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**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE
EUROPEAN PARLIAMENT**

Completing the internal energy market

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

**amending Directives 96/92/EC and 98/30/EC concerning common rules for the internal
market in electricity and natural gas**

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on conditions for access to the network for cross-border exchanges in electricity

(presented by the Commission)

1. INTRODUCTION

The opening up of the energy sector to competition was achieved much later than the opening of other sectors of the economy in the context of the objective set in 1985 to create, by 1992, a single market in Europe without internal frontiers. The Electricity and Gas Directives¹, which were adopted in 1996 and 1998 and had to be implemented in February 1999 and August 2000 respectively, partly filled this gap and represent an important step towards the creation of an internal market in these sectors. The objective of the directives is to open up the electricity and gas markets through the gradual introduction of competition, thereby increasing the efficiency of the energy sector and the competitiveness of the European economy as a whole.

Full opening of energy markets is a key factor in improving Europe's competitiveness and the welfare of its citizens. Electricity is the most important secondary source of energy in the European Union and the electricity industry is one of the largest sectors of the economy in Europe. Annual production is some 2 500 Terawatt hours², generating turnover of around EUR 150 billion. Natural gas is increasing its importance in primary EU energy supply, notably as the fuel of choice in power generation. The annual end-sales value of gas in the EU is estimated at around EUR 100 billion per year (incl. taxes).

Energy costs represent an important share of European production costs. In a global and competitive market place it is vital to ensure efficiency in energy supply and competitively based energy prices. The high oil prices experienced in recent months combined with the traditional oil-linkage of gas pricing in Europe has made the potential benefits of gas-to-gas competition, a key element of the creation of the internal energy market, particularly apparent.

In this Communication it is concluded that, to date, the effects of market opening have been positive, with regard to both the development of the market as such and the impact of market opening on related important policy fields, such as public service objectives, environment and security of supply. However, in order to complete the internal energy market and to reap its full benefits, further measures are now necessary. The nature of the measures which are required in order to provide for such an impetus are identified; they concern the degree of market opening ("quantitative proposals") and the minimum obligations regarding access to the network, consumer protection, regulation and the unbundling of the transmission and distribution function in integrated gas and electricity companies ("qualitative proposals").

On the basis of these conclusions, the Commission has tabled a formal proposal for the amendment of the Electricity and Gas Directives. Also proposed is a Regulation setting out principles and procedures regarding the conditions for access to the network for cross border exchanges of electricity.

The Communication thus meets the demand of the European Council of Lisbon of 23-24 March 2000 for rapid work to be undertaken to complete the internal market for electricity and gas. It also responds to the request of the European Parliament to the Commission to adopt a detailed timetable for the achievement of accurately defined objectives with a view to gradually but completely liberalising the energy markets³. On the

¹ Electricity Directive 96/92/EC, OJ L 27, 30.1.1997 and Gas Directive 98/30/EC, OJ L 204, 21.7.1998.

² Or 2 500 billion kilowatt-hours.

³ Resolution 'Liberalisation of energy markets' A5-0180/2000 of 6 July 2000.

basis of a previous Communication from the Commission⁴, which provided an initial analysis of the state of play with regard to electricity market opening and examined the actions to be taken to facilitate the functioning of the internal electricity market, the Energy Council of 30 May 2000 echoed the call of the Lisbon European Council⁵.

In preparing this Communication and before drawing conclusions, the Commission considered it important that the views of all parties with an interest in the matter, i.e. social partners, generators, gas producers, Transmission System Operators (hereinafter referred to as TSOs), distributors, consumers and other interested parties, were heard. Therefore, a public hearing was organised in September 2000. Nearly 120 associations and companies participated.

2. THE INTERNAL MARKETS FOR ELECTRICITY AND GAS – PROGRESS SO FAR

2.1. The legal framework

The EU Electricity and Gas Directives (96/92/EC and 98/30/EC) entered into force on 19 February 1997 and 10 August 1998 respectively and had, as the general rule, to be implemented into national legislation two years later.

While the two directives reflect the different specific technical and commercial characteristics of each of the two sectors, they are to a large extent based on the same key measures intended to open up the markets to competition. Exclusive rights to import and export gas and electricity and to build and operate gas and electricity facilities have been abolished following the implementation of the Directives. With regard to electricity, the construction of new generating capacity has also been fully opened up to competition.

With regard to the degree of market opening, the Directives set minimum targets for the opening of the market which, in the case of electricity, correspond to 30% of domestic consumption in 2000 and 35% in 2003. For the gas market, opening must be 20% in 2000 and 28% by 2003. This opens up the possibility for the largest consumers to choose their suppliers freely. With respect to gas, all gas fired power generators are also given this possibility, irrespective of their annual consumption.

Although opening an important part of the market (quantitative opening) is vital in developing competition, this alone does not ensure that the market works in practice. In this context, access to the network is a key issue, in particular taking into account that it is likely to remain a natural monopoly. In fact, it will in most cases not be economic to duplicate the existing networks that, therefore, constitute essential infrastructure. It is thus vital that market players can get fair access to the transmission and distribution grids including all the necessary related ancillary facilities ("third party access" or TPA). The achievement of this is more likely if the operation of the transmission and distribution systems (in practice, often operated by vertically integrated companies) are functionally separated from the other commercial interests, in particular generation/production and supply.

⁴ COM(2000) 297, "Recent progress with building the internal electricity market".

⁵ This Communication follows up on the Communication of 16 May 2000 in which the Commission gave its preliminary thinking on the way in which the liberalisation of the electricity sector could be completed.

The directives offered Member States the choice between a third party access system based on published tariffs applicable to all customers ("Regulated third party access") and a system based on negotiations between the parties, with published main commercial conditions ("Negotiated third party access"). With respect to unbundling, integrated companies are obliged to unbundle their different business activities by separating their accounts and preserving the confidentiality of commercially sensitive information through "Chinese walls". Moreover, the Electricity Directive requires that an independent (at least in management terms) transmission system operator ("TSO") is designated to ensure non-discrimination in system use between the incumbent and new entrants. In order to ensure non-discrimination, Member States are furthermore obliged to designate a competent and independent "dispute settlement" authority.

2.2. Implementation in practice⁶

All Member States have now adopted national legislation implementing the provisions of the Directive concerning common rules for the internal market in electricity. Belgium has yet to adopt the secondary legislation (implementing decrees) needed in order to apply the laws.

As regards gas, most Member States had implemented the Gas Directive into primary national legislation on 10 August 2000. For these countries the Commission is presently examining implementing legislation, to ensure that all the detailed requirements of the Directives are met. However, three Member States (France, Luxembourg and Germany) have yet to complete this process and infringement procedures have been launched.

Notwithstanding this, the initial experience in terms of implementing the Directives has been encouraging. In terms of market opening, for example, the vast majority of Member States are going further than legally required, and many have already decided to progressively move to full market opening.

EU gas and electricity market opening – 2000

	Electricity	Gas
Directive - min.	30%	20%
Austria	32%	49%
Belgium	35%	59%
Denmark	90%	30%
Finland	100%	90%
France	30%	20%
Germany	100%	100%
Greece	30%	0%
Ireland	30%	75%
Italy	35%	96%
Luxembourg	40%	51%

⁶ Detailed information can be found on the Commission's website:
 electricity – http://europa.eu.int/comm/energy/en/elec_single_market/index_en.html
 gas – http://europa.eu.int/comm/energy/en/gas_single_market/index_en.html

Netherlands	33%	45%
Portugal	30%	0%
Spain	54%	72%
Sweden	100%	47%
United Kingdom	100%	100%
EU - average	66%	79%

Furthermore, a clear majority of Member States have chosen structural measures accompanying market opening most likely to promote effective competition. In fact most Member States have opted for regulated third party access, the authorisation procedure for new generation capacity, full legal unbundling of transmission system operators, and the creation of independent regulatory authorities.

However, the trend towards regulated third party access and strict unbundling is less pronounced in gas than in electricity; only six Member States are either pursuing or seriously considering legal or ownership separation of the transportation and commercial supply activities of integrated companies.

At this stage therefore, it may be said that the state of implementation is encouraging. However, practical experience has already shown that further improvements and efforts are necessary to guarantee a smooth operation of the two markets.

As shown above, the degree of market opening differs considerably between Member States and without further action this trend is likely to continue. Whilst an overwhelming majority of Member States currently expect to liberalise all electricity customers by 2007 and gas customers by 2008, the picture is far from uniform. This situation has given rise to significant concerns among most Member States and market players. Their concern is that if this situation is maintained over a longer period, a real level playing field will not develop within the internal market. The reciprocity provisions of the electricity and Gas Directives have been designed, on a temporary basis, to address the issue of quantitative imbalances in market opening. However, experience in the electricity market has shown that such a clause may not be able to address all aspects of creating a real level playing field between Member States and operators⁷.

Indeed, at the Public Hearing, the importance of this was stressed by an overwhelming majority of those commenting. The significantly different competitive environment between Member States, for example, in terms of purchasing possibilities for cheaper electricity by SMEs, was viewed as an important distortion of competition. In fact over 80% of respondents at the hearing argued in favour of full market opening in the short to medium term.

Market opening is important, but to be effective in practice *fair and non-discriminatory access to the network* must be guaranteed. Whilst important progress has been achieved in this respect, in particular in electricity, there is still a need for further improvement. The numerous complaints received by the Commission, national administrations and regulatory/competition authorities, indicate that the ultimate goal of non-discriminatory access to the network has not yet been fully achieved in practice. Furthermore, undertakings

⁷ For example, increasingly sophisticated trading arrangements render it impossible to trace the origin of gas or electricity.

have indicated to the Commission that where clear and effective unbundling does not exist, together with standard and published third party access tariffs, this represents a significant barrier to market entry, as it is not believed that effective and non-discriminatory access to the network will exist. As such, this represents a significant limit to the development of an effective internal energy market. The systems and rules for third party access and the degree of unbundling play a fundamental role in this respect. These fundamental elements in the creation of fair competition have also been highlighted in the recent Green Paper on security of supply⁸.

It can therefore be concluded that in order for real competition to develop and provide tangible results both for suppliers and consumers, effective unbundling and proper, fair and non-discriminatory conditions for access to the European gas and electricity networks will be required. Without *both* of these conditions fulfilled, distortions of competition will always remain likely. With regard to the structure of the gas sector, the development of real supply-side gas competition in the gas sector at the up-stream end of the gas supply chain is also vital. Both the Gas Directive and competition policy may have an important role to play in achieving this.

These qualitative issues were also underlined by participants at the hearing as being vital to ensure the development of real, effective and fair competition. Indeed, over 70% of the respondents at the public hearing were in favour of strengthening existing unbundling provisions. In fact, aside from the representatives of the gas industry, only two of the organisations and companies present believed the current provisions in the Directive to be adequate to ensure fair competition. Furthermore, with respect to third party access, the system of case-by-case negotiated third party access, presently permitted by the Directive, was favoured by none of the respondents.

Also in this context, many participants underlined the importance of the existence of an independent national regulatory authority, and indeed some insisted on the need for having a regulator at the European level. A Regulator is important in arriving at a truly competitive market, especially to ensure non-discriminatory access to the network. Regulators have the competence to set or approve network tariffs and intervene *ex-ante* in the market, as opposed to competition authorities, which can only deal with competition problems *ex-post* and under procedures, which are not adapted to deal with the setting of tariffs.

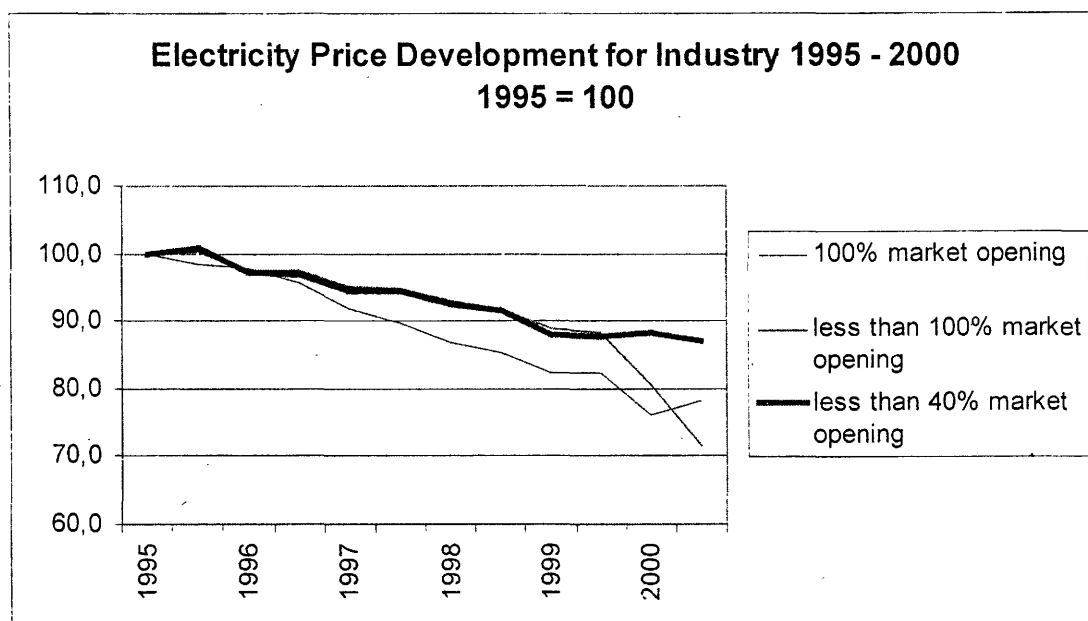
Finally, it is important to develop a common approach on this issue, on the basis of high standards, to ensure a level-playing field, particularly in the light of the development of similar rules in accession countries.

Thus, in conclusion, even though the existing market opening process is producing positive benefits for European competitiveness on the whole, there seem – already at this early stage – to be several weaknesses in the current legal framework which will need to be remedied if a fully operational internal market for gas and electricity is to be achieved.

⁸ COM(2000) 769, p. 71.

2.3. Price developments⁹

Electricity prices for industrial consumers have gone down in almost all Member States since the Electricity Directive was implemented. In general, the most significant price reductions can be found in the Member States that have opened more than the minimum legally required and which were the market exposed to effective domestic or import competition. This is shown in the following graph, which depicts the price developments for large industrial consumers since 1995.



Source: Eurostat.

Note: Prices exclude energy taxes and VAT and prices have been deflated. "Industry" is defined as having an annual electricity consumption of 2 GWh.

In the UK, which was the first country to liberalise, large price reductions have been seen since market opening started in 1990; prices for UK industrial users, for example, have been reduced, on average, by 35% in real terms since this date, compared to a Community average of 25%. In Finland and Sweden, where market opening started later, price reductions have also been significant; 20% in Finland since 1995 and 15% in Sweden since 1996. This is remarkable considering that the electricity price in these two countries was already amongst the lowest in Europe before market opening. Finally, in Germany, where market opening has taken place only recently, prices reduced rapidly, on average by 25% between March 1998 and August 2000.

Electricity price reductions are not confined to industry even though the effects have been less pronounced for households. The largest price reductions can be found in Member States where consumers are free to change supplier, and in particular where it is de facto easy to do so. Experience from Finland and Sweden shows, for example, that households were able to benefit from market opening once the requirement to invest in expensive metering equipment was abolished, and the concept of standardised load profiles¹⁰ was introduced. Since 1998,

⁹ The main source for this chapter is Eurostat, which twice a year publishes statistics on electricity and gas prices.

