TN), Zlatko R.
CHEREPNALKOSKI (MK), Roald HAUGEN (NO), Annette INTERHOLZOVA (SK),
Andras KACSO (HU), Torsten KNOP (DE), Katarzyna KOSTRZYNSKA (PL), Denis
LINFORD (GB), Gabriela MUNTEANU (RO), Leif NIELSEN (DK), Peter O'SHEA (IE),
Dimitri PAPAKONSTANTINOU (GR), Marja RASI-KURRONEN (FI), Jacob RAZON
(IL), Véronique RENARD (BE), Daniel SCHALCH (CH), Jaromir SILHANEK (CZ), Joana
SIMOES (PT), Giovanni TAGLIALATELA (IT), Eric VAN VLIET (NL), Juan Eduardo
VASQUEZ MOYA (ES), Fridolin ZANON (AT), Bernd-Michael ZINOW (DE)

Anne-Malorie GERON (EURELECTRIC), Eva HOOS (EURELECTRIC)

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The Union of the Electricity Industry - EURELECTRIC, formed as a result of a merger in December 1999 of the twin Electricity Industry Associations, UNIPEDE and EURELECTRIC, is the sector association representing the common interests of the European Electricity Industry and its worldwide affiliates and associates. Its mission is to contribute to the development and competitiveness of the Electricity Industry and to promote the role of electricity in the advancement of society.

Union of the Electricity Industry – EURELECTRIC Comments on the Commission’s Strategy paper “medium term vision for the internal electricity market”

Introduction

The liberalisation of energy markets has brought tremendous changes in the way these markets are operated and developed. Therefore it would appear all the most necessary, in view of the uncertainties laying ahead in the post-liberalisation era, to draw up a road map for the coming decades. It is essential to identify and anticipate today the necessary changes and adjustments to ensure a homogenous development of the markets which is able to ensure a secure supply of electricity on a pan-European dimension, serving both industry and commerce and meeting the needs of our modern society as a whole.

For all these reasons, EURELECTRIC strongly welcomes the European Commission’s initiative to draw up a Strategy Paper with a medium-term vision and to launch a broad consultation with all stakeholders. With this Position Paper, EURELECTRIC intends to actively contribute to this important debate and prepare for a fruitful discussion at the Rome Forum of 8-9 July.

The first part of this paper is dedicated to general comments relating to the structure and the philosophy of the Strategy Paper. The second part goes through the paper chapter by chapter and sets out more detailed comments.

General comments

EURELECTRIC notes that the new March 2003 draft of the Commission’s Strategy Paper is a much more structured and elaborated version, which introduces a number of significant improvements on the first outline, notably along the lines highlighted in our December letter. While this undoubtedly constitutes a positive start in the process of drafting a road map, we believe nevertheless that still more needs to be done if we want to develop a real, comprehensive picture with respect to the development of an internal energy market within the horizon of 2020-2030.

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- **A wider strategic vision is necessary**

The objective of this Strategic Paper should aim to design a stable regulatory framework capable of providing sufficient harmonisation to create a level playing field, combining dense competition with a robust industry. This strategy should be underpinned with a more encompassing medium term vision including competition, security of supply, investment, public service obligation, sustainable development, environmental objectives and an approach towards the developing world. Taking all these points into account would result in a more comprehensive road map on the further necessary steps toward a successful internal electricity market. We welcome the basic reliance on competition, the aim of harmonising framework conditions and the focus on market oriented regulatory instruments. We look forward to the further development of a comprehensive road map, which will contribute to the necessary regulatory stability.

- **Status of the paper: how does it fit into the liberalisation package agenda and the Florence discussions?**

The Strategy Paper does not limit itself to merely making an assessment on the issues which need to be addressed in the future but also includes practical steps, including indicative tables. We appreciate this concrete approach but we wonder how this new agenda can be linked in and how it will interact with the liberalisation package agenda and the Florence discussions. It seems to us that this agenda has been developed without sufficient account being given to the time table of the liberalisation package (1st July 2004/ 1st July 2007). Seeking to develop one price area within the regional markets by 2006 before the package has been fully implemented, and a sufficient level of harmonisation between market structures has been reached, does not seem realistic. Therefore, we would recommend that the Strategy Paper should better integrate this central timetable and seek greater coherence. Furthermore, we note that on the basis of work capacity/ delivery as evidenced in the developments at the Florence Forum, the indicative tables are quite ambitious in terms of the work load imposed on both CEER and ETSO.

- **Changing approach: from a European integrated market to regional markets**

The Strategy Paper is based on the basic fundamental of a progressive integration within regional markets until 2006 and then between these markets by 2010 (underpinned with the approach of one price area and implicit auctioning at the borders). With this new approach, the Commission could be potentially introducing a change in paradigm. Prior to “European integration”, the focus would be on “regional integration” for a transitional period. While this seems to be an attempt to find a pragmatic approach, it would nevertheless be a change in the Commission’s strategy and in the way competition should be achieved in the European Union.