¹⁰ Under a standardised load profile, an assumption on the consumption of electricity of a type of small consumer is made, in volume and timing of demand. Any discrepancies with the profile are settled after periodic readings of the existing meter, eliminating the need for expensive minute-to-minute reading of the consumer's actual consumption and offsetting that against his/her contracted volume.

average prices for domestic consumers have fallen by 13% in Finland and by 16% in Sweden¹¹.

Thus, the price development of electricity has been very positive since the process of market opening begun in the European Union. However, we cannot conclude that prices will continue to decrease as market opening progresses. One of the most important determining factors in the price of electricity is the fuel used for its generation. The European Union has, for example, little influence on the development of the price of crude oil, and, at least at present, of natural gas, which in the majority of Member States is linked to the oil price. What a real competitive market does ensure, however, is that the price adequately reflects demand and supply and that efficiency gains are made, which were not achieved under the former market structure dominated by national monopolies.

The picture is less clear for gas. The effect on gas prices from market opening has been significantly distorted by the increase in oil prices and the development in the Euro/US \$ exchange rate. To some extent, this reflects the structural differences between gas production and electricity generation and the contractual arrangements for gas supply including gas price linkage to oil prices. Until real gas-to-gas competition develops, gas prices will not properly reflect the supply and demand situation of the gas market, independently of that for oil. Nonetheless in the UK, for example, the introduction of competition, along with other factors such as plentiful fuel supplies and the relative isolation of the UK market, did initially lead to lower gas prices. Between 1990 and 1999, average UK industrial gas prices fell by 45%, and by 20% for domestic consumers¹². However, following the entry into operation of the Interconnector from Bacton in the UK to Zeebrugge in Belgium in October 1998, gas prices in the UK roughly doubled during 2000, mainly as a result of increasing Continental gas prices linked to the price of oil which has increased considerably over the last 18 months.

Huge disparities in terms of gas price exist between Member States. This situation is likely to lead to distortions of the market in industries that use energy. It should also be noted that SMEs are at the moment often disadvantaged compared to large industrial customers in terms of prices, in particular if they remain captive customers without choice of supplier.

The monitoring of the internal electricity and gas markets is important to ensure the development of effective competition and also to ensure that lower prices for electricity and gas do not have a negative impact on the development of environmentally friendly technologies relating to renewables and energy efficiency. This concerns not only final electricity prices, but also competition indicators – examining for example the level of customers switching following market opening, changes in market shares, and the extent of new market entry by electricity companies. However it is important to also remember that just the threat of entry can be enough to encourage incumbent suppliers to reduce their prices. Analysis of market shares may not be an accurate indicator of the impact of liberalisation. It will therefore also be important to benchmark transmission and distribution tariffs across the Community, to ensure that national regulators have the information necessary to ensure proper comparison of domestic tariff levels. The Commission has recently launched a study on this issue, and this will continue to be part of its ongoing work.

¹¹ According to the Association of Swedish Electricity Distributors, 10% of all households have changed supplier between 1 November 1999 and 31 August 2000. The electricity prices have, however, also gone down for other households. The association estimates that 2/3 of all electricity suppliers have reduced their price.

¹² Source: Department of Trade and Industry: "UK Energy Sector Indicators - 1999".

2.4. The development of trade within the internal market

2.4.1. Current situation and trends in the internal market

The objective of the Electricity and Gas Directives is the creation of one truly integrated single market, not fifteen more or less liberalised but largely national markets. It is therefore encouraging that cross-border trade is also progressing. The total volume of trade in electricity, for instance, is equivalent to around 8% of total electricity production in the Community. As indicated in the Green Paper on security of supply¹³, this level of trade is much lower than in other sectors that have gained much from the internal market, such as telecommunications, financial services and industrial products.

The table below shows the level of physical exports and imports for each country for 1999¹⁴:

GWh	Imports	Exports
Belgium	8 918	8 204
Germany	39 304	38 018
Spain	11 858	5 905
France	4 471	66 668
Greece	1 813	1 652
Italy	42 539	527
Luxembourg	6 175	657
Netherlands	22 406	3 753
Austria	10 494	14 402
Portugal	3 513	4 453
Switzerland	20 856	30 123
Central Europe	5 030	13 012

Even though cross border trade is still limited, this does not mean that competition has not had an effect. In fact, as already noted, the price of electricity has reduced in nearly all Member States since the implementation of the Electricity Directive. Both competition at national level as well as the pressure of foreign competition has meant that, despite physical constraints, electricity producers have had to lower prices in order to keep their customers.

Furthermore, an important indicator of the extent to which a real, integrated internal market is developing, is the number of customers which have chosen to switch supplier, and whether new supplies come from a generator situated in another Member State. The Commission has therefore begun a monitoring exercise in this respect, and has requested such information, where available, from industry, Member States and national regulators. Whilst data is not yet available for all Member States, a number of indicators can already be identified.

¹³ COM(2000) 769, p. 69.

¹⁴ Trade within the Scandinavian system (NORDEL) and between Ireland and the UK are not included.

According to presently available information, which the Commission was able to collect, the number of customers having switched supplier is the highest in those Member States where market opening started early. For instance, in Finland around 20% have changed supplier, and in Sweden and the United Kingdom most industrial customers are believed to have changed supplier at least once since the introduction of competition in 1996. But also in the Member States where market opening was introduced later, a trend towards changing supplier is discernible. As regards France, Germany, Spain and Portugal, for instance, it is estimated that around 5% of eligible customers have changed supplier.

As regards the country of origin of the new supplier chosen by customers, there is only very limited information available. It appears, however, that most customers tend to opt for a national supplier, except in countries dominated by a single domestic supplier. It is important to monitor developments, and more information in this respect can be expected from the indicators the Commission, through EUROSTAT, is currently developing in order to monitor and assess the functioning of the internal market.

These developments demonstrate the beginning of a true Community competitive market. However, they also show that such a market is far from being completed.

In countries whose electricity market is dominated by one or two generators which produce all the electricity consumed in a country, a competitive environment, that is true market competition, can only be realised if a high level of imports is possible.

Furthermore, if cross border trade remains limited and markets are principally national, it is probable that generation capacity in the Union will not be efficiently utilised. For example, if physical restraints on exports remain, it is possible that new generation installations will be constructed in one country despite the existence of spare capacity in another that risks closure. Finally such a situation is likely to impact on the security of supply situation in the Union if new installations use an imported energy source – for example natural gas – while existing stations, risking closure, are powered by sources of energy which pose less or no problems in terms of security of supply, such as renewables.

In order to address these issues, it is essential that the possibilities for trade be maximised. In this context, three major actions are necessary:

- appropriate rules with respect to the pricing of cross-border trade;
- rules for allocation and management of scarce interconnection capacity; and
- where economically justified, the increase of existing physical interconnection capacity.

All of these issues represent an essential complement to the electricity and Gas Directives.

2.4.2. The work of the Florence and Madrid Fora

To deal with these issues, and in particular the first two considerations, the European Commission took the initiative to set up two new bodies – the Electricity Regulatory Forum of Florence in 1998 and the European Gas Regulatory Forum of Madrid in 1999. The issues mentioned above are technical and complex in nature and rapidly developing and the fora represent an appropriate and flexible mechanism for making progress. The Fora convene twice a year and consist of Member States' representatives, national

regulatory authorities, the European Commission, Transmission System Operators, electricity and gas suppliers and traders, consumers, network users, and power and gas exchanges.

For both of these Fora, the first step has been the creation of a body representing the transmission system operators (TSOs). Thus, for electricity the European Transmission System Operators Association (ETSO) has been created, which is a wholly new and separate body from other Electricity Industry associations or bodies. With respect to gas, a grouping of transmission system operators – GTE – was set up in the summer of 2000. In addition to this, national electricity and gas Regulators have created the Council of European Energy Regulators (CEER). These developments have proved important in reaching common ground on a number of the issues under consideration.

2.4.3. Transmission tariffs for cross-border trade in electricity

When the directive was adopted, each Member State dealt with the issue of tariffication for cross-border trade on the basis of their national system. This leads to considerable differences in tariff structures across the Community. Some countries impose charges only on consumers, whilst others put tariffs partly on generators, partly on consumers. Furthermore, some Member States impose charges on transits, others do not. This leads to important distortions of competition and, in many cases pancaking: the imposition of charges by all countries located between the generator and consumer, an approach that has no relation to the costs incurred. Thus, the first task of the Florence Forum was the agreement of a harmonised system for cross-border tariffication.

The Forum rapidly agreed the basic principles upon which such a tariffication system must be based; transparency, simplicity, cost-reflectiveness and non-discrimination. Furthermore, it subsequently succeeded in agreeing the basis of the mechanism that would be needed to implement these principles:

- the mechanism must be based on physical flows of electricity, not the distance between two contracting parties;
- where countries export significant net quantities of electricity, they cause physical flows and transits. These transit flows cause costs in countries hosting them;
- these “host” countries should be compensated for the costs caused to their networks by the market parties in the TSO area responsible for them;
- these compensations should be made via payments made between TSOs.

At the fifth meeting of the Florence Forum in March 2000 agreement in principle was reached to introduce a tariffication system for cross-border trade in electricity based on the above principles, for a provisional test phase of one year. Thus, TSOs would compensate one another for transits on the basis of financial calculations proposed and verified at national level. One important issue, however, was left to subsidiarity: the way in which national TSOs reflect the result of the compensations paid and received in their national tariff system. On this particular point it was agreed to leave the issue during the provisional one-year period to the discretion of the Member States. However, the national mechanisms would remain subject to overall coordination and control by the European Commission to ensure that the potentially different approaches at Member State level would not result in unreasonable distortion of the internal electricity market.

The Commission has not yet been prepared to endorse the entry into force of the provisional system. On the basis of the information received from all national regulators/competent authorities concerned, it could not be excluded that the potentially different approaches would result in unreasonable distortion of the internal market. In fact, different groups of Member States exist, falling into two broad categories: one group intends to introduce an export charge whereas the second intends to opt for a system of repartition of costs over all users of the network. Under such circumstances an introduction of the provisional system would be likely to lead to an unacceptable degree of discrimination between operators and distortions of trade, the more so as the level of the export charge envisaged by some countries would lead in many cases to considerably higher transaction costs than under current national tariff systems.

This was also stressed by representatives of large industrial consumers, traders, a number of Member States and a number of national regulators which on various occasions expressed their serious concerns with respect to the concept and the level of the intended export charge.

The Commission believes that already the provisional mechanism, though being temporary, needs to be based on principles that ensure a proper functioning of the internal market and does not contain elements, which constitute a barrier to trade. The most appropriate way to achieve this goal is that those two Member States envisaging the introduction of an export charge would examine whether they could refrain from introducing it or whether the proposed level of the charge could be significantly reduced, in order to limit possible distortions of trade and competition.

The Commission has undertaken further discussions with individual regulators/national authorities in order to resolve this issue with the objective of allowing the introduction of the provisional system in the near future.

However, in the course of these discussions the Member States concerned, in particular Germany, have declared to be willing to reduce their intended export tariff only under the condition that all other Member States introduce in turn an export charge of the same level, including those opting for a system of repartition of costs over all users of the network. Such an approach would, however, be unacceptable for the latter Member States and for the Commission. In fact, the Commission in its proposal for a definitive tariffication system outlined below (2.4.5.) suggests the principle of repartition of costs for all Member States and, consequently, it would be inconsistent to encourage those Member States willing to adopt this approach already under the provisional system to abandon it and introduce an export charge.

The introduction of a provisional system would have been an important step forward, in order to gain experience with the inter-TSO compensation mechanism and to achieve an abolition of existing tariffs, which would also lead to a simplification of the tariff structures.

However, if no satisfactory solution can be found, purely national systems will continue to be applied to cross-border transmission, until a robust definitive system enters into force in line with the proposal outlined below (2.4.5.). These transitory national systems will however remain subject to the competition rules of the Treaty.

However, even if the provisional system can finally enter into force, a number of important issues remain to be resolved before a definitive tariffication system fully in line with the basic principles mentioned above can be put into place. These include the precise methodology for calculating the cost of hosting transits, harmonisation of the methodology of financing the payments, and the harmonisation of certain aspects of national tariffication systems necessary

for the development of fair and undistorted trade¹⁵. It has not been possible to resolve these issues within the context of the Florence Forum.

2.4.4. Congestion Management

Whilst the Commission places a high priority on ensuring the construction of necessary and economically justified new interconnection capacity, it must be recognised that certain interconnections will remain congested for the foreseeable future. To develop the internal market it is vital, therefore, that the capacity that is available is allocated in a manner most likely to achieve a competitive internal market. The Florence Forum endeavoured to develop commonly agreed guidelines to ensure that this objective was met when Member States allocate capacity. A working group representing the Regulators, Commission, representatives of the Member States and, where appropriate, industry, was set up to draw up such guidelines, which were agreed at the last meeting of the Florence Forum in November 2000. In particular, they conclude that capacity should be allocated through market-based mechanisms. The adoption of these guidelines represents a step forward on this issue. However, their implementation in practice at national level is wholly voluntary in nature.

2.4.5. The need for further measures

The Florence Forum has proven a highly effective tool in developing a degree of consensus on highly complicated, rapidly evolving and controversial issues. Whilst it will remain an important instrument in this respect, in particular because it ensures the representation of industry and consumers, recent experience, in particular in the context of the intended introduction of a provisional tariffication system, has demonstrated that the process suffers from a number of disadvantages when it is necessary to reach concrete decisions on specific issues:

- the process is an informal one, based on bi-annual meetings lasting two days. As such it is inappropriate to take concrete decisions on very detailed issues that require in-depth discussions;
- to make progress on any issue requires full consensus of all parties;
- any decisions reached can only be implemented if all parties respect them; there are no procedures to ensure implementation;
- certain issues such as the calculation of the correct level of inter-TSO payments require regular detailed decisions to be taken. The Forum is not able to appropriately address such issues.

In this light, the Commission has concluded that to build on the progress achieved at the Forum, it is now necessary to adopt a legislative instrument for a clear decision-making process for making final progress on the issues of cross-border transmission tariffication and congestion management on interconnectors. If the full benefits of the internal market are to fall to consumers, such an instrument is vital. Furthermore, such an instrument will ensure the full involvement of the Parliament and Council.

¹⁵ This concerns notably the extent to which network charges are split between generators and consumers.

Member States alone cannot resolve this issue: to develop an effective tarification system a harmonised approach is imperative and cannot be developed at national level. As demonstrated above, an informal collaborative approach will not lead to the implementation of an appropriate system with necessary procedural and democratic safeguards. Such a proposal is therefore wholly in line with the subsidiarity principle, and indeed is made necessary by it. Thus, together with the adoption of this Communication, the Commission has decided to propose to the Parliament and Council the adoption of a “Regulation on conditions for access to the network for cross-border exchanges in electricity in the internal electricity market”¹⁶.

2.4.6. *Gas: The Madrid Forum*

The European Gas Regulatory Forum (the Madrid Forum) first met in 1999, and has now met three times.

Work is less advanced in this sector compared with electricity due to the fact that the Gas Directive was implemented 18 months later than the Electricity Directive. However, a number of important issues are now being actively addressed in the Madrid Forum and substantial progress is being made. The third meeting of the Forum held in October 2000 marked a turning point during which the main issues were identified and a number of key principles and a clear agenda for future work was set out.