EURELECTRIC recognises the development of regional markets but would like to stress that there are several questions that must be solved to enable functioning regional markets. Therefore, it needs more in-depth consideration and discussion before a formal view is taken. Care should be taken that regional aspects do not develop autonomously and that the Commission does not lose focus on overall EU coherence.

- **Industry: an essential partner in the success of the completion of Internal Electricity Market**

Ensuring consistency in national energy policy and regulatory models within the EU internal electricity framework will be key to the success of the market. Nevertheless, creating the proper conditions for maintaining a sustainable Electricity Industry should be regarded as an equally important objective, which cannot be dissociated from the achievement of a successful internal electricity market. We believe that this point is not sufficiently addressed in the Paper, which places excessive weight on market concentration but seems to ignore crucial issues for the future of the Industry and the market, such as the importance of well-designed, stable and consistent regulatory frameworks and the need to create favourable investment climate and investment incentives. EURELECTRIC looks forward to being continually involved in the very important process initiated by the Strategy Paper.

Detailed comments

Introduction

Although the Strategy Paper is only intended to look at the developments in electricity, we believe that specific attention should nevertheless be given to **convergence in the liberalisation of the electricity and gas markets**. A successful energy market implies a homogenous and parallel development of competition in both the gas and electricity markets, which offers the same benefits and business opportunities to all market participants.

CHAPTER 3 – FULL IMPLEMENTATION OF REVISED ELECTRICITY DIRECTIVE AND REGULATION
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For the parts of this chapter which look at the implementation of the liberalisation package and the Florence discussions, we will not restate the views that we have widely expressed, but would refer here to our previous Position Papers⁹.

The most important item in this chapter is the new objective of ensuring integration within regional markets by creating a single price area and solving congestion through implicit auctioning by 2006, subsequently achieving integration between these regional markets, notably through co-ordinated implicit auctioning by 2010.

Further work needed on regional markets

We consider that the Commission should clarify this strategy, in particular indicating in greater detail how this single price area in each regional market is to be achieved and whether this approach requires the establishment of a power exchange in each regional market. With regard to the regional markets, as set out on page 3, we wonder what the driving criteria for shaping the map were. In our view, it would be logical that the regional markets follow the potential major physical congestion, not the national borders. This is all the more relevant to the so-called “core market” composed of Germany, Austria, Switzerland, France and Benelux, where the congestion between most of these countries seems to have been simply ignored.

Market splitting: attractive model but not feasible for the whole of Europe in the mid term

To facilitate the discussions on congestion management mechanisms, a preliminary short analysis from the Commission on the pro's and con's of the varied applied methods all over the European Union could have provided a helpful basis and introduction.

⁹ Regarding the liberalisation package, see Position Papers of February 2001 on the further liberalisation of the Electricity Markets and of April 2002 on the latest developments on the draft Electricity Directive. Concerning cross-border trade issues, we would refer to our Position Papers of September 2002 on the more permanent mechanism, of June 2001 on the harmonisation of G and L at EU level and of November 2000 on congestion management.

As we have stated in the past (Position Paper November of 2000), in an ideal world, **market splitting** appears to be a very attractive solution, but the prerequisites for establishing such congestion mechanisms are far from being met (the existence of power exchange or power-pool arrangements and sufficient harmonisation on exchange patterns - timetables, bid format, market clearing procedure). For this reason we can only reiterate our statement that “explicit auctions would be the preferred and more acceptable option for capacity allocation in the mid term horizon”. For all these reasons, the objective of implicit auctioning by 2006, - ie even before the final opening date of the energy markets under the new Directive - seems to us particularly ambitious.

We would rather recommend that, as a first concrete and feasible step, increasing use be made of explicit auctioning and that market-based mechanisms be introduced at all borders, in accordance with the guidelines of the 6th Florence Forum.

Co-ordination of TSOs: better acting as one

Whereas the first outline envisaged the creation of one single TSO, this aim has been abandoned in the second draft of the Strategy Paper. We do not regard the question of merging TSOs as essential as long as there is proper **co-ordination among TSOs** (which is already existing to a certain extent within ETSO) so that, at regional level, they can be seen as acting as one. Thus, we believe that greater co-ordination among TSOs is an important goal and that the interface presented to the market should be gradually standardised and harmonised.

The need for liquid wholesale markets

The development of liquid wholesale markets is playing an important role in the further development of electricity markets. Liquidity is vital to the efficient operation of power and gas markets as it helps to ensure a good quality reference price, which in turn feeds into longer-term decisions on investment, and provides a means of managing risk. Therefore, care should be taken to ensure favourable and compatible regulatory regimes for energy trading, with the aim to facilitating trading all over the European Union.

CHAPTER 4 “IMPROVED INTERCONNECTION BETWEEN MEMBER STATES”

In this Chapter, the Commission reiterates the overall objective of an average increase to 10%, in the level of interconnection between Member States, which was first presented in its Communication of December 2001. In addition, the Commission is also looking at ways to stimulate investment, notably through an increased rate of return and the development of merchant interconnectors.