A higher degree of correlation exists between the physical and contract path for gas than for electricity; in particular in relation to international transits bringing gas from fields of production to consuming markets. Gas transport between and through Member States has taken place for many years and more than 50% of all gas consumed within the EU crosses at least one border. Cross-border tariffs, based on physical flow through systems, already exist.

However, the correlation between physical and contracted flows will be eroded as a result of competition. It is therefore vital to ensure that European gas tarification systems take account of this fact and that third party access tariffs are cost-reflective. For example, tariffs should not be distance related when actual transportation costs incurred do not reflect the notional contracted path e.g. when swaps are involved.

Furthermore, whilst at present congestion has not posed a significant limitation with respect to the development of the European gas market, this is mentioned with increasing frequency as a potential barrier to trade and refusal of access. As a first step towards providing timely and accurate information on available capacities in the European gas grid, the gas transmission system operators have been requested to develop and publish a detailed map of the European gas network identifying available transmission capacities at all major entry and exit points of the network.

Finally, in order to facilitate the entry of new market players, the establishment of non-discriminatory grid access codes defining the rights and obligations of network users will be necessary. The Madrid Forum has called for inter-TSO arrangements to be established with a view to facilitate cross-border trade and to serve as a clearing mechanism for transport between different systems. These additional measures are clearly necessary to ensure that the full benefits resulting from the internal market are passed on to consumers. The work pursued in the context of the Madrid Forum will therefore need to be continued and completed. It is

¹⁶ OJ

not yet appropriate to propose the adoption of legislative measures with respect to issues such as tariffication and congestion management for gas, for the reasons mentioned above. Nonetheless, the Commission will keep this question under review and, if necessary, propose appropriate measures.

2.4.7. *Infrastructure: the development of an electricity infrastructure plan and the revision of the TEN guidelines*

– Electricity infrastructure

Stimulation of intra-Community trade in electricity depends on an optimum use of the existing interconnections between Member States, to be achieved, as outlined above, through the provision of fair and transparent rules on cross-border tariffication and congestion management.

Furthermore, and equally important, the construction of new infrastructure needs to be encouraged. The European transmission system is not yet sufficiently developed for the purpose of a real internal market with effective trade opportunities. This is not surprising since, in the past, interconnection lines were built by vertically integrated monopoly companies that did not have objectives beyond the improvement of their own system security and quality of service.

Two years after the entry into force of the Electricity Directive, the following three main interconnection bottlenecks exist:

- the Iberian peninsula remains, to a significant extent, isolated due to insufficient interconnection capacity with France and, as a consequence, the rest of the European network;
- interconnection capacity available to Italy (from France, Switzerland and Austria) is insufficient;
- the UK has only one interconnector with France with limited capacity; other projects are under examination, but implementation costs are high.

However, congestion problems also occur frequently at other points in the European network, for instance in the Benelux and Central Europe, and between Scandinavia and the continent.

In many cases, as at the France-Spain border, the only solution for developing trade is the construction of new connections or the increase in capacity of existing lines as far as is technically possible.

The construction of new infrastructure is often not a financial problem since the undertakings are prepared to invest in new networks in response to the demand on the market. In general, the problem is more of a political nature. Often, plans to construct new interconnection capacity run up against constraints calling for a balance to be struck between the public interest, whether Community or national, and local reservations about new infrastructure. Construction of new lines often raises local opposition at strategic points, for example, as mentioned above, around the Pyrennees or Alps, making it difficult to go ahead with the intended scheme.

The Community has to play a key role in this respect to ensure that the operation of the market is not hampered by physical constraints. In the Green Paper on Security of Energy Supply¹⁷ the Commission underlined that a lack of network infrastructure can slow the integration of national markets and thus limit security of supply. In this context, due consideration should of course also be given to the enlargement of the internal market and the additional interconnection capacity this requires.

To overcome these problems, effort must first be made to upgrade the capacity available on existing lines. Second, where necessary, the constructions of new lines must be facilitated. For this purpose, work should be initiated to elaborate a European interconnection plan identifying schemes of 'European interest' through a new procedure. A proposal will be presented in line with the forthcoming revision of the guidelines on Transeuropean Networks. Such a plan would help to overcome divergent local and national hurdles.

As a first step in forming this plan, and keeping in mind the objective of better coordination of trade between Member States, the Commission will launch a review with the following themes

1. An analysis of the definitions and criteria used when estimating available capacity at national level as well as by larger associations of networks (UCTE, NORDEL, UK); in certain cases a relative increase in declared available capacity could be proposed. Technical operating standards (maximum temperature of cables, for example) will also be examined and proposals submitted for revision and harmonisation.
2. Possibilities for technical improvements, such as the reinforcement of transformers or certain sections of cable or the introduction of new technology will be examined also with a view to increase physical capacity on certain interconnectors.
3. After this evaluation of possibilities for increasing capacity on existing networks the study will then establish the minimum level of interconnection between networks required for a functioning internal market and will identify the new connections that are needed.

In this context, it is important that the Electricity Directive ensures that Member States have available all necessary instruments to require such reinforcement, and that such measures are compatible with the Directive. Such provisions are therefore included in the proposed revision of the Directive.

– Gas infrastructure

As in the case of electricity, a well-integrated network is an essential precondition for the effective operation of the internal gas market as well as for security of supply. This requirement has been highlighted by the sharp rise in demand for natural gas within the European Union over the past decade and the particular situation that has emerged following the recent implementation of the Gas Directive.

Generally speaking, gas network interconnection within the EU is developing well, driven by a combination of market demand developments, the need for additional transport capacity and gas security considerations.

¹⁷ COM(2000) 769, p. 70.

Over the last few years, a large number of major new pipeline systems have been brought into operation, which have strengthened and further integrated the EU gas network both internally within the EU and in relation to external suppliers. Major new gas transmission infrastructure has been set up by gas operators in recent years to meet growing demand. These include projects in the northern part of the EU (including the UK-Continent Interconnector, new supply pipelines from Norway and related reinforcement in continental Europe), the central part (including various gas pipelines in Germany and Austria) and in the southern part of the European Union (new gas networks in Portugal, Greece and western Spain, new gas pipelines from Algeria).

However, increased demand and cross-border trade as a result of market opening may result in congestion and the need to deal with congestion issues similar to the ones mentioned above for electricity networks already seem to be emerging, e.g. at the Dutch frontier, in Ireland and in France (liquefied natural gas). An approach similar to the that envisaged for electricity networks with regard to identifying new interconnections, establishing appropriate tariffication and capacity allocation mechanisms will, as far as applicable, therefore likewise be adopted for gas networks.

– Revising the guidelines of Trans European Networks

In 1994 the European Union launched the political framework for the promotion of Trans European Networks (TENs) and from 1995 the TENs programme to cover electricity and gas networks started. Currently, 44 projects of community interest covering links between Member States and with third countries have been identified in the electricity sector and 46 projects referred to pipelines, LNG terminals and storage in the natural gas sector. The establishment and development of Trans European Networks for energy are contributing to the achievement of the internal market. It also contributes to the reliability and security of supply of electricity and natural gas in the Community and contributes to the cohesion effort. One of the priorities of the energy transeuropean network policy is the development of interconnectors between Member States and also internal connections, which extend these connections at national level. The development of trade in the framework of the internal market has led the Commission to propose a revision in the guidelines applicable regarding energy transeuropean networks which will stress the goal of the optimal functioning of energy networks in the context of the internal market for energy, with due consideration for its future enlargement.

With this in mind, a report on the implementation of the guidelines for energy trans-european networks, as well as a revision of these guidelines will be adopted shortly by the Commission. In this context it will be necessary to give appropriate support and focus on projects of particular environmental benefit, and in particular those likely to reduce the level of losses on the networks. This revision will include the resolution of problems of missing links in the network, congestion and the recognition of new requirements resulting from the implementation of the Electricity and Gas Directives and the growing number of eligible customers.

2.4.8. *Conclusion*

It is clear that the development of the conditions to promote trade in electricity and gas, must and will remain one of the priorities for the Commission. The adoption of the proposed Regulation on cross-border transmission tariffication and congestion management will represent a major step forward. Nonetheless, this initiative must be complemented by the construction of new infrastructure where technically feasible and economically justified. This latter task will receive particular attention from the Commission.

2.5. **Public service objectives**

In the context of the electricity and gas sectors, public service issues cover a wide range of aspects relevant to ensure the continued secure supply of high quality electricity and – where connected – gas at competitive prices. In the past, this overall public service objective has, in almost all EU countries, been pursued through the public ownership and operation of all electricity generation, transport and supply functions and all gas transport and supply functions. In these circumstances, only a limited amount of regulation was considered to be necessary to ensure the maintenance of these objectives. However, as privatisation and market opening has taken place, governments have adopted systems of regulation, usually via sector specific regulatory authorities, which lay down minimum standards of public service that must be respected.

In the EU, a number of public service objectives or standards are commonly pursued in the electricity and gas sectors. At the generation level, these concern obligations upon generators to respect minimum environmental standards, to generate minimum levels of renewable sourced electricity or other environmental objectives, or, occasionally, to respect minimum rules regarding the primary fuel source to meet supply security concerns. This aspect is also highlighted in the Green paper on security of supply¹⁸.

The key public service issues, however, exist at the transmission/distribution/supply level. In fact, in many respects, the operation of the transmission and distribution systems may themselves be considered public services; they represent a monopoly and an essential service for all citizens and industry. This is particularly the case in the context of liberalised markets, as the transmission and distribution systems represent the key infrastructure permitting competition to exist and develop. Thus, all Member States impose minimum operational or public service conditions on grid operators – for example requiring transmission and distribution companies to guarantee connection to the grid for all citizens under reasonable conditions. In addition to this, Member States often, and increasingly, require transmission and distribution companies to meet minimum service criteria – such as the time within which repairs must be effected and connections made.

Finally, at the supply level, Member States require companies who wish to operate on their domestic markets to acquire a licence to do so. The licence requirements include minimum criteria that must be respected by an operator, many of which are public service in nature. For example, some countries require uniform tariffs to be offered to equivalent customers and special tariffs to low income users, protection from disconnection for vulnerable customers and, for certain countries, requirements as to service standards, including conditions of contracts, transparency of information and complaint handling mechanisms.

¹⁸ See footnote 8.

The attainment of the highest possible standards of public service in these areas is a primary objective of Community energy policy. This reflects a basic Community policy objective regarding services of general interest, as underlined by the European Council at Nice on 7 and 8 December 2000, on the basis of the Commission's Communication on services of general interest¹⁹. It is essential that the gradual completion of the internal market contributes to this objective and thus to the maintenance and increase of public service standards. In particular, it is vital that all Community citizens have a universal right to be supplied at reasonable prices and that a minimum set of consumer protection standards is maintained. In this light, the Directives contain a number of provisions, notably Article 3²⁰ to ensure that Member States retain the necessary tools in this respect.

These provisions ensure that the measures taken by Member States to pursue legitimate public service objectives remain compatible with the Directives, providing the measures taken are reasonable and proportionate to the objectives pursued. To date, none of the measures taken by Member States have raised substantive questions as to their compatibility with the Directives. Indeed, no Member State has found it necessary to derogate from any provision of the Directive in order to meet their public service objectives.

The choice of the public service measures or standards adopted by Member States is in principle a matter of subsidiarity. However, the Commission, in the light of the fact that the maintenance and increase of such standards overall throughout the Community is an integral part of Community energy policy, has commenced a benchmarking exercise to compare the public service measures pursued in the Member States, the methods chosen to achieve them, and their success in meeting high standards. The results will assist Member States in maintaining and increasing standards.

The first part of this exercise, the completion of detailed questionnaires by Member State administrations and regulatory authorities, is now finished. On this basis the Commission will prepare a detailed Communication. However on the basis of information received, it is already clear that market opening, including the introduction of full competition, has in no way prevented Member States from pursuing a successful policy of maintaining high standards of public service. Indeed as market opening progresses, increasing public service levels have been attained through the imposition of licence requirements or conditions. National regulators monitor the respect of these conditions, and impose penalties in the event of non-compliance²¹. This approach has enabled Member States, by continually raising and improving standards, particularly at the transmission, distribution and supply level, to increase public service standards gradually and continually in a liberalised market.

Almost all correspondents at the public hearing stressed the importance of this issue. The overwhelming majority of those commenting on this issue confirmed that experience clearly demonstrates that public service standards – particularly with respect to issues such as ensuring universal service and consumer protection – can not only be maintained in a competitive market place, but increased.

¹⁹ Communication of 20 September, OJ C 17, 19.1.2001, p. 4.

²⁰ But also Article 9(2) of the Gas Directive (obligation to supply a given area), Article 17 of both Directives (refusal of access), Article 20 of the Gas Directive and Article 21 of the Electricity Directive (authorisation to build direct lines) and Article 23 of the Electricity Directive and Article 24 of the Gas Directive (safeguards in the event of a sudden crisis).

²¹ Including, where appropriate withdrawal of the licence.

In conclusion, experience clearly demonstrates that the creation of liberalised gas and electricity markets has not resulted in any decrease in public service standards. On the contrary, with appropriate regulatory control, liberalisation has in fact focused attention on the importance of the level of service provided, leading to improvements. The benchmarking exercise currently underway will permit all Member States to profit from such experience resulting in the attainment of the highest possible standards of public service throughout the Community.

Notwithstanding this, the Commission's experience to date concerning the implementation of electricity and Gas Directive indicates that it would be appropriate to take further measures to re-enforce existing provisions. First, the Commission considers that one basic public service objective – the right for household consumers to be supplied with electricity on reasonable conditions – must be viewed as an underlying objective of the internal market and therefore the Directive. It is thus proposed to require Member States to take the necessary measures to ensure that this is achieved. Secondly, it is appropriate to oblige Member States to take the appropriate measures to ensure that a number of essential public service objectives are met. They should therefore be required, both with respect to electricity and gas, to introduce appropriate provisions to ensure the attainment of essential public service objectives and notably:

- the protection of vulnerable customers; Member States will, for example, need to ensure appropriate protection from unjustified disconnection of, *inter alia*, the elderly, the unemployed, the handicapped, etc.;
- the protection of final customers; Member States will, for example, need to ensure a minimum set of conditions of contracts, transparency of information, and the availability of low-cost and transparent dispute settlement mechanisms;
- Social and economic cohesion; beyond ensuring universal service, where necessary, Member States will need to take appropriate measures to ensure supplies and connection at appropriate prices to, for example, peripheral areas;
- environmental protection; e.g. demand side management obligations and measures to promote renewables and cogeneration; and
- security of supply; notably through ensuring appropriate levels of maintenance and development of infrastructure, and in particular interconnections.

It is vital that the monitoring and benchmarking exercise mentioned above is completed and continues on a regular basis. Articles 3(2) of both Directives require at present that Member States notify public service obligations to the Commission. This applies, however, only to measures that require a derogation from the Directives. As mentioned above, Member States have not needed to derogate from the Directives to achieve public service objectives. To assist the benchmarking and monitoring process, it would be a significant improvement if Member States were required to notify the Commission of all measures taken. The Commission would issue a bi-annual report on the basis of this information and, where appropriate, issue recommendations of measures that Member States should take to ensure high public service standards.

2.6. Security of supply

The recent Commission Green Paper "Towards a European strategy for the security of energy supply" (COM/2000/769) examines in some detail the question of security of supply and its relation to the establishment of the internal market for electricity and gas. On these issues, it concludes that the "integration of energy markets contributes to security of supply, provided that these markets are truly integrated". In reaching this conclusion, the Green Paper notes, in particular, the vital importance that security of supply is recognised as an essential public service obligation. It further examines the provisions contained in the Gas and Electricity Directives that ensure that in an open and competitive market, security of supply can be met, both at national and Community level.

In essence, the Directives contain provisions that ensure that all the safeguards available to Member States to guarantee security of energy supplies remain unchanged by the introduction of competition. For example, Member States are obliged to provide for the possibility to launch tenders for additional generation capacity backed-up by purchasing agreements. They also retain the possibility, where necessary, to limit gas purchases from a single source. The creation of the internal market will mean a greater degree of interconnection of electricity and gas markets and an increasing number of suppliers. Subject to proper monitoring at both Community and national level and, where necessary, action under the relevant provisions of the Directives, the completion of the internal market for electricity and gas can therefore contribute to security of the Community's energy supplies.

It should be noted that these safeguards, properly implemented by Member States, guarantee that the situation that has developed in California, of a lack of supply and (artificially) escalating prices, will be avoided in the EU. In California, a combination of factors led to the present precarious and unacceptable situation in terms of security of supply; notably the existence of an obligatory pool leading to anti-competitive, oligopolistic pricing practices and the impossibility to offset risk through long-term supply agreements, rapidly increasing demand due largely to the internet explosion, a lack of new generation capacity due to an uncertain regulatory environment and extremely strict planning restrictions, retail price freezes, a lack of a possibility for the TSO itself to launch tenders for the construction of new capacity combined with power purchase agreements, a lack of interconnection capacity and supply arrangements with neighbouring states, and a lack of appropriate intra-state trading arrangements. The provisions mentioned above, notably the possibility for Member States to launch tenders where demand threatens to exceed supply, together with significant and increasing interconnection capacity between Member States, effective trading arrangements and careful monitoring at both Community and national level, means that the development of the "Californian experience" can be excluded in the EU.

However, given the vital importance of this issue – continued secure supplies of electricity is probably the most important public service objective – it is appropriate to reinforce the existing safeguards contained in the Electricity Directive on this point. In particular, it would be appropriate for Member States to be required to carefully monitor the state of the domestic electricity market, and in particular the existing demand/supply balance, the level of expected future demand, envisaged additional capacity under planning or construction, and the level of competition existing on the market. On an annual basis the Member States should be required to publish a report outlining their findings, and indicating any measures envisaged to ensure supply security. Furthermore, given that due to the highly interconnected nature of the EU electricity network, the relationship between demand and supply at the Community level is of vital importance for overall system security, the Commission, on the basis of the national

reports and its own monitoring work, should publish a similar Communication covering the Community as a whole.

2.7. Environmental consequences of energy market opening

The creation of an internal market for electricity and gas has been shown, in many respects, to have had positive environmental impacts due to the improvements in generating plants, increased operational efficiency and a switch to cleaner fuels in power production. On the other hand falling energy prices might not be conducive to the development of energy efficiency and renewables.

For example, between 1990 and 1998, the use of natural gas for power production increased by 128% while solid fuels decreased by 18%. In the same period, the average conversion efficiency of thermal power stations has increased by 6% and the carbon intensity (CO₂/GWh) has been reduced by more than 15%. The trend towards cleaner power generation plants can be expected to accelerate as market opening progresses. For example, in the United Kingdom, which was the first Member State to liberalise the electricity and gas sectors, the development towards a cleaner energy sector has been particularly significant. Here the share of natural gas increased from 0.5% in 1990 to 38.5% in 1999. The average conversion efficiency increased by 9.5% between 1990 and 1998. CO₂ emissions from power generation decreased by 27% in UK compared to only 3% in average in the EU in the same period.

However, the environmental consequences of market opening must be continuously monitored²². With market opening, electricity prices may decline and this gives rise to a number of environmental challenges that must be addressed. If the market price for electricity reduces, demand may increase, partly at least due to less intensive efforts in energy savings and energy efficiency. In the Green Paper on Security of Supply projections suggest that demand may increase by 20% due to lower electricity prices²³. Similarly, full competition may mean that electricity from new and less developed energy sources (e.g. renewables and combined heat and power) becomes less attractive. This could reduce the development towards a cleaner fuel mix in the electricity production.

Both the Electricity and Gas Directives provide Member States with the possibility to address these issues:

- Article 3 in both the Electricity Directive and the Gas Directive provide Member States with the possibility, in the general economic interest, to introduce public service obligations which may *inter alia* relate to environmental protection. For example, reductions in overall electricity bills do not preclude the adoption of tariff structures to encourage energy efficiency. These could be implemented through cuts to fixed charges, leaving price signals on the variable use of electricity unchanged. Appropriate regulatory incentives would need to be in place in order to encourage such innovative tariff structures to emerge.

²² The Commission has launched a study with the aim of assessing the environmental implications of a market opening up to 2010.

²³ See footnote 8.

- Articles 8(3) and 11(3) in the Electricity Directive allow Member States to require the operators of the transmission and the distribution system, when dispatching generating installations, to give priority to generating facilities using renewable energy sources or waste or producing combined heat and power.

A number of Member States have adopted such measures and have taken additional actions to ensure that high environmental standards are respected in gas and electricity production and supply. Community competition rules, and notably those concerning state aid, normally apply to such schemes. However, as seen in the treatment of such cases, these mechanisms are in principle compatible with the state aid rules providing their effects in terms of restriction of competition are not disproportionate to the pursued environmental objective, and the objective of increasing the EU's security of supply situation²⁴. Furthermore recent guidelines have been adopted highly favourable to support mechanisms for renewable sourced electricity.

To complement the measures taken at national level, the Commission has itself launched a number of initiatives:

- **Renewable energy sources.** The Commission has presented a proposal for a Directive²⁵ on the promotion of renewable energy sources in the internal electricity market. The aim is to ensure that the development of electricity from renewables will be in line with the overall EU indicative target of doubling the share of renewables in the gross inland energy consumption by 2010. On 5 December 2000, the Energy Council reached a political agreement on the proposal, which is likely to be adopted later this year.
- **Combined Heat and Power (CHP).** A strategy for further developing CHP was outlined in the 1997 Communication on CHP²⁶, which also proposed an indicative target of doubling the share of CHP in EU by 2010. The recent Action Plan on Energy Efficiency²⁷ reaffirmed this target and it listed a range of measures to promote CHP. The proposal for a revised large Combustion Plants Directive also promotes the use of co-generation. In the framework of the European Climate Change Programme CHP has been identified as a promising area for achieving emissions reductions.
- **Emission standards.** Emissions from power plants are regulated through the Large Combustion Plants Directive (88/609/EEC) and the Directive on Integrated Pollution Prevention and Control²⁸. On 22 June 2000, the Council (Environment) unanimously adopted a common position on the proposal for revising the Large Combustion Plants Directive. This increases the scope of the Directive and provides for more stringent limits for emissions from new plants.

²⁴ See footnote 8.

²⁵ COM(2000) 279 final, 10.5.2000, "Proposal for a Directive on electricity from renewable energy sources and the internal market for electricity".

²⁶ COM(97) 514 final, 15.10.1997

²⁷ COM(2000) 247 final, 26.4.2000, "Action Plan to Improve Energy Efficiency in the European Community".

²⁸ Council Directive 96/61/EC of 24 September 1996 concerning integration pollution prevention and control.

- **Energy efficiency and energy saving.** In April 2000, the Commission presented its Action Plan on Energy Efficiency, which calls for a 1% improvement of energy intensity per year compared to a business as usual, scenario. On 30 May 2000, the Council invited the Commission to come forward with detailed proposals for the implementation of the Action Plan. It is essential that efforts continue in this area immediately and in parallel to the market opening process. A fully opened market needs an internalisation of external costs to ensure a fair level playing field. The Commission will therefore promote initiatives in this sense, e.g. an EU-wide energy/CO₂ tax, strict rules on State aid, demand side management measures, measures to promote cogeneration and renewables which have a competitive disadvantage as long as external costs are not fully integrated. For example, the Commission will propose the following legislative measures in this field in 2001:
 - Proposal for a Directive concerning energy efficiency in buildings;
 - Proposal for a European Parliament and Council Directive on the environmental aspects of electric and electronic equipments;
 - Proposal for a European Parliament and Council Decision on a multiannual programme aimed at the promotion of renewable energy and energy saving (2003-2006) (follow-up to the SAVE and ALTENER programmes).

Furthermore, it intends to prepare, in 2002, proposals with respect to combined heat and power (CHP).

- **Energy taxation.** The Commission has proposed the extension of the present Mineral Oil Directive to also cover other competing energy sources, including electricity, gas, coal, lignite, etc. Furthermore, several Member States have introduced energy/environmental taxes to reduce energy consumption.
- **Potential future actions.** A number of additional and complementary measures are at present being examined at Community and national level. This includes, for example, the issue of green house gas emission trading. The Commission has launched a discussion on the issue in a Green Paper²⁹ in line with the Kyoto Protocol. The various working groups of the European Climate Change Programme which bring together stakeholders, Member States and the Commission are in the process of identifying possible policies and measures that could be recommended to the Commission with a view to meeting the EU's climate change objectives.

Conclusion

In many respects, market opening could be beneficial in meeting the Community's environmental objectives in energy terms. Notably, the introduction of competitive pressures has been seen to lead to the more rapid introduction of more efficient and cleaner thermal generating units than has been the case under monopoly conditions. However, with the potentially lower prices resulting from market opening, a number of complementary policies become increasingly important, as presented above.

²⁹ COM(2000) 87 final, 8.3.2000, "Green Paper on greenhouse gas emissions trading within the European Union".

The Commission is currently undertaking a study that will assess the overall environmental impact of liberalisation in the energy markets on the environment. The Commission will monitor the situation closely and, if necessary, propose further measures to safeguard the environment that, at the same time, complies with the internal market rules.

2.8. The effects of competition on employment

Though intervening with some delay, the creation of the internal energy market forms part of the 1992 objective to create a fully operational internal market in the European Union, with a view to foster growth and employment opportunities to the benefit of the citizens of the Union. Increased efficiency and lower energy prices as well as opportunities for new technologies resulting from the introduction of competition in the energy sector will, at least in the medium and long term, boost employment in the European industry as a whole.

The European Council at Lisbon in March 2000, when calling for the completion of the internal energy market, stressed the role of the internal market as a key element of the strategy of the European Union to “regain the conditions for full employment”, in order “to become the most competitive and dynamic knowledge-based economy in the world with more and better jobs and greater social cohesion”. Likewise, the European Parliament, in its Resolution on liberalisation of energy markets of July 2000, said that “competition is having a substantial effect on economies and consumers as a whole, such as ... increased opportunities for new employment, and is having a positive medium-term impact on the labour market in general economic terms”.

However, as regards short-term developments in the energy sector alone, the introduction of competition is likely to lead to a reduction in the workforce, as a result of the necessary adaptation of the national ex-monopoly companies to competition through appropriate restructuring measures at company level.

It is important to ensure that such job losses occurring in the transitory period during which companies in the energy sector are adapting to the new competitive environment are recognised and appropriately taken care of by national and Community policies.

Against this background and in order to deepen its understanding of the employment situation in the energy sector, both with regard to experience made so far and possible future trends, the Commission launched a study. This study was designed and completed in close collaboration with representatives of the social partners. Based on available statistics on the *quantitative* developments of the workforce in the energy sector, it describes and analyses in particular the *qualitative* aspects of the employment development in the electricity and gas industry in the context of market opening.

As regards *developments in the size of the workforce* in the two industries concerned, statistics show that the number of people employed in the electricity and gas sectors decreased between 1990 and 1998³⁰. Major reasons for this reduction, which in many Member States clearly started before market opening, have been technological progress and a tendency to “outsource” certain functions. However, market opening has played a role in accelerating the process, particularly in the electricity sector.

³⁰ On the basis of the available European and national statistics, it has been estimated that more than 250 000 jobs could have been lost in the sector between 1990 and 1998. However, statistics often only show employment developments in utilities as a whole and do not – in case of multi-utilities – differentiate between the different services provided, e.g. gas, electricity and water supply.

The reduction of the workforce was coupled with a change of the *skill profile* required by the industry. In fact, technical occupations for semi-skilled and skilled employees as well as middle management and associated clerical professions have been reduced over time. New job opportunities have been created in areas such as marketing, customer services, IT and business services. In addition, the emergence of new business activities, such as energy trading, has brought about new jobs.

As regards *the manner in which staff reductions were effected*, the 10 companies in the UK, Ireland, Sweden, Italy and Germany, which were covered by the case studies undertaken, have managed to effect restructuring in a socially consensual manner, for instance by applying voluntary early retirement schemes. In addition, a significant number of the larger companies surveyed had instituted re-training and redeployment programmes. Under such schemes retraining was offered, either to allow members of staff to remain with the company in a new position or to facilitate finding a job outside the company.

Market opening has thus had both a quantitative and a qualitative impact on the employment situation of the electricity and gas industry. Traditional skills have become less relevant whereas new job opportunities have emerged for skills that are important in a competitive environment, such as marketing and customer service.

Thus far, the reduction of staff numbers, where considered inevitable, has been done in a socially responsible manner, through early retirement coupled with retraining schemes. However, as market opening is moving ahead and restructuring continues, it is necessary that alternative measures at company level intended to accompany the restructuring process be further explored and reinforced. Such measures are, for instance, working time reductions and increased retraining, in line with the European Employment Strategy under which, in principle, priority should be given to retraining and redeployment over early retirement. Developing alternative measures is particularly important if the possibilities for companies to handle restructuring through early retirement become more limited over time, due to staff becoming younger on average. Best practice in this respect should be exchanged between companies and the social partners. The Commission will encourage such an exchange of experience, for instance in the framework of the sectoral dialogue committee "electricity"³¹.

The Joint Declaration by the social partners in the electricity industry, published on 27 November 2000, is an encouraging first step in this context³². In this declaration, the European electricity industry and trade unions representing employees in the sector launched a common effort to explore ways by which both businesses and their staff could benefit from changes linked to the development of the internal market and to reduce the social consequences of restructuring as far as possible.

The opportunities offered under the European employment strategy should also be taken into account. The strategy provides the proper framework for dealing with both the quantitative and qualitative aspects of management of change, in particular the *adaptability* and *employability* pillars of the strategy. Adaptability refers to the adaptation of the work organisation of companies as a consequence of the new industrial context. The objective of the employability pillar is to increase employees' skills to cope with change, and includes strategies of life long learning. Actions under these employment policy pillars require the

³¹ The Committee was set up on the basis of the Commission Decision of 20 May 1998 on the establishment of sectoral committees promoting the dialogue between social partners at EU level.

³² Available at www.emcef.org, www.epsu.org, www.eurelectric.org

establishment of a strong partnership between public and private actors at different levels and can be financed through the European Social fund in the context of programmes agreed between the Commission and the Member States.

Special attention must be given in this context to developments in the candidate countries. It is important to assist energy companies and governments in these countries in the process of restructuring the energy sector in a socially responsible manner, for instance through sharing with candidate countries the experience made in the Community in this respect. Further monitoring will be undertaken by the Commission in this respect and the countries concerned will be encouraged to strengthen this aspect under the PHARE programme. However, the employment effects of market opening in the energy sector might well make their impact felt most strongly in the candidate countries when they will have been integrated in the internal market and the PHARE programme no longer applies to them. The Commission shall ensure that this aspect of market opening in the candidate countries will receive continued attention and support, also when the candidate countries will have become members of the European Union.