Infrastructure projects should be determined on economic grounds

Increasing the level of interconnection is of course an important issue for the development of electricity markets. However, we do not think that setting a notional standardised target across all EU borders is the most appropriate way to do so. In our view, interconnector investment should be determined primarily on economic grounds including security of supply.

Where one Member State has a significant cost advantage through a non-transportable natural resource such as hydro-power, or where the costs of transporting the primary fuel are greater than that of electricity transmission, as can be the case for coal, then a high electricity export from that Member State can be expected. However, where there are few differences in cost base, then there is little rationale for high volume trade.

Increasing interconnection: not the only solution

It is also incorrect to assume that building interconnectors is the only way to resolve congestion – the construction of new generating plants in areas of high demand and/or increasing of transmission capacity will often be a more cost-effective alternative. There are also various other mechanisms such as co-ordinated redispatch and countertrading, which can deal with this problem.

Favourable climate for investment

The incentives proposed by the Commission go in the right direction. It is important to create a favourable climate for investment in new interconnectors, incentivising TSO and encouraging an entrepreneurial approach. The basic problem should be addressed: the investor in an interconnector is typically not the one – and even not that country – which benefits from the establishment of the interconnector. The necessary monetary flows must be ensured in order to create incentives for the investment. It must also be noted, - particularly in the case of merchant lines -, that conflicts of interest may arise between the users of the interconnectors, and the owners of the installation, the former having an interest in greater capacity while the latter would logically seek to obtain revenues from the congestion. It must be ensured that any additional benefits obtained from the management of the interconnections lead to more investment or a reduction of the tariffs.

Underground cables: inappropriate for overcoming environmental/ planning obstacles

EURELECTRIC has highlighted in the past that the need to stimulate investment is not the sole problem in developing interconnections but that in a number of cases, infrastructure developments face lengthy authorisation procedures and public resistance. The Commission's proposal to remedy this through the use of underground cables is most unlikely to be a viable option, given the huge cost differentials involved, and would result in a significant increase in tariffs.

CHAPTER 5 FACILITATING COMPETITIVE CHOICE BY CUSTOMERS

In this chapter, the Commission addresses a number of considerations regarding the customer switching models and the role of the supplier of last resort.

Enabling competitive choice by customers and ensuring effective customer switching procedures are the goal of European energy market-opening. Potentially the numbers of people exercising this opportunity will be very large, since all Europeans have access to electricity. The industry will have to solve many technical questions if it is able to handle large numbers of customers switching their supplier.

Moreover, establishing procedures that make it easier for a customer to change supplier implies a cost and it does not seem unfair to expect this cost to be paid by those who benefit from switching.

In the large majority of cases the electrical energy consumed by household customers is not metered in real-time, but companies usually rely on estimated typical consumption patterns, or so-called load-profiles. The actual consumption is typically measured 1-4 times per year. Before expanding hourly metering to cover all customers, establishing load profiles is therefore important to reduce the cost of metering household customers and small industries. In the long term, the trade-off between real time metering (automatic meter reading) and the use of load profiles or hourly meters must be based on the cost of the technology and the need of consumption flexibility in the market.

Considerations on the supplier of last resort

With regard to the supplier of last resort, our consistent position¹⁰ has been that even though the initial supplier of last resort may be a distribution company, it is preferable that the supplier of last resort be selected through a non-discriminatory procedure compatible with EU rules. This procedure should be completed as soon as possible after the original supplier has left the customer. With regard to the tariffs applicable to this supplier, prices should be reflective of the full cost of supply or otherwise allow for compensation for the extra costs. Regarding the appropriateness of introducing a price cap, please refer to our comments on the next chapter.

Customer switching: industry standards are preferable

The Strategy Paper calls on CEER to come up next year with a definition of best practice for customer switching procedures. We believe that our association should be closely consulted, and could co-operate with CEER on this. Work has already begun within EURELECTRIC with regard to the identification of best models of customer switching. We are currently studying the different European models for customer switching, with the intention of coming up with recommendations for best practice for the switching procedures. We are confident that we can actively contribute to this discussion, by pointing out practical solutions for customers and the industry.

¹⁰ Position Paper « Union of the Electricity Industry – EURELECTRIC comments on the latest developments on the draft Electricity Directive” – April 2002

CHAPTER 6 MEASURES TO REDUCE THE PROBLEMS OF MARKET CONCENTRATION

In this chapter, the Commission looks at ways to reduce so-called concentration in the market, through a wide range of instruments such as divestment and capacity release programmes, and also restrictions in import capacity bids in case of dominant position and the introduction of price caps in the wholesale and balancing markets.

Answers to structural problems should be sought elsewhere

In so doing, we feel that the Commission is not proposing the right answers to the structural problems affecting the development of the electricity markets, notably congestion and lack of interconnection. Big players should not be considered responsible for this situation or for the fact that their size is already of a European dimension whereas the market dimension is still lagging behind. It should also be borne in mind that the electricity sector is basically a capital intensive industry and the critical mass is therefore rather large. This, in our view, should not be considered as a threat but as a guarantee for the efficient operation of the sector and for providing necessary security of supply.