In conclusion, it can be said that it has been possible so far to effect restructuring in a socially responsible manner. However, the situation needs to be closely monitored and, if necessary, additional measures taken, as market opening and restructuring of the industry moves ahead. All relevant players must contribute in order to find solutions that will minimise any negative social consequences of the restructuring of the European electricity and gas industry.

2.9. Trade with third countries

Electricity has been exchanged between the EU and neighbouring non-EU countries for many years, for example between the EU and Nordel member countries. Prior to market opening such exchanges were carried out by the former utilities in the framework of their monopoly position. However, the amount of electricity exchanged was relatively limited, due to technical limitations such as low capacity of interconnections between national systems as well as differing operating standards.

In the liberalised internal market, trade in electricity with third countries is likely to become more attractive. Companies are already increasingly negotiating with third countries on future deliveries of electricity. Furthermore, the situation with regard to technical limitations of interconnections is gradually improving. There are a number of projects aimed at improving connections between Eastern and Central European countries, including the Ukraine and Russia, to the electricity grids of the Community.

A potential intensification of trade in electricity with neighbouring countries would, in principle, be a positive development. It would increase competition, resulting in increased efficiency and possibly provide new investment opportunities for EU companies in neighbouring countries. However, it must be ensured that such an extension of the market is made on the basis of a level playing field for all economic operators. A fundamental precondition for the introduction of Community-wide competition in the electricity market is the existence of comparable framework conditions in all countries concerned.

In view of the potential for increased trade in electricity and the need to make such trade subject to certain conditions, clear legal rules need to be agreed and compliance must be ensured. The enlargement process and the intention to accelerate market opening have accentuated the need for such a framework. The Community needs to be aware of, and prepared for, the consequences of a further opening of the internal market with regard to its

trade relations with third countries. As regards electricity undertakings in third countries, they need to have a clear perspective allowing them to develop an effective and coherent strategy with regard to their participation in the internal electricity market.

With regard to gas, it is clear that the external dimension of the internal market is equally important. In view of growing import dependency, however, the issues are different. A reciprocal opening of upstream and downstream markets based on free trade and integration of EU and non-EU markets and closer and strengthened cooperation are important. Depending on developments, the Commission may consider whether specific initiatives are required in order to ensure external reciprocity.

2.9.1. Creation of a reliable legal framework for electricity trade with non-EU countries

It is necessary to create a reliable legal framework for such trade activities. As already spelled out in principle in the Commission Communication "Recent progress with building the internal electricity market" adopted in May 2000³³, such a framework could be established through the conclusion of regional or bilateral agreements with third countries concerned, where appropriate in the context of existing framework arrangements, for instance the Association Agreements concluded with candidate countries. It appears appropriate to look into the possibility of asking for commitments, on the basis of reciprocity, to address environmental and nuclear safety standards, in particular in order to prevent potential danger to the environment in the Community. Such arrangements would constitute a reciprocity-based framework for trade with third countries, thus ensuring equivalent access to the Community market and third country markets and the respect of basic environmental and nuclear safety standards. In the absence of any specific arrangements, existing international trade rules apply.

The Action Plan providing for technical assistance for the preparation of candidate countries to the internal energy market set up by the Commission in 1998 will facilitate the achievement of this objective. It puts the emphasis on the real need for assistance on regulatory issues, drafting legislation, operation of the market and transmission system, establishment of national regulatory authorities, etc. Tailor-made action is being organised to smoothen the transition process. In view of the proposed acceleration of the opening of the market in the European Union, the Commission will strengthen the Action Plan for technical assistance and its other efforts to assist the candidate countries in adapting their energy sector to meet EU requirements.

2.9.2. Next steps

The Commission shall identify – through the analysis of available information and bilateral contacts – countries, potential candidates for entering into a bilateral or regional agreement/understanding with the Community. In principle, such countries must have an electricity market organised in compliance with the basic principles of the EU Electricity Directive, both in quantitative and qualitative terms (i.e. with regard to the degree of market opening, third party access and unbundling) and must be prepared to grant access to the market for EU companies. Furthermore, the situation with regard to environmental standards applicable to electricity production and nuclear safety standards must be satisfactory.

³³ COM(2000) 297 final.

As regards the accession countries any such agreements must be fully in line with the accession negotiations and future stipulations of the Accession Treaties.

Once potential candidate countries are identified, the Commission would request the Council for a negotiation mandate on the basis of the procedure of Article 228 of the Treaty and enter into the negotiations. It is expected that first mandates could be requested in 2001.

Furthermore, it is necessary to monitor the effects in practice of the concluded agreements. It appears therefore appropriate to require Member States to report regularly to the Commission on past quantities and origins of imports under new bilateral or regional agreements or existing arrangements. The Commission would then produce a report on experience made and, if necessary, propose additional measures at the Community level.

3. CONCLUSIONS

Important progress has been made with the development of the electricity and gas markets, in both quantitative (percentage market opening) and qualitative (structural choices on unbundling, network access, etc.) terms. This has led to important price reductions, most significant in those countries with a high degree of quantitative market opening.

As regards *public service standards*, experience demonstrates that market opening, including full opening, has not resulted in any decline in public service standards. On the contrary, full market opening combined with effective regulation has led to increasing awareness and standards of public service. The Commission feels it is of the utmost importance that public service standards should not decline. Although all the evidence points to public service standards going up, the Commission feels it is important to stipulate at least that in all Member States universal service in electricity should be ensured, meaning the supply of high quality electricity for all households at affordable prices and that a minimum set of final customer protection standards are adopted.

Market opening has also proved compatible with the Community's objectives in terms of *security of supply* and *environmental protection*, provided the necessary complementary policies are pursued. Appropriate measures are in place or under preparation, at national and community level, to ensure that the progressive completion of the internal market contributes positively to the Community's objectives in these respects.

Measures can and are being taken to ensure that the necessary restructuring of energy industry takes place in a socially consensual manner compatible with the Community's objectives in terms of *employment policy*.

Neighbouring countries are already participating or will participate in the internal market, subject however to considerations of reciprocity and environmental protection compatible with the trade rules and necessary to ensure a level playing field. Bilateral agreements could lay the foundation for progress in this respect.

These developments are encouraging. However, the ultimate objective of a fully integrated market has not yet been achieved. Experience has shown that the provisions of the Electricity and Gas Directives regarding two key issues must be reviewed and strengthened in order to complete the internal market.

As regards the *level of market opening*, most Member States have gone further than requested by the Electricity and Gas Directives. However, the degree of market opening differs considerably between Member States. This situation, if maintained over a longer period, will prevent a real level playing field from developing within the internal market. Such a development was not anticipated at the time the Gas and Electricity Directives were agreed. At that time, it was not expected that an overwhelming majority of Member States would open their markets more than legally required, and certainly not to commit to full opening within a short fixed time scale. Thus the distortion of competition – both between electricity and gas companies, and between electricity and gas users – that presently exists, was not expected. Furthermore, the reciprocity provisions of the Directive do not provide an adequate solution to this distortion.

Market opening is important, but to be effective in practice *fair and non-discriminatory access to the network* must be guaranteed. Though important progress has been achieved in this respect, in particular in electricity, there is still a need for further improvement. Also, the standards differ between Member States, a situation that is likely to accentuate distortions of the market. The number of respondents that stressed the fundamental importance of these issues at the Public Hearing, both in order to create effective competition and a level playing field shows the importance of this issue.

The Commission believes that the conditions are right for a significant further step in the market opening process, leading to the rapid completion of the internal markets for electricity and gas. As mentioned above, an overwhelming majority of respondents at the Public Hearing confirmed the need to complete the internal electricity and gas market more rapidly. As underlined by these companies, consumer representatives and organisations, the benefits of a fully liberalised market are numerous.

Full opening of gas and electricity markets would provide a level playing field between Member States and for all market players in the internal market, which cannot be expected through the implementation of the current directives, as has been demonstrated above.

As regards the price of electricity in particular, the level of competition that has already been achieved in this area has led to important price reductions. These will maintain and enhance the general competitiveness of EU industry. Market opening is now moving forward quickly in most of the countries with which EU undertakings principally compete. The completion of the single market is vital to keep up with developments of the markets of our trading partners.

Also, competition will lead to a greater homogeneity of prices throughout the Community thereby providing a level playing field for both industrial and private energy users. This is of particular importance for small and medium sized enterprises which at the moment are often disadvantaged compared to large industrial customers, in particular if they are captive customers. In this respect, it is notable that a number of respondents underlined that it cannot be justified to continue to give a competitive advantage to large EU companies over small ones in terms of access to comparative electricity and gas prices. Given the importance of small and medium sized enterprises for the Community, such a situation can only be prejudicial in terms of competitiveness, innovation and employment.

Full market opening will also encourage innovation and the market penetration of new technologies. In fact, many new technological developments are taking place in power generation, notably with respect to micropower technology and renewable energies. Microturbines are increasingly presenting alternatives to customers, and fuel-cell technology is now being introduced. These technologies have considerable advantages for many

customers in terms of reliability, environmental impact and often cost. Furthermore, for peripheral areas, such technologies are particularly attractive. The completion of the internal market will provide a level playing field for all competitive technologies in terms of access to customers and will therefore accelerate the introduction of these new technologies.

Further market opening is also likely to increase service levels for customers, particularly at the final consumer level. The quality of service offered, for example in terms of repairs, new services and billing arrangements, are some of the areas on which undertakings compete. This has already been seen in countries where full market opening has taken place.

Finally, the development of "gas-to-gas" competition would be further facilitated by the completion of the internal energy market. At present, the price of natural gas in continental Europe is closely linked to the oil price parity. In Germany, for example, light heating oil prices increased by 50% between July 1999 and July 2000. Gas wholesale prices increased by 42% during the same period. The average December 2000 border price for German gas imports was up nearly 90% on the previous year. It is clearly in the Community's interest that gas-to-gas competition continually develops, de-coupling the oil/gas price relationship since this will improve the diversity of the supply of energy to the EU. The Gas Directive already envisages the development of gas-to-gas competition through the right to get third party access by eligible customers right up to the wellhead. As increasing numbers of eligible customers source competitively, this will require gas producers to increasingly compete between one another in terms of price.

The development of effective gas-to-gas competition in Europe may be hampered by the extent of long-term contracts in European gas supply and transportation. An effective way of opening up the European gas market and developing gas-to-gas competition would be to introduce gas release programmes by opening existing long-term exclusive supply contracts to third parties. A few Member States have introduced such programmes and other Member States should be encouraged to consider such programmes, which would increase liquidity in the gas market.

In order to achieve full market opening, both quantitative and qualitative elements must be addressed. It is necessary to fix a deadline for Member States to permit all customers, both industrial and domestic, to purchase electricity and gas from the supplier of their choice throughout the Community. This will ensure that an internal market develops rapidly and to the benefit of all Community citizens, but also to provide a real level playing field for all EU companies.

Second, it is necessary to ensure an effective system of market access – ensuring that eligible customers and generators are able to have effective and non-discriminatory access to the transmission and distribution grid and other essential infrastructure. Experience indicates that the achievement of the ultimate goal of non-discriminatory access to the network cannot be fully achieved on the basis of the current rules of the Directive regarding third party access and the level of unbundling. In this context, independent national regulatory authorities should be established in all Member States, as they play a pivotal role in ensuring non-discriminatory terms for access to the network. They should at least have the power to fix or approve transmission and distribution tariffs.

High standards must be assured with respect to both the conditions of third party access and unbundling, ensuring a high degree of independence – and thus impartiality – of system operators. Such standards should in principle be comparable in quality in all Member States in order to provide for a level playing field and avoid trade distortions.

The Commission has therefore concluded that proposals meeting these requirements should now be put forward to the European Council and Parliament. Furthermore, such proposals can reinforce the existing provisions regarding public service objectives. These qualitative proposals have already been identified in the Green Paper on security of supply that was adopted by the Commission in November 2000³⁴.

While it is true that such proposals follow relatively quickly after the implementation of the existing Electricity and Gas Directives, strong grounds exist for proposing new measures. First, market opening has proceeded far more quickly than expected in most Member States, resulting in more important market distortions than expected. Second, existing experience demonstrates that if effective competition is to develop, and a level playing field is to result, equivalent and robust minimum standards must be set regarding unbundling and third party access.

However, it is important that the completion of the internal market does not endanger but contributes to the attainment of the Community's goals in other important areas, such as consumer protection and the protection of the environment, security of supply and other public service issues. Therefore, as market opening accelerates, it must continue to be accompanied by appropriate measures in these areas, both at the national and the Community level. The Commission will closely monitor developments in this regard and make appropriate proposals when necessary.

It should also be underlined, that this next legislative stage is only one of the elements that will need to be undertaken to achieve an effective internal market. Whilst, for example, much has been achieved in the context of the Florence and Madrid electricity and gas fora, further progress is essential, particularly with respect, for example, to the cross-border tariffication mechanism and congestion management in the electricity sector. The Commission will formalise the progress that has been achieved so far in the framework of the electricity regulatory forum with legislative measures.

In particular for electricity, it is now necessary to provide for a formal legal framework building on the results of the regulatory Forum relating to cross border access to transmission networks. This will allow the adoption of Decisions on the matter that are directly applicable. The Commission has therefore decided that a proposition fulfilling this requirement should be presented to the European Parliament and Council.

Furthermore, continued progress will need to be made in adopting existing proposals in the environmental and taxation areas. To ensure that continued high levels of public service are maintained and increased, the Commission will continue its ongoing benchmarking exercise, and will adopt a Communication on this issue during 2001. The Commission will also continue work on security of supply issues. The Commission on 29 November 2000 has adopted a Green Paper (COM(2000) 769) on this issue, and continued work on this area will be important. All of these issues will continue to be priority areas for the Commission in parallel to the adoption of further legislative measures aimed at completing the internal markets for gas and electricity.

³⁴ COM(2000) 769, pp. 71 and 72.

EXPLANATORY MEMORANDUM

REVISION OF THE ELECTRICITY AND GAS DIRECTIVES

1. INTRODUCTION

The European Council in Lisbon of 23-24 March 2000 called for “rapid work” to complete the internal market and asked “the Commission, the Council and the Member States, each in accordance with their respective powers ... to speed up liberalisation in areas such as gas, electricity ... The aim is to achieve a fully functional operational internal market in these areas; the European Council will assess progress achieved when it meets next Spring on the basis of a Commission report and appropriate proposals”. The European Parliament equally requested the Commission to adopt a detailed timetable for the achievement of accurately defined objectives with a view to gradually by completely liberalising the energy markets¹.

The Energy Council of 30 May 2000 stressed “the importance and urgency of the conclusions reached at the Lisbon European Council” and invited the Commission “to present timely proposals for further action”.

In the Commission Communication “Completing the Internal Energy Market”², the conclusion is reached that proposals aimed at completing the internal gas and electricity markets can now be made to the Parliament and Council, which would not only achieve this primary objective but also be compatible with, and contribute to, the Community’s other relevant policies in this area.

The attached proposal to amend Directives 96/92/EC and 98/30/EC therefore meets the request of the European Council and the Energy Council; it follows the recent Green Paper on Security of Supply³ which highlighted the links between the acceleration of the integration of energy markets within Europe and the need to ensure security of supply.

2. OBJECTIVES PURSUED

As explained in the abovementioned Communication, if the Community is to create a real and effective internal market for electricity and gas, any proposal must contain both quantitative and qualitative elements:

- The progressive freeing of all electricity and gas consumers to choose their supplier (“quantitative proposal”). There are three reasons for pursuing an ambitious program in this respect. First, to ensure that all EU companies receive the benefits of competition in terms of increased efficiency and lower prices, leading to increased EU competitiveness and employment. Secondly, to ensure that EU consumers receive the full benefits of market opening in terms of lower domestic bills for electricity and gas. Thirdly, to ensure a level playing field between Member States in terms of market opening and hence to fully integrate the 15 national markets into one true and fully operational single market.

¹ Resolution ‘Liberalisation of energy markets’ A5-0180/2000 of 6 July 2000.

² OJ C

³ COM(2000) 769, p. 71.

- Improving, in structural terms, the Community electricity and gas markets (“qualitative proposals”). Experience in market opening, not only in the Community but also in other countries, has clearly demonstrated that certain approaches to market opening are far more likely to bring about the development of effective competition. The clear majority of Member States have adopted such an approach for electricity and a large number of Member States have also done so for gas.

As the internal market develops, particularly in terms of the abovementioned quantitative acceleration, it is therefore essential that methods by which market opening is implemented gradually converge between Member States if a real internal market is to develop on the basis of undistorted competition. This is equally necessary if all the possible benefits from the creation of the internal markets for electricity and gas are to be exploited and passed on to consumers.

It is generally acknowledged that third party access based on published and non-discriminatory tariffs, and a high level of unbundling, are not only conducive but necessary to ensure effective competition. To complete the internal market, it is not sufficient therefore to fully liberalise demand, but effective market structures must also exist. In addition to the need to ensure that the maximum benefits of competition develop to the profit of Community citizens, such measures are necessary to guarantee a level playing field between Member States and to ensure non-discrimination, notably in relation to vertically integrated companies enjoying a dominant position. Indeed, it has become increasingly clear that this issue is just as, if not more, important as the level of quantitative market opening if real reciprocity is to be attained between Member States.

In addition, it is appropriate that this proposal updates the Directives: certain provisions and options in the Directives have either become redundant, or have not been selected by Member States. This concerns the tendering procedure for liberalising generation (except as a back-up measure that can be taken for reasons of security of supply) and the single buyer model for network access. These can therefore be deleted from the Directive. This clarification is particularly important in terms of providing for a level playing field in terms of market structures of the gas and electricity markets in the countries that are candidates for accession to the Community. In addition, a number of administrative issues have been simplified in order to reduce red tape. This concerns obligations in the Directives that, in the light of experience, can be alleviated. Furthermore, a clarification has been made with respect to the provisions of both Directives with respect to the accounting unbundling requirements.

It also appears appropriate to repeal Council Directives 90/547/EEC and 91/296/EEC on the transit of electricity and natural gas in order to ensure homogeneous and non-discriminatory access regimes for transmission including when this involves cross-border transport in the Community. In order to ensure consistency and avoid confusion related to access regimes and terms, it is proposed to incorporate and streamline the rules of the transit directives into the proposal for a new directive on the completion of the internal energy market thereby allowing transmission system operators access, if necessary, to the grid of other transmission system operators on conditions that are non-discriminatory.

Finally, it is appropriate to improve the existing provisions regarding public service objectives, to permit an effective and continual benchmarking exercise, and to ensure that all citizens enjoy the right to be supplied with electricity at affordable and reasonable prices (universal service) and that they enjoy a minimum set of consumer protection rights.

These improvements to the Directives and the removal of redundant provisions will also provide more clarity and guidance to the candidate countries in the adoption of reforms of their electricity and gas sectors.

3. THE PROPOSALS

3.1. Quantitative proposals – making all consumers progressively free to choose their supplier

It is proposed that Member States make all non-domestic electricity customers (i.e. all industrial and commercial properties) free to choose their electricity supplier by 1 January 2003, and that this be extended to all customers (i.e. 100% market opening) by 1 January 2005.

As the opening of gas markets is still behind electricity (Member States had to implement the Gas Directive 18 months after the Electricity Directive), and gas companies have had less time to prepare, it is proposed that all non-domestic gas customers be eligible by 1 January 2004, i.e. one year later than for electricity. The same deadline is however proposed as that for electricity for the introduction of full market opening: 1 January 2005, as this period is sufficiently long to permit the EU gas industry to fully prepare for full competition, and will then ensure that both internal markets are operating in parallel. This is particularly important due to the increasing convergence between the two sectors.

These proposals are made taking into account the experience of those countries that have already successfully introduced full competition, and the time that has been necessary to make all the necessary preparations, both administrative, technical and legal/regulatory, to ensure consumer protection and the respect of necessary public service objectives. In particular, it takes account of the fact that the eligibility of domestic consumers, unlike the industrial and commercial sector, often requires important preparation in terms of billing arrangements and the development of customer load profiling⁴. It also takes into account the intentions of a majority of Member States to introduce full competition under a timetable similar to the one proposed. The Commission Communication on completing the internal energy market clearly demonstrates that the main objectives of the Community in this area, notably high standards of public service and consumer protection, environmental protection, security of supply and socially consensual market opening, can be fully met in the context of such progress.

3.2. Qualitative proposals

Two proposals are made in this respect, concerning unbundling and network access methodology. Almost all those that have commented in the context of the public hearing on the completion of the internal energy market, which the Commission organised in September 2000, stressed that high standards and clear measures with respect to both these issues are essential if effective competition is to be ensured throughout the internal market, and effective reciprocity is to exist between Member States and companies.

⁴ Under a standardised load profile, an assumption on the consumption of electricity of a type of small consumer is made, in volume and timing of demand. Any discrepancies with the profile are settled after periodic readings of the existing meter, eliminating the need for expensive minute-to-minute reading of the consumer's actual consumption and off-setting that against his/her contracted volume.

Unbundling: In order to ensure a common minimum standard of unbundling throughout the internal market for electricity and gas, it is proposed that Member States ensure, as a minimum, that transmission be carried out via a subsidiary company that is legally and functionally separate vis-à-vis its day to day operations from generation and sales activities of its parent company (an independent transmission system operator – TSO). A number of measures are specified that must be respected to ensure that the transmission subsidiary company is able to operate in functional terms independently of the other commercial interests of the group to which it belongs. The minimum requirements in terms of functional separation are the following:

- those responsible for the management of the transmission system may not participate in company structures responsible, directly or indirectly, for the day-to-day running of the generation/production, and supply functions of the integrated group;
- appropriate measures must be taken to ensure that the personal interests of the management of the transmission system company are taken into account in a manner that ensures that they are capable of acting independently;
- the transmission system operator must exercise full control over all assets necessary to operate, maintain and develop the network;
- the transmission system operator must establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded. The programme must set out the specific obligations of employees to meet this objective. It must be drawn up and its respect monitored by a compliance officer appointed by and reporting to the President/Chief Executive of the integrated company to which the transmission system operator belongs. An annual report, setting out the measures taken, must be submitted by the compliance officer to the national regulatory authority and published.

Many respondents at the public hearing further argued that distribution should also be unbundled in a similar manner, requiring legal separation⁵, and stressed the importance of non-discriminatory access to distribution as vital⁶.

Further opening of the market will render independent distribution system operation as important as independent transmission system operation. For this reason, the Commission proposes a legal separation of electricity distribution system operators by 2003 and of gas distribution system operators by 2004 on largely the same conditions as those described above for the transmission system operator. However, Member States may decide to introduce a *de minimis* threshold, because it might not be proportional to impose this unbundling obligation on small local distribution companies.

It should be noted that this modification represents a greater development with respect to gas than to electricity. In the Gas Directive, only internal accounting unbundling of transmission, together with measures to ensure the non-disclosure of commercially sensitive information is required. However, six Member States have in fact moved to ownership, legal, or management unbundling, or are preparing to do so. In addition, it is worth noting that several

⁵ The Gas and Electricity Directives require only accounting unbundling at distribution level together with measures to ensure the non-disclosure of commercially sensitive information.

⁶ Distribution costs are relatively significant. For gas, total investments in gas distribution will typically be twice as high as in transmission. In a country without gas production, gas distribution investment can account for 70% to 80% of total investment in the supply chain to the end user.

integrated gas undertakings are pursuing similar policies of separating management and operation of transportation functions from the gas supply function. It is generally accepted that such a development will lead to a more effective and equivalent competitive structure throughout the internal market and will permit more market entry, as potential entrants will be confident of non-discriminatory access. Moreover, within integrated companies it will provide clearer cost signals and incentives to the different business functions. The adoption of this measure will thus lead to a more rapid and equitable development of an effective internal market for gas.

These provisions were the ones underlined as important by an overwhelming majority of those commenting during the hearing. In the light of experience in implementing the existing Directives, they have also proven to be the most important in ensuring effective functional independence.

Many respondents at the hearing argued that storage and LNG facilities for gas should be further unbundled and subject to regulated access. Many also argued that full ownership unbundling for transmission should take place. It is clear that measures such as these would result in more effective guarantees of non-discriminatory access. Furthermore, the Commission fully recognises the fundamental role that access to gas storage and other key ancillary facilities must play if a competitive market is to develop⁷. In this light, the Commission has decided to propose a clarification of the importance of access to storage, other ancillary services and flexibility instruments; strengthening the method of third party access regarding distribution and LNG facilities (see below); and to require that gas companies be obliged to identify and create separate operators responsible for storage and LNG activities (storage and LNG operators); thus increasing transparency for those requesting access to these key facilities. The Commission expects that these measures will be sufficient to ensure effective and non-discriminatory access to the gas and electricity systems. It has decided not to require, at least at present, unbundling requirements additional to this with respect to storage and LNG (i.e. not to require separate legal entities for these activities). Furthermore it is proposed to include a provision on non-discriminatory provision of balancing services for both gas and electricity.

However, the Commission will continue to monitor carefully whether effective and non-discriminatory access develops for transmission (including upstream pipelines), distribution, LNG, storage and other key ancillary facilities. In order to ensure continued examination of these issues by all Community institutions, it is proposed that the Directives be revised to require the Commission to submit a report to the European Parliament and Council, *inter alia* on these issues before the end of the second and fourth years following the entry into force of this revision (Articles 1 and 2), together, if necessary, with appropriate proposals for further action.

⁷ Gas offtake varies for all customers greatly, both within a single day and between seasons during the year. Gas supply, however, is more constant as gas producers wish to maximise the capacity usage of their pipeline infrastructure. Non-discriminatory access to flexibility instruments such as storage may therefore be crucial for an efficient access to the overall gas system and for ensuring a level playing field between incumbent utilities having significant storage facilities at their disposal and new entrants and customers without such facilities.

Third party access: As mentioned above, effective third party access was also identified by all respondents at the hearing as vital to ensure the development of effective competition. It is almost universally considered that the minimum system necessary to ensure non-discrimination and the necessary transparency and predictability to create effective competition to develop is published and regulated tariffs, which are applied under non-discriminatory terms and conditions to all system users, be they customers or companies, including those belonging to the group to which the TSO belongs. Such tariffs may be divided into objective classes of customers, providing that this does not result in discrimination. This system has been adopted by almost all Member States with respect to electricity, but not concerning gas⁸. It is therefore proposed that a published and regulated tariff structure be the minimum norm for transmission and distribution tariffs in both markets. It is important to ensure that future accession countries also implement structures compatible with the approach pursued by Member States.

In order to ensure that non-discrimination is effective in practice, Member States and national regulatory authorities will have to carefully monitor the behaviour of the legally separated transmission and distribution system operators. Thus, Member States and national regulatory authorities will need, *inter alia*, to ensure that transmission and distribution operators reply to access requests within a reasonable period of time. In the Commission's view a period of two weeks should, in principle, not be exceeded. They will equally need to ensure that transmission and distribution system operators do not ask questions to companies requesting access to the network, which relate to the source of the energy, the destination or the onward transport route that are not necessary for the carrying out of their responsibilities in relation to the operation of the network.

Regulation: Independent national regulatory authorities play a pivotal role in ensuring non-discriminatory access to the network, as they have the power to fix or approve transmission and distribution tariffs prior to their entry into force. Competition authorities can only act on competition distortions *ex-post*, while regulators have an active *ex-ante* function. These authorities also play a major role in issues relating to cross border trade, in the creation of a truly internal market. They also bring about regulatory continuity and transparency to the market. The proposed Directive therefore requires Member States to establish independent regulatory authorities with the competence, *inter alia*, to set and/or approve tariffs and conditions for access to gas and electricity transmission and distribution networks. Thus, the regulatory authority must approve the transmission and distribution tariffs prior to their entry into force. This approval may be on the basis of a proposal by the transmission/distribution system operator(s), or on the basis of a proposal agreed between the transmission/distribution system operator(s) and the users of the network. Indeed, it is in any event appropriate for transmission/distribution system operators to consult closely with all categories of their network users prior to proposing tariffs to their regulatory authority. Although independent, these organisations will need to work closely with other government bodies such as competition authorities where these still retain the responsibility for settling other types of disputes relating to TPA, for example, questions of discrimination in individual cases.

⁸ For gas, the following Member States have either a system of negotiated access, or a hybrid published/negotiated system: Austria, Belgium (who, however, recently decided to change to regulated TPA), Denmark, France, Germany and The Netherlands.

Trade with non-EU countries: In a liberalised market there may be increased opportunities for EU businesses to trade with suppliers and customers outside the EU. Significant benefits could arise from such trade as in other industries. However, there must be agreement between the EU and third countries on reciprocal access to markets and on environmental and safety standards to prevent potential danger to the environment in the Community, particularly for the electricity market. A framework for bilateral or regional agreements could be envisaged to cover these matters. However, some Member States may already have separate arrangements with non-EU countries to exchange electricity. These agreements need to be monitored so that they are compatible with the Community objectives on, for example, nuclear power safety. Hence, the Directive requires Member States to inform the Commission of the imports of electricity from those countries to which the Electricity Directive does not apply.

3.3. Updating provisions

To reflect the fact that a number of options in the present Electricity Directive are implemented by no Member State, and are generally accepted to be less likely to lead to the development of competitive markets than those actually implemented, it is proposed that these are deleted from the Directive. This is important in ensuring a continued level playing field with potential accession countries. Thus, it is proposed that the tendering procedure with respect to generation be deleted. However, Member States are required to make provision for the launch of tenders for new capacity that might be used as an exceptional measure for reasons of security of supply. The “Single buyer” option with respect to TPA for electricity is also deleted.

An administrative improvement is also proposed to remove a procedural requirement that, in the light of experience, has been shown to be unnecessary, and can be deleted without reducing the effectiveness of the Directive. This concerns the requirement that in the event of a refusal to grant authorisation to construct new generating capacity, a copy of the relevant decision is forwarded to the Commission. It has become evident that this procedure is unnecessarily onerous as many such refusals take place for small facilities on simple planning grounds (Article 5(3) of Directive 96/92/EC). The benefits of this procedure are therefore outweighed by the administrative burdens it imposes, particularly on local authorities. This requirement is therefore dropped. Companies that are refused authorisations retain the right, however, to refer any case they may wish to the Commission.