Big players should not be discriminated against because of their size

Reading this chapter gives the impression of an overall and systematic suspicion towards the big players in the electricity market. EURELECTRIC supports the establishment of a market with well functioning de facto competition. Both bigger and smaller players will have a role to play in various parts of this market. No player – or no group of players – must restrict competition. Big players can exist in the market without abusing their position. Calling for divestment and related measures merely because of the size of market players would constitute unfair discrimination, which cannot find any justification under competition law. There is a consistent principle under competition law that dominant players in a market do not raise any concern as long as these players do not abuse their dominant position. Thus, it is clear that behaviour - not size - is the criterion under competition law. We would therefore highly recommend that the Commission review this chapter along these lines.

The need to develop a robust, competitive and sustainable industry

We also believe that the issue as how to ensure a robust, competitive and sustainable electricity industry has not been addressed in the Strategy Paper. The developments of the markets has shown that a bad regulatory framework can quickly erode the industry's potential and further attention should be given besides the mere customer protection to the quality of regulation notably with respect to simplicity, transparency and investor-friendly legislation. It is essential to ensure that regulation will develop in a homogenous and consistent way so that it will not further introduce market distortions at national level and thus reinforce the regionalisation of electricity markets. These risks can be partly avoided if high-level dialogue and co-operation between regulators are established. Co-ordination both between regulators and TSOs¹¹ will be crucial to enhance the coherence of the market, and this should be further emphasised in the Paper.

Price caps detrimental to the market

¹¹ see comments made on page , the proposal in this chapter for « a single system operator for the region concerned » is not relevant.

Price caps in the wholesale market are most likely to deter investment. Furthermore, this would mean greater uncertainty as to the value of the underlying elements for derivatives contracts, with consequent serious impact on the attractiveness of derivative products as a tool of risk management. All in all, liquidity both in the spot market and in the derivatives markets would be reduced, posing a serious threat to a liberalised market, in which transparency is key. For the same reasons, we would make the same comments about price caps on the retail market. The negative effects that can be exerted by such price caps on all the market players and consumers involved were graphically illustrated by the situation that occurred in the Californian electricity market.

The need to ensure well functioning balancing markets

As stated previously in these comments, we believe that liquidity in the wholesale markets will play an important role in the development of electricity markets. Therefore, sound and well functioning balancing markets are also an essential element and greater integration between them should be sought.

Pools

Regarding the last remark on pools, we would not support the contention that pool based systems necessarily amplify the effects of market concentration. However, we agree that a pool should never be mandatory in the sense that it rules out other alternatives as bilateral physical contracts, financial contracts, etc.

CHAPTER 7 CONSISTENT APPROACH TO GENERATION ADEQUACY

In this Chapter, the Commission sketches the scenario of a European electricity market still characterised by overcapacity but likely to see that capacity reduced over time, and looks at ways to enhance investment in generation - notably through capacity payments to generators, price floors and obligations on retail suppliers.

In its assessment, the Commission rightly acknowledges the crucial importance of adequate generation with a view to ensuring long term security of supply, but at the same time recognises the complexity of this task and the ambiguity of potential measures such as capacity payments.

We consider in the first place that prices should deliver important signals for investment in generation capacity and it is clear that a period of high prices will be needed to reward such investment. However, some form of mechanism, might be considered, capable of providing enhanced investment signals, especially concerning peak load generation. EURELECTRIC is currently undertaking work on how to ensure investment in both network and generation facilities and intends to deal with this chapter in further detail when the findings are available by the end of this year. Streamlining authorisation and planning processes should also be encouraged.

In relation to the sharing of generation capacity, the potential for exploiting the different timings of the demand peaks must not be overestimated. Peak-coincidence should be analysed in further detail before drawing any conclusions.

We also believe that further attention should be paid to how fuel diversity should be encouraged.

CHAPTER 8 CONSISTENT SUPPORT FRAMEWORK FOR RENEWABLES

The Commission looks under this heading at subsidies to electricity generation and their potential side-effects on competition. This also includes further consideration of emission trading and the Commission acknowledges the need to further consider the interaction of emission trading with the market for electricity.

Renewables and emission trading should be treated separately

The impact on competition of promotion measures for renewable energies and the introduction of emission trading schemes should not be neglected as these may create additional trade obstacles. Having said this, we would not place renewables and emission trading on the same level with respect to the reduction of greenhouse gas effect. While this is the primary goal for emission trading, this is not the case for renewables which furthermore is a rather low-efficient way to reach this objective. For this reason we would like to see a clear separation between the treatment of renewables and emission trading.

Market-based mechanism is best

We welcome the Commission's analysis of the market distortions resulting from feed-in tariff schemes and the superposition of various different support mechanisms. This clearly shows that the promotion of renewables can only be achieved through market-based support mechanisms (a view which we have consistently supported¹²). Transparency of costs is crucial. Market-based mechanisms also offer the best way of addressing this requirement.