Article 14(3) of the Electricity Directive and 13(3) of the Gas Directive require that integrated undertakings maintain separate accounts for their different activities. According to the definitions contained in Article 2(5) and (6) of the Electricity Directive and 2(3) and (5) of the Gas Directive both transmission and distribution mean the transport of electricity/gas “with a view to its delivery to final consumers”. Certain companies have argued that this means that it is unnecessary to maintain separate accounts for distribution and supply activities. The Commission believes this to be incorrect and incompatible with the wording and objective of this provision, notably to create transparency and effective regulation. Nonetheless to ensure full clarity on this issue, the draft Directive proposes a modification of Article 14(3) of the Electricity Directive and 13(3) of the Gas Directive.

With respect to the reciprocity provision, contained in Article 19 of both Directives, it is now possible to fix a final date at which this provision shall cease to be valid. As it is proposed that all Member States must designate all consumers to be eligible by 1 January 2005, the clause becomes invalid on that date.

Finally, it is proposed to repeal the Gas and Electricity Transit Directives (Council Directives 90/547/EEC and 91/296/EEC) to avoid different regimes, publication requirements, dispute settlement systems, etc. for access to the network. Transmission system operators shall, if necessary and for the purpose of carrying out their functions including in relation to transit, have access to the network of other transmission system operators based on non-discriminatory terms and conditions.

3.4. Public service objectives

As mentioned in the Communication on completing the internal market, the attainment of public service objectives is one of the most fundamental objectives of the Commission in this area. Whilst existing provisions of the Gas and Electricity Directives have operated well to date, room for improvement exists, in particular in the context of full market opening. First, in order to ensure that universal service in electricity is ensured as market opening progresses, the Commission feels it is important to include a provision in the proposal stating that Member States should ensure universal service, meaning supply of high quality electricity to all customers in their territory (Article 3(3)). Equally, and as a complement to this, requirements (Article 3(3) and (4)) are introduced upon Member States, both for electricity and gas, to introduce appropriate provisions to ensure the attainment of the public service objectives and notably:

- The protection of vulnerable customers: Member States will, for example, need to ensure appropriate protection from unjustified disconnection of, *inter alia*, the elderly, the unemployed, the handicapped, etc.;
- The protection of final customers' basic rights: Member States will, for example, need to ensure a minimum set of conditions for contracts, transparency of information, and the availability of low-cost and transparent dispute settlement mechanisms⁹;
- Social and economic cohesion: beyond universal service, where necessary, Member States will need to take appropriate measures to ensure supplies at appropriate prices to, for example, peripheral areas;
- Environmental protection; and
- Security of supply; notably through ensuring appropriate levels of maintenance and development of infrastructure, and in particular interconnections.

Furthermore, and again as a complement to the above, in order to ensure that it is clear that Member States have available all necessary instruments to guarantee network maintenance and development, it is proposed that a new Article be inserted in the Gas and Electricity Directives (Article 8(5) of the Electricity Directive and Article 7(5) of the Gas Directive), which states that "Member States may require Transmission System Operators to meet minimum levels of investment for the maintenance and development of the transmission system, including interconnection capacity".

⁹ Appropriate provisions to ensure these basic rights can be found in Article 17 of the Commission proposal for a Directive of the European Parliament and of the Council on universal service and users' rights relating to electronic communications networks and services, COM(2000) 392 of 12 July 2000.

Finally, given the vital importance of continued secure supplies of electricity as highlighted in the Green Paper of Energy Supply – probably the most important public service objective – it is necessary to take a number of additional complementary measures to reinforce the existing safeguards contained in the Electricity and Gas Directives on this point. In particular, and in addition to the requirements on Member States to provide for the possibility of launching tenders for new capacity when necessary, it would be appropriate for Member States to be required to carefully monitor the state of the domestic electricity and gas markets, and in particular the existing demand/supply balance, the level of expected future demand, envisaged additional capacity under planning or construction, and the level of competition existing on the market. On an annual basis, the Member States should be required to publish a report outlining their findings, and indicating any measures envisaged to ensure supply security. Furthermore, given that due to the highly interconnected nature of the EU electricity and gas network, the relationship between demand and supply at the Community level is of vital importance for overall system security, the Commission, on the basis of the national reports and its own monitoring work, should publish a similar Communication covering the Community as a whole. For this reason, it is proposed to include these provisions in Article 6(6) of the revised Electricity Directive and in Article 4a of the revised Gas Directive.

Article 3(2) of the existing Directives requires Member States to notify public service objectives to the Commission. However, as no Member State has adopted such objectives, which require a derogation from either Directive, no such notifications have been made. In order to permit an effective benchmarking exercise by the Commission, enabling Member States to ensure that they maintain the highest levels of public service, it is appropriate to amend this provision to ensure that Member States notify, every two years, all measures taken to achieve public service objectives, irrespective of whether they require a derogation from the Directive and notably the new requirements mentioned above. On this basis, the Commission should be obliged to publish a report every two years analysing the different measures adopted, and, if necessary, make recommendations as to measures to be taken to achieve high public service standards.

Finally, a fully opened market needs an internalisation of external costs to ensure a true level playing field. The Commission will therefore promote initiatives in this sense, e.g. an EU-wide energy/CO₂ tax, strict rules on State aid, demand-side management measures, measures to promote cogeneration and renewables which have a competitive disadvantage as long as external costs are not fully integrated.

4. CONCLUSION

All the evidence available to the Commission on the basis of the operation of the gas and Electricity Directives demonstrates that all the basic objectives pursued by the internal market; lower prices, increased competitiveness, high standards of public service, security of supply, and environmental protection, are being achieved; and in a socially consensual context. Experience in countries that have moved to full market opening demonstrates that these objectives can be and are met under conditions of full competition, and can indeed be better pursued under such circumstances. The overwhelming view of those commenting in the context of the public hearing on completing the internal gas and electricity markets, and comments received in writing, support this approach.

The rapid completion of the internal market in this area represents, therefore, an important step in meeting the Community's objectives set out at the European Council at Lisbon in spring 2000. The adoption of these proposals can be expected to bring important benefits in terms of competitiveness and employment, and provide competitive prices and higher standards of service to Community citizens for gas and electricity.

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directives 96/92/EC and 98/30/EC concerning common rules for the internal markets in electricity and natural gas

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 47(2), Article 55 and Article 95 thereof,

Having regard to the proposal from the Commission¹,

Having regard to the opinion of the Economic and Social Committee²,

Having regard to the opinion of the Committee of the Regions³,

Acting in accordance with the procedure laid down in Article 251 of the Treaty⁴,

Whereas:

- (1) Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity⁵ and Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas⁶ have made very important contributions towards the creation of internal markets for electricity and gas.
- (2) Experience in implementing those Directives demonstrates the important benefits that have begun to result from the internal markets in electricity and gas, in terms of efficiency gains, price reductions, higher standards of service and increased competitiveness. However, important shortcomings and possibilities for improving the functioning of the markets remain.
- (3) At its meeting in Lisbon on 23 and 24 March 2000, the European Council called for rapid work to be undertaken to complete the internal market in both electricity and gas sectors and to speed up liberalisation in these sectors with a view to achieving a fully operational internal market. The European Parliament, in its Resolution of 6 July 2000 on the Commission's second report on the state of liberalisation of energy markets, requested the Commission to adopt a detailed timetable for the achievement of

¹ OJ C

² OJ C

³ OJ C

⁴ OJ C

⁵ OJ L 27, 30.1.1997, p. 20.

⁶ OJ L 204, 21.7.1998, p. 1.

accurately defined objectives with a view to gradually but completely liberalising the energy market.

- (4) The main obstacles in arriving at a fully operational internal market are related to issues of access to the network and different degrees of market opening between Member States.
- (5) In order to achieve non-discriminatory access to the network, the independence of the transmission system operator is of paramount importance. The provisions on unbundling should therefore be strengthened. In order to ensure non-discriminatory access to the distribution network, unbundling requirements for the distribution system operator should be introduced for both electricity and gas distribution system operators.
- (6) To avoid imposing a disproportionate financial and administrative burden on small distribution companies, Member States should be able, where necessary, to exempt such companies from the unbundling requirements.
- (7) Further measures should be taken in order to ensure transparent, predictable and non-discriminatory tariffs for access to essential transportation and related infrastructure, including storage and other ancillary facilities. Those tariffs should be applicable to all system users on a non-discriminatory basis.
- (8) In the light of the experience gained with the operation of Council Directive 90/547/EEC of 29 October 1990 on the transit of electricity through transmission grids⁷ and Council Directive 91/296/EEC of 31 May 1991 on the transit of natural gas through grids⁸, measures should be taken to ensure homogeneous and non-discriminatory access regimes for transmission, including across borders between Member States.
- (9) The presence of independent national regulatory authorities, is an important feature in guaranteeing non-discriminatory access to the network. Those authorities should at least have the competence to fix or approve transmission and distribution tariffs and tariffs for access to liquefied natural gas (LNG) facilities, prior to their entry into force.
- (10) National regulatory authorities should be able to approve tariffs on the basis of a proposal by the transmission system operator or distribution system operator(s) or LNG system operator, or on the basis of a proposal agreed between these operator(s) and the users of the network.
- (11) The benefits resulting from the internal market should be available to all Community industry and commerce, including small and medium-sized enterprises and to all Community citizens as quickly as possible for reasons of competitiveness and employment.

⁷ OJ L 313, 13.11.1990, p. 30; Directive as last amended by Commission Directive 98/75/EC (OJ L 276, 13.10.1998, p. 9).

⁸ OJ L 147, 12.6.1991, p. 37; Directive as last amended by Commission Directive 95/49/EC (OJ L 233, 30.9.1995, p. 86).

- (12) Gas and electricity customers should be able to choose their supplier freely. Nonetheless a phased approach to completing the internal market for electricity and gas should be taken to enable industry to adjust and ensure that adequate measures and systems are in place to protect the interests of customers and ensure they have a real and effective right to choose supplier.
- (13) Progressive market opening towards full competition will gradually remove differences between Member States: Transparency and certainty in the implementation of this Directive should be ensured.
- (14) Directive 98/30/EC provides for access to storage as part of the gas system. In the light of the experience gained in implementing the internal market, additional measures should be taken to clarify the provisions for access to storage and other ancillary services and to reinforce the separation of the operation of transmission and distribution systems, and gas storage and LNG facilities.
- (15) Nearly all Member States have chosen to ensure competition in the electricity generation market through a transparent authorisation procedure. However, Member States should have the possibility to ensure security of supply through the launching of a tendering procedure in the event that sufficient electricity generation capacity is not built on the basis of the authorisation procedure.
- (16) In the interest of security of supply, the supply/demand balance in individual Member States should be monitored and appropriate action taken if security of supply is compromised.
- (17) Member States should ensure that all customers enjoy the right to be supplied with electricity of a specified quality at affordable and reasonable prices. In order to ensure the maintenance of the highest possible standards of public service in the Community, all measures taken by Member States to achieve the objectives of this Directive should be regularly notified to the Commission. The Commission should regularly publish a report analysing measures taken at national level to achieve public service objectives and comparing their effectiveness, with a view to making recommendations as regards measures to be taken at national level to achieve high public service standards.
- (18) The requirement to notify the Commission of any refusal to grant authorisation to construct new generation capacity has proven to be an unnecessary administrative burden and should therefore be dispensed with.
- (19) Directives 96/92/EC and 98/30/EC should therefore be amended accordingly.
- (20) In accordance with the principles of subsidiarity and proportionality as set out in Article 5 of the Treaty, the objectives of the proposed action, namely the creation of fully operational internal electricity and gas markets, in which fair competition prevails, cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale and effects of the action, be better achieved by the Community. This Directive confines itself to the minimum required in order to achieve those objectives and does not go beyond what is necessary for that purpose.
- (21) To ensure homogeneity in the treatment of access to the electricity and gas networks, also in the case of transit, Directives 90/547/EEC and 91/296/EEC should be repealed,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Amendments to Directive 96/92/EC

Directive 96/92/EC is amended as follows:

(1) Article 2 is amended as follows:

(a) point (9) is replaced by the following:

"9. 'final customer' shall mean a consumer buying electricity for his own use."

(b) point (22) is replaced by the following:

"22. 'non-domestic customer' shall mean a consumer purchasing electricity which is not for his own household use and shall include producers, transmission and distribution undertakings and wholesale customers."

(2) Article 3 is replaced by the following:

"Article 3

1. Member States shall ensure, on the basis of their institutional organisation and with due regard for the principle of subsidiarity, that, without prejudice to paragraph 2, electricity undertakings are operated in accordance with the principles of this Directive, with a view to achieving a competitive market in electricity. Member States shall not discriminate between these undertakings as regards either rights or obligations.
2. Having regard to the relevant provisions of the Treaty, in particular Article 86, Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and to environmental protection. Such obligations shall be clearly defined, transparent, non-discriminatory and verifiable. As a means of carrying out public service obligations in relation to security of supply, Member States may introduce the implementation of long-term planning, taking into account the possibility of third parties seeking access to the system.
3. Member States shall ensure that all customers enjoy universal service, that is the right to be supplied with electricity of a specified quality within their territory at affordable and reasonable prices. They shall take appropriate measures to protect final customers and to ensure high levels of consumer protection, particularly with respect to transparency regarding contractual terms and conditions, general information and dispute settlement mechanisms. These measures shall include, in particular, those set out in the Annex.

4. Member States shall implement appropriate measures to achieve the objectives of social and economic cohesion, environmental protection and security of supply, notably through the maintenance and construction of necessary network infrastructure including interconnection capacity.
5. Member States may decide not to apply the provisions of Articles 5, 6, 16 and 21 in so far as their application would obstruct the performance, in law or in fact, of the obligations imposed on electricity undertakings in the general economic interest and in so far as the development of trade would not be affected to such an extent as would be contrary to the interests of the Community. The interests of the Community include, *inter alia*, competition with regard to eligible customers in accordance with this Directive and Article 86 of the Treaty."

(3) The following Article 3a is inserted:

"Article 3a

1. Member States shall, every two years, notify the Commission of all measures adopted to fulfill universal service and public service obligations, whether or not such measures require a derogation from the provisions of this Directive. This notification shall relate, *inter alia*, to the requirements of Article 3(4) and the maintenance of service standards.
2. The Commission shall publish, every two years, a report analysing the different measures taken in the Member States to meet high public service standards, together with an examination of the effectiveness of those measures.

Where appropriate, the Commission shall make recommendations as to measures to be taken at national level to achieve high public service standards."

(4) Article 4 is deleted.

(5) Article 5 is replaced by the following:

"Article 5

1. For the construction of new generating capacity, Member States shall adopt an authorisation procedure, which shall be conducted in accordance with objective, transparent and non-discriminatory criteria.
2. Member States shall lay down the criteria for the grant of authorisations for the construction of generating capacity in their territory. These criteria may relate to:
 - (a) the safety and security of the electricity system, installations and associated equipment;
 - (b) protection of public health and safety;
 - (c) protection of the environment;
 - (d) land use and siting;

- (e) use of public ground;
- (f) energy efficiency;
- (g) the nature of the primary sources;
- (h) characteristics particular to the applicant, such as technical, economic and financial capabilities;
- (i) compliance with measures adopted pursuant to Article 3.

3. The authorisation procedures and criteria shall be made public.

4. Applicants shall be informed of the reasons for any refusal to grant an authorisation. The reasons must be objective, non-discriminatory, well founded and duly substantiated. Appeal procedures shall be made available to the applicant."

(6) Article 6 is amended as follows:

(a) Paragraph 1 is replaced by the following:

"1. Member States shall ensure the possibility, in the interests of security of supply, to tender for new capacity on the basis of published criteria. A tendering procedure can, however, only be launched if on the basis of the authorisation procedure the capacity being built is not sufficient to ensure security of supply."