Renewables & CHP: further consistency and harmonisation needed

It is vital to ensure compatibility not only between different national supports but also between different EU promotional systems and different promotional systems within a given country. We are quite sceptical that the Commission's goal of adopting a common framework for renewable support can be reached. As we have stated in the past, current national support schemes are most likely to consolidate over the years so that it will be even more difficult in the future to find a common EU-wide support model. This highlights the need to review as soon as possible the current national renewable supports, in order to favour market-based oriented mechanisms at European level. It is furthermore surprising that the principles advocated by the Commission with respect to the use of market-based mechanisms, are not reflected in its own proposal for CHP. Furthermore, with a view to maintaining EU coherence, the development of a multitude of trading systems should, as far as possible, be avoided.

Emission trading schemes must not create market distortions

As regards emission trading, we note with satisfaction that the Commission intends to look further at its interaction with the electricity market and we consider that this issue should deserve further developments in the Strategy Paper.

¹² See the following EURELECTRIC Position Papers: « promotion of renewables in the EU and possible harmonisation – October 1999 » and « EURELECTRIC remarks on the proposal for a renewable Directive – October 2000 ».

In this context, we would also refer to EURELECTRIC's GETS simulations (particularly GETS 1 and 2) which explicitly explored the inter-relationships and inter-actions between electricity and greenhouse gas markets. Specific attention needs to be focused on ensuring that the national allocation process does not create serious distortions. The issue as how to ensure that the allocation process does not unduly disadvantage those companies that have undertaken "early actions" will also have to be carefully addressed. Thus, EURELECTRIC would like to stress the contribution that the Electricity Industry will provide towards pursuing the EU Kyoto objectives through the planned emission trading regime. For these reasons, EURELECTRIC finds it inappropriate that electricity should be taxed for the reason of pursuing these very Kyoto objectives.

CHAPTER 9 REMOVING OTHER DISTORTIONS

In the preceding chapter, the Commission showed in its analysis that certain schemes, be they renewable support or an emission trading scheme, could have side-effects on competition. In Chapter 9, the focus is placed on market distortions resulting from differences in taxation (excise duties, VAT) or from state aid to primary fuels.

Introducing a certain level of harmonisation on taxation between the different Member States is essential to create a level playing field between the market players. We appreciate the Commission's intent to tackle this point under the Strategy Paper but wonder whether voluntary convergence of excise duties can be seen as a realistic alternative to the failure to reach agreement between the Member States.

The streamlining and clarification on the application of VAT rules to cross-border exchanges of electricity are most valuable and we look forward to their rapid implementation in the systems of the Member States.

The elimination of subsidies with respect to certain primary energy sources used for energy production must also be welcomed.

CHAPTER 10 RELATIONS WITH THIRD COUNTRIES

This Chapter looks at the progressive implementation of the liberalisation package by the candidate countries together with some alignment of third countries (South East Europe and Mediterranean Ring) with the energy “acquis communautaire”. The situation of Russia and the former Soviet republics with regard to the potential trade volume through the interconnections is also addressed.

EURELECTRIC considers that a clear legal framework should be introduced for harmonising market structures with neighbouring regions after the forthcoming EU enlargement. Bearing in mind the advantages and shortcomings of multilateral and bilateral approaches for external trade in electricity, certain steps should be undertaken to harmonise (but not standardise) the international trade law (deriving from WTO rules) and EU bilateral requirements comprising cost-based pricing, market rules, environmental standards and nuclear safety issues. How WTO rules apply to electricity trade with respect to competition, safety and reliability should be further investigated.

In addition, the date of 2007 for full participation of acceding countries in the internal market should be clarified.

The integration of Switzerland represents another important issue in the development of the electricity markets which seems to have been left aside. The Helvetic Confederation - which is an important transit country of the UCTE area but at the same time is not subject to the same level of commitments as EU or candidate countries (notably in terms of energy liberalisation and Kyoto commitments) - also needs to be addressed in such a strategic paper.



Head Office: 119 Chaussée de Charleroi B- 1060 Brussels

Tel: 32 2 542 06 87 Fax: 32 2 542 06 92

www.ifiec-europe.be

IFIEC Europe

Brussels: 2.07.03

European Commission draft Strategy Paper concerning

MEDIUM TERM VISION FOR THE INTERNAL ELECTRICITY MARKET Position Paper

Electricity is a key variable cost for European manufacturing industry, with direct impact on the competitiveness of its diversified activities in a global market. Achieving effective competition in generation and supply, as well as adequate grid capacity and access in the scope of the Single Market objectives are essential conditions for the survival of industrial energy users. Industry requires freedom of choice in competitive electricity supply.

Based on its overview of the current electricity market situation, IFIEC Europe, which represents the interests of over 70% of the industrial energy users in Europe, offers hereafter its initial contribution to the important EU debate on medium-term strategy for electricity, including recommendations to ensure competitive electricity prices, a pre-requisite to maintain the competitiveness of industrial consumers in Europe.

- **Overview of the current market situation and suggestions for improvement**

National electricity markets within the EU have been gradually opening-up as solutions for non-discriminatory and transparent network access provided for under the Electricity Directive are implemented: appropriate regulatory mechanisms at both national and European levels are being put into place and independent TSO management in unbundled infrastructure entities is slowly emerging. However, the Single Market for electricity has yet to be achieved.

For the industrial energy consumers in IFIEC Europe, the main challenge today is to ensure that the full market opening under the revised Directive is effective, with non-discriminatory access to a diversified and competitive supply of electricity that meets the current and future requirements of customers throughout Europe. Strong vigilance is required at this crucial point to keep the internal energy market process on track. In particular, efficient mechanisms must be put into

AEGE (ES)	AICEP (I)	A.P.I.G.C.E.E. (P)	EIUG (UK)	EKV (CH)	FEBELIEC (B)	IBEC (IR)
Francisco Giralte,2 28006 Madrid Tel: 34 91 411 28 11 Fax : 34 91 782 46 26	Via Tiburtina 912 00156 Roma 39 06 40 71 724 39 06 40 80 16 29	Salgados da Povoa Apartado 88 2616-909 Alverca 351 210 30 04 10 351 210 30 05 01	Broadway House Tothill street London SW 1 H 9NQ 44 207 654 15 36 44 207 222 27 82	Pfulggässlein, 2 Postfach 309 4001 Basel 41 61 269 84 44 41 61 269 84 45	Sq Marie-Louise 49 1040 Brussels 32 2 238 97 11 32 2 231 13 01	Confederation House 84/86 Lower Baggot St. Dublin 2 353 1 605 15 30 353 1 638 15 30
IFIEC-GREECE (GR)	OEKV (A)	TT/Energy Sector (SF)	UNIDEN (F)	V.E.M.W. (NL)	VIK (D)	
1 Sekeri 10671 Athens Tel: 30 1 36 93 604 Fax: 30 1 36 93 615	Museumstr., 5 1070 Wien 43 1 523 75 11 43 1 526 36 09	Eteläranta 10 00130 Helsinki 358 9 68 68 25 49 358 9 63 73 85	30 Ave de Messine 75008 Paris 33 1 45 63 02 66 33 1 45 63 61 54	Postbus 205 3440 AE Woerden 31 348 48 43 66 31 348 48 43 90	Richard Wagner Str., 41 45128 Essen 49 201 810 84 11 49 201 810 84 30	

place to closely monitor developments in the market place. Competition authorities should be mandated to take a more pro-active stance in promoting competition in this field.

In this respect, IFIEC Europe would like to call urgent attention to three key issues which, if left unchecked, risk undermining the competitiveness of industrial energy consumers, with permanent and grave consequences for their future development in Europe :

- **lack of effective competition in the electricity market,**
- **insufficient available transmission capacity and abusive grid access charges,**
- **excessive surcharges and taxes on electricity.**

The cumulative effect of these issues is an alarming increase in delivered electricity prices. In order to reverse this trend, appropriate measures must be taken as soon as possible.

1. LACK OF EFFECTIVE COMPETITION IN THE ELECTRICITY MARKET

In some countries, effective competition has not emerged because strong, dominant players continue to retain control of the national market.

Examples vary, from countries where no competition has been introduced at generation level (ELECTRABEL in Belgium and PPC in Greece) to countries where one dominant player continues to control the national market (EDF in France).

In some other parts of Europe, where competition was beginning to emerge, the number of generators and traders/suppliers has dramatically declined over the last three years due to consolidation within the electricity sector.

Examples are the mergers between RWE/VEW, BAYERNWERK/PREUSSEN-ELEKTRA, EDF/EnBW, VATTENFALLI/HEW/VIAG, ELECTRABEL/EPON, NUON/ENW et al., MEGA Limburg/PNEM and EGD/Ijselmij, as well as the proposed take-over of Reliant by NUON..

In addition, increased horizontal integration of the electricity and gas industries hinders the competitors of the incumbent utilities as risks for new investments in gas-fired power plants grow.

Prime examples are the mergers between E.ON/RUHRGAS and RWE/ThyssenGas/WFG.

Consolidation has been intensified recently, in spite of numerous protests from consumers, institutional and other parties; this trend is likely to continue, reducing the scope of competition for Europe at large.

In parallel, independent traders have abandoned the European wholesale market, reducing liquidity and leaving trading activities in the hands of a few integrated incumbents, resulting in further erosion of competition.

A pre-condition to effective competition in the electricity market is the availability of ample generation capacity. In situations where oligopolistic structures exist, the incumbent players tend to retain generation capacity, or even moth-ball plants, to tighten the supply-side of the market.

As alternative supply offers vanish due to lack of competition, wholesale electricity prices for base-load consumption have been rapidly increasing since 2000 (for example, from 40 to 50% in Germany, France and Belgium). The reasons given for these dramatic price hikes seem to be arbitrary.

For example, higher fuel prices linked to the threat of war in Iraq were offered as an explanation for higher electricity prices in 2003; since the war, the decrease in fuel prices has not been reflected in electricity prices.

The speed at which concentrations are occurring at both national and transnational levels is unfortunately proving to be faster than the development of competition via the growth of cross-border trade.

IFIEC Europe recommendations for improvement :

In order to reduce anti-competitive effects of concentrations and promote competition in the relevant (national or regional) markets,

- **increase the number and type of suppliers in the different national or regional markets by limiting market share per player, for a duration compatible with achieving real competition, via asset sales, split-ups (e.g. England and Wales) or virtual generation capacity ;**
- **reduce the cost of developing new power plants : cost of administrative compliance, cost of connection, cost of back-up power, development of effective competition in the gas market ;**
- **scheduled shut-down and moth-balling of significant generation capacity should be published, thus allowing regulatory scrutiny to avoid abusive behavior ;**
- **data concerning the de-commissioning and commissioning of power plants should be published, allowing regulatory control to ensure the adequacy of supply/demand evolution ;**
- **improve the terms and conditions for interconnections within the enlarged EU ;**
- **enforce existing competition law to promote competition, ensure against abuse of dominant positions of suppliers and establish pro-competition merger and acquisition policies.**

2. INSUFFICIENT AVAILABLE TRANSMISSION CAPACITY, ABUSIVE GRID ACCESS CHARGES**2.1. Non-discriminatory network access****2.1.1. Strict Unbundling of TSO and DSO activities**

In liberalized markets, electricity transmission and distribution remain de-facto monopoly activities which need to be treated accordingly. Availability of grid services at lowest cost and adequate quality is of central importance to the smooth-functioning of the whole electricity market.

Regulation and/or control of transmission networks needs to pay particular regard to ensuring that all market participants are entitled to access the network on non-discriminatory terms.

Costs must be properly controlled and accounted for, and monopoly profits from transmission and distribution service providers must not exceed the low level of risk these businesses face.

IFIEC Europe recommendations for improvement :

- **In order to ensure confidentiality of highly-sensitive commercial information regarding market transactions, grid operators should be subject to a strict code of conduct in the exercise of their technical and economic functions.**

- **The most effective and best long-term guarantee to avoid conflicts of interest and possible discrimination is *ownership unbundling*, whereby the infrastructure accounting and management operations are under the responsibility of independent, legal entities, and whereby transmission and distribution are clearly separated from other generation and supply/trading activities open to competition. This is the clearest approach to ring-fence such monopoly services and to make their services available to all market participants.**
- **To improve transparency of monopolistic services, grid operators need to make information concerning grid costs, revenues, reliability statistics and other relevant data available not only to the regulatory authority but also to their customers.**

2.1.2. Access tariffs

The management of grid investment and operations is not generally conducted in the most efficient manner possible. In particular, current management and investment do not lead to the lowest possible costs that are compatible with customer requirements regarding reliability.

Instead, the risk remains of cross-subsidies between transmission and distribution revenues, on the one hand, and generation and supply costs, on the other hand.

Transmission pricing is not always globally cost-reflective, based on rate-of-return and efficiency criteria. In particular, return on investment does not reflect the low level of risk associated with this activity.

Ancillary services are made available by the transmission system operator (TSO) in order to balance the system. Balancing power must be purchased by the TSO in a transparent way without giving an unjustified advantage to incumbent power suppliers. Abusive behavior by the suppliers of balancing power that can result in excessive costs for the grid users must be avoided.

IFIEC Europe recommendations for improvement :

In order to improve the efficient management of the grid and ensure non-discriminatory access to grid services,

- **integrate adequate efficiency and reliability criteria into the price regulation mechanisms concerning access to the grid ;**
- **ensure that the national regulator has full and independent authority to fulfill his duty, and in particular to avoid excessive grid charges and cross-subsidies ;**
- **ancillary services must be made available through non-discriminatory and transparent mechanisms under regulatory scrutiny.**

2.2. Cross-border congestion management & allocation of capacity ; pricing & locational signals

IFIEC Europe considers that the long-term goal should be to establish mandatory coordinated management of the different national or regional grids as if they were one European grid. In the future, cross-border issues of a political nature should disappear, even though technical constraints might persist in certain parts of Europe.

Today, coordination between national or regional TSO's is based solely on voluntary procedures without binding obligations. Progress in addressing cross-border issues under the current transitional phase has been very slow.

Insufficient TSO coordination currently leads to inadequate data exchange, lack of physical flow modeling and excessive loop flows and phantom flows, thus reducing the net transfer capacity (NTC).

The primary features of any cross-border allocation and congestion management scheme must be simplicity, transparency, maximum use of transmission capacity and low cost.

All revenues received by TSO's in connection with congestion management and capacity allocation measures must be subject to regulatory scrutiny. The funds must be exclusively used to reduce congestions.

As long as imperfect market conditions prevail, IFIEC Europe opposes the generalization of auction mechanisms to allocate available transmission capacity. Instead, it favours recourse to a so-called "**dynamic toolbox**" whereby a mix of TSO management techniques is permanently adapted to different and changing local control area condition, on a case-by-case basis. This will involve co-ordination between two or more TSO's, as well as multiple-border solutions. When/if the congested situation improves, appropriate measures are adopted accordingly.

As explained in the IFIEC Europe working document dated 14.10.02 entitled "A Dynamic Toolbox" approach to cross border capacity allocation and congestion management", the IFIEC Europe "Dynamic Toolbox" contains three basic types of measures: soft measures to deal with grid organisation, calculations and information; allocation measures based mainly on current practices (pro rata, market-splitting, coordinated re-dispatching, coordinated cost plus, etc.); and timely structural measures to enhance the grid interconnexions where necessary.

Reservation of interconnector capacity linked to historical contracts are contributing to the lack of available transmission capacity at the borders.

In order to stimulate increased cross-border exchanges, cross-border prices should be non-transaction based (a "t" factor should be rejected).

IFIEC Europe supports the concept of a two-term price: a generation price component (G) should be based on electricity being supplied into, and a load price component (L) should be based on electricity being taken out of the system.

Locational signals should give appropriate incentives to grid users to improve the efficiency of the operation and investment in grid infrastructure. Locational signals may vary either on the generation and/or the load component of grid charges in order to stimulate growing grid use in areas of sufficient grid capacity. Accordingly, all locational signals leading to higher grid prices in so-called congested areas need to be fully offset by lower prices in non-congested areas. Additional income for grid operators needs to be avoided.

IFIEC Europe recommendations for improvement :

In order to enhance supply competition through cross-border exchanges,

- **data covering historical contracts need to be published,**
- **adjust national legislation so that national and regional TSO's are obliged to cooperate in a binding manner within an appropriate management structure(s),**
- **set a European timetable to maximize net transfer capacity (NTC) through TSO cooperation, de-bottlenecking of interconnectors and standardization of NTC calculation methods,**
- **mechanisms to allocate cross-border capacity should primarily aim to facilitate competition in supply, rather than create a market for transmission capacity; auctioning methods should be avoided as soon as possible,**
- **apply a basket of methods best adapted to changing local conditions, as defined**

- in the so-called IFIEC Europe “dynamic toolbox” approach** (*pro rata, market-splitting, coordinated re-dispatching, coordinated cost plus, etc.*) **to reduce short term congestions,**
- **promote coordinated system management initiatives between Member States at regional level,**
 - **resolve longer-term structural congestions by reinforcing and developing interconnections,**
 - **all network users should contribute to the network costs through the “G” & “L” components, and the G term should therefore be significant.**

3. EXCESSIVE SURCHARGES AND TAXES ON ELECTRICITY

Increasing surcharges and taxes are borne by electricity consumers to finance not only public policies relating directly to electricity, but also policies concerning other sectors. Unless urgent action is taken, the existing financial burden is likely to increase significantly in the next years as a result of new electricity and CO2 taxes, trading permits, special regimes to support renewable energies, public service charges, etc.

Charges relating to the financing of renewable energies are only one component among others in the total package of charges and taxes currently weighing on electricity prices.

In the UK, for example, electricity suppliers are required to have a percentage of their sales from renewable generation or pay a penalty of approximately 45€/MWh. The renewable obligation increases as a percentage of total supply from 3% in 2002 to 10.4% in 2011 and remains at this level until 2027, adding 1.9€ to 5.5€/MWh. This cost has been passed through to consumers.

The total direct surcharges and taxes borne by most industrial consumers of electricity in 2003 is estimated to be from 4 to 12 €/MWh, depending on the particular situation in each Member State.

Above and beyond these charges, the introduction of CO2 emissions trading schemes from 2005 may have a substantial impact on electricity prices (from 10 to 15€/MWh on average), if national schemes impose absolute caps on individual companies. By contrast, if national schemes impose relative targets linked to company performance, it is estimated that the impact would only be marginal.

The overall effect of assigning these additional costs to the consumer’s electricity bill, is to cancel all expected benefits from market integration and contribute to the current decline of choice and flexibility in the marketplace.

IFIEC Europe recommendations for improvement :

In order to mitigate the impact of surcharges and taxes on the competitiveness of the electricity price:

- **the cost-efficiency of public policies should be increased,**
- **energy, environmental and other public policy initiatives should not be financed through surcharges and taxes on electricity,**
- **surcharges related to public service obligations should be limited in scope and capped.**

Conclusions

European industrial energy consumers are currently operating under a competitive handicap, as compared to industries located in other regions of the world, such as China, the Middle East, Australia and South Africa, where energy prices are lower by 30-50%. The situation is particularly critical for the survival of energy-intensive industries in Europe.

- **The backward trend towards de facto oligopolistic market structures and behavior needs to be reversed.**
- **Efficient measures to actively promote competition and stronger integration of EU-wide markets need to be urgently put into place.**