(b) Paragraph 2 is deleted.

(c) Paragraph 6 is deleted.

(7) The following Article 6a is inserted:

"Article 6a

1. Member States shall designate a body, which may be the independent regulatory authority referred to in Article 22, to monitor security of supply issues. This body shall monitor, in particular, the supply/demand balance on the national market, the level of expected future demand and envisaged additional capacity planned or under construction, and the level of competition on the market. The body shall publish, by 31 July each year at the latest a report outlining its findings on these issues, as well as any measures taken or envisaged to address them and forward this report to the Commission forthwith.
2. On the basis of the report referred to in paragraph 1 the Commission shall, on an annual basis, forward a Communication to the European Parliament and the Council examining issues relating to security of supply of electricity in the Community, and in particular the existing and projected balance between demand and supply. Where appropriate, the Commission shall issue recommendations."

(8) In Article 7, paragraph 6 is replaced by the following:

"6. Unless the system operator is already fully independent from other activities not relating to the transmission system in terms of ownership, the system operator shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to transmission.

In order to ensure the independence of the system operator, the following criteria shall apply:

- (a) those persons responsible for the management of the transmission system may not participate in company structures of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, distribution and supply of electricity;
- (b) appropriate measures must be taken to ensure that the personal interests of the persons responsible for the management of the transmission system are taken into account in a manner that ensures that they are capable of acting independently;
- (c) the system operator must exercise full control over all assets necessary to maintain and develop the network;
- (d) the system operator must establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded. The programme must set out the specific obligations of employees to meet this objective. It must be drawn up and its respect monitored by a compliance officer appointed by and reporting to the President/Chief Executive of the integrated electricity undertaking to which the system operator belongs. An annual report, setting out the measures taken, must be submitted by the compliance officer to the national regulatory authority and published."

(9) The following Article 7a is inserted:

"Article 7a

Transmission system operators shall procure the energy they use for the carrying out of their functions according to transparent, non-discriminatory and market based procedures."

(10) In Article 8, the following paragraphs 5 and 6 are added:

"5. Member States may require transmission system operators to meet minimum levels of investment for the maintenance and development of the transmission system, including interconnection capacity.

6. Rules adopted by transmission and distribution system operators for balancing, in real time, generation and consumption of electricity, shall be transparent and non-discriminatory. Tariffs and terms and conditions for the provision of such services by system operators shall be established in a non-discriminatory way reflecting prevailing market prices and shall be fixed or approved by the national regulatory authority prior to their entry into force."

(11) In Article 10, the following paragraph 4 is added:

- "4. Unless the system operator is already fully independent from other activities not relating to the distribution system in terms of ownership, the system operator shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to distribution.

In order to ensure the independence of the system operator, the following criteria shall apply:

- (a) those persons responsible for the management of the distribution system may not participate in company structures of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, transmission and supply of electricity;
- (b) appropriate measures must be taken to ensure that the personal interests of the persons responsible for the management of the distribution system are taken into account in a manner that ensures that they are capable of acting independently;
- (c) the system operator must exercise full control over all assets necessary to maintain and develop the network;
- (d) the system operator must establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded. The programme must set out the specific obligations of employees to meet this objective. It must be drawn up and its respect monitored by a compliance officer appointed by and reporting to the President/Chief Executive of the integrated electricity undertaking to which the system operator belongs. An annual report, setting out the measures taken, must be submitted by the compliance officer to the national regulatory authority and published.

The provisions of the first and second subparagraphs shall apply from 1 January 2003. Member States may decide not to apply those provisions to integrated electricity undertakings serving less than 100 000 customers at that date."

- (12) The following Article 12a is inserted:

"Article 12a

The rules in Articles 7(6) and 10(4) do not prevent the operation of a combined transmission and distribution system operator, which is fully independent in terms of its legal form, organisation and decision making from other activities not relating to transmission or distribution system operation and which meets the requirements of Article 7(6)."

- (13) In Article 14, paragraph 3 is replaced by the following:

"3. Integrated electricity undertakings shall, in their internal accounting, keep separate accounts for their generation, distribution and supply activities, and, where appropriate, consolidated accounts for other, non-electricity activities, as they would be required to do if the activities in question were carried out by separate undertakings, with a view to avoiding discrimination, cross-subsidisation and distortion of competition. The internal accounts shall include a balance sheet and a profit and loss account for each activity."

- (14) Article 15 is deleted.

- (15) Article 16 is replaced by the following:

"Article 16

1. Member States shall ensure the implementation of a system of third party access to the transmission and distribution systems based on published tariffs, applicable to all eligible customers and applied objectively and without discrimination between system users. These tariffs shall be approved prior to their entry into force by a national regulatory authority established in conformity with Article 22.
2. The operator of a transmission or distribution system may refuse access where it lacks the necessary capacity. Duly substantiated reasons must be given for such refusal, in particular having regard to Article 3."

- (16) Articles 17 and 18 are deleted.

- (17) Article 19 is replaced by the following:

"Article 19

1. Member States shall ensure that all non-domestic customers are free to purchase electricity from the supplier of their choice from 1 January 2003 at the latest. They shall ensure that all customers are free to choose their supplier from 1 January 2005 at the latest.
2. To avoid imbalance in the opening of electricity markets:
 - (a) contracts for the supply of electricity with an eligible customer in the system of another Member State shall not be prohibited if the customer is considered as eligible in both systems involved;

- (b) in cases where transactions as described in subparagraph (a) are refused because of the customer being eligible only in one of the two systems, the Commission may oblige, taking into account the situation in the market and the common interest, the refusing party to execute the requested electricity supply at the request of the Member State where the eligible customer is located."

(18) In Article 20, paragraph 4 is replaced by the following:

- "4. In the event of cross-border disputes, the dispute settlement authority shall be the dispute settlement authority covering the system operator which refuses use of, or access to, the system."

(19) Article 22 is replaced by the following:

"Article 22

1. Member States shall establish national regulatory authorities. These authorities shall be wholly independent of interests of the electricity industry. They shall at least have the sole responsibility:
 - (a) to fix or approve terms and conditions for connection and access to national networks, including transmission and distribution tariffs;
 - (b) to fix or approve tariffs, or changes in tariffs at national level, to reflect costs or revenues related to cross border transmission of electricity;
 - (c) to define the rules on the management and allocation of interconnection capacity, in conjunction with the national regulatory authority or authorities of those Member States with which interconnection exists;
 - (d) to fix or approve any mechanisms to deal with congested capacity within the national electricity system;
 - (e) to ensure the respect of the requirements set out in Article 3(3) and (4).
2. Member States shall create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of dominant position, in particular to the detriment of consumers, and any predatory behaviour. These mechanisms shall take account of the provisions of the Treaty, and in particular Article 82 thereof.
3. Member States shall ensure that the appropriate measures be taken, including administrative action or criminal proceedings in conformity with their national law, against the natural or legal persons responsible where confidentiality rules imposed by this Directive have not been respected."

- (20) The following Article 23a is inserted:

"Article 23a

Member States shall inform the Commission by 31 March of each year at the latest of imports of electricity that have taken place during the previous calendar year from third countries."

- (21) Article 26 is replaced by the following:

"Article 26

The Commission shall review the application of this Directive and submit a report to the European Parliament and the Council, by [indicate a date] at the latest and by [indicate a date] at the latest, on the experience gained and progress made in creating a complete and fully operational internal market in electricity in order to allow the European Parliament and the Council to consider, in due time, the possibility of provisions for further improving the internal market in electricity. In particular, the report shall examine the extent to which the unbundling and tariffication requirements of this Directive have been successful in ensuring fair and non-discriminatory access to the Community's electricity system. The report shall also examine possible necessary harmonisation requirements that are not linked to the provisions of this Directive."

- (22) The Annex, the text of which is set out in Annex I to this Directive, is added.

Article 2

Amendments to Directive 98/30/EC

Directive 98/30/EC is amended as follows:

- (1) Article 2 is amended as follows:

- (a) the following point 12a is inserted:

"12a. 'ancillary services' shall mean all services necessary for the operation of transmission and/or distribution networks and/or LNG facilities, including storage facilities and equivalent flexibility instruments, load balancing and blending;"

- (b) the following point 20a is inserted:

"20a. 'non-domestic customer' shall mean a consumer purchasing natural gas which is not for his own household use and shall include power generators, natural gas undertakings and wholesale customers;"

(2) Article 3 is replaced by the following:

"Article 3

1. Member States shall ensure, on the basis of their institutional organisation and with due regard for the principle of subsidiarity, that, without prejudice to paragraph 2, natural gas undertakings are operated in accordance with the principles of this Directive with a view to achieving a competitive market in natural gas. Member States shall not discriminate between such undertakings as regards either rights or obligations.
2. Having regard to the relevant provisions of the Treaty, in particular Article 86 thereof, Member States may impose on natural gas undertakings, in the general economic interest, public-service obligations which may relate to security, including security of supply, regularity, quality and price of supplies, and to environmental protection. Such obligations shall be clearly defined, transparent, non-discriminatory and verifiable. As a means of carrying out public-service obligations in relation to security of supply, Member States may introduce the implementation of long-term planning, taking into account the possibility of third parties seeking access to the system.
3. Member States shall take appropriate measures to protect final customers and to ensure high levels of consumer protection, particularly with respect to transparency regarding contractual terms and conditions, general information and dispute settlement mechanisms. These measures shall include, in particular, those set out in the Annex.
4. Member States shall implement appropriate measures to achieve the objectives of social and economic cohesion, environmental protection and security of supply, notably through the maintenance and construction of necessary network infrastructure including interconnection capacity.
5. Member States may decide not to apply the provisions of Article 4 with respect to distribution in so far as their application would obstruct, in law or in fact, the performance of the obligations imposed on natural gas undertakings in the general economic interest and in so far as the development of trade would not be affected to such an extent as would be contrary to the interests of the Community. The interests of the Community include, *inter alia*, competition with regard to eligible customers in accordance with this Directive and Article 86 of the Treaty."

(3) The following Article 3a is inserted:

"Article 3a

1. Member States shall, every two years, notify the Commission of all measures adopted to fulfil public service obligations, whether or not such measures require a derogation from the provisions of this Directive. This notification shall relate, *inter alia*, to measures regarding environmental protection, security of supply, protection of customers, including final customers, social and regional cohesion, and the maintenance of service standards.

2. The Commission shall publish, every two years, a report analysing the different measures taken in the Member States to meet high public service standards, together with an examination of the effectiveness of those measures. Where appropriate, the Commission shall make recommendations as to measures to be taken at national level to achieve high public service standards."

(4) The following Article 4a is inserted:

"Article 4a

1. Member States shall designate a body, which may be the independent regulatory authority referred to in Article 22, to monitor security of supply issues. This body shall monitor, in particular, the supply/demand balance on the national market, the level of expected future demand and available supplies, and the level of competition on the market. The body shall publish, by 31 July each year at the latest, a report outlining its findings on these issues, as well as any measures taken or envisaged to address them, and shall forward this report to the Commission forthwith.
2. On the basis of the report referred to in paragraph 1, the Commission shall forward a Communication to the European Parliament and the Council each year examining issues relating to security of supply of natural gas in the Community, and in particular the existing and projected balance between demand and supply. Where appropriate, the Commission shall issue recommendations."

(5) Article 7 is replaced by the following:

"Article 7

1. Member States shall designate or shall require undertakings which own transmission, storage or LNG facilities to designate, for a period of time to be determined by Member States having regard to considerations of efficiency and economic balance, one or more system operators to be responsible for operating, ensuring the maintenance of, and developing the transmission, storage and LNG facilities in a given area and their interconnections with other systems, in order to guarantee security of supply.
2. Each transmission, storage and/or LNG system operator:
 - (a) shall operate, maintain and develop under economic conditions secure, reliable and efficient transmission, storage and/or LNG facilities, with due regard to the environment;
 - (b) shall not discriminate between system users or classes of system users, particularly in favour of its related undertakings;
 - (c) shall provide any other transmission undertaking, any other storage undertaking, any other LNG undertaking and/or any distribution undertaking, sufficient information to ensure that the transport and storage of natural gas may take place in a manner compatible with the secure and efficient operation of the interconnected system.

3. Rules for balancing the gas system adopted by transmission and distribution system operators shall be transparent and non-discriminatory. Tariffs and terms and conditions for the provision of such services by system operators shall be established in a non-discriminatory way reflecting prevailing market prices and shall be fixed or approved by the national regulatory authority prior to their entry into force."

(6) The following Articles 7a and 7b are inserted:

"Article 7a

1. Member States may require transmission system operators to meet minimum levels of investment for the maintenance and development of the transmission system, including interconnection capacity.
2. Unless the transmission system operator is already fully independent from other activities not relating to the transmission system in terms of ownership, the transmission system operator shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to transmission.

In order to ensure the independence of the transmission system operator, the following criteria shall apply:

- (a) those persons responsible for the management of the transmission system may not participate in company structures of the integrated natural gas undertaking responsible, directly or indirectly, for the day-to-day operation of the production, distribution and supply of gas;
- (b) appropriate measures must be taken to ensure that the personal interests of persons responsible for the management of the transmission system are taken into account in a manner that ensures that they are capable of acting independently;
- (c) the transmission system operator must exercise full control over all assets necessary to maintain and develop the network;
- (d) the transmission system operator must establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded. The programme must set out the specific obligations of employees to meet this objective. It must be drawn up and its respect monitored by a compliance officer appointed by and reporting to the President/Chief Executive of the integrated natural gas undertaking to which the transmission system operator belongs. An annual report, setting out the measures taken, must be submitted by the compliance officer to the national regulatory authority and published.

Article 7b

Transmission system operators shall procure the energy they use for the carrying out of their functions according to transparent, non-discriminatory and market based procedures."

(7) In Article 10, the following paragraph 4 is added:

"4. Unless the distribution system operator is already fully independent from other activities not relating to the distribution system in terms of ownership, the distribution system operator shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to distribution.

In order to ensure the independence of the distribution system operator, the following criteria shall apply:

- (a) those persons responsible for the management of the distribution system may not participate in company structures of the integrated natural gas undertaking responsible, directly or indirectly, for the day-to-day operation of the production, transmission and supply of gas;
- (b) appropriate measures must be taken to ensure that the personal interests of persons responsible for the management of the distribution system are taken into account in a manner that ensures that they are capable of acting independently;
- (c) the distribution system operator must exercise full control over all assets necessary to maintain and develop the network;
- (d) the distribution system operator must establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded. The programme must set out the specific obligations of employees to meet this objective. It must be drawn up and its respect monitored by a compliance officer appointed by and reporting to the President/Chief Executive of the integrated natural gas undertaking to which the distribution system operator belongs. An annual report, setting out the measures taken, must be submitted by the compliance officer to the national regulatory authority and published.

The provisions of the first and second subparagraphs shall apply from 1 January 2004. Member States may decide not to apply those provisions to integrated natural gas undertakings serving less than 100 000 customers at that date."

- (8) The following Article 11a is inserted:

"Article 11a

The rules in Article 7a(2) and Article 10(4) do not prevent the operation of a combined transmission and distribution system operator, which is fully independent in terms of its legal form, organisation and decision making from other activities not relating to transmission or distribution system operation and which meets the requirements of Article 7a(2)."

- (9) In Article 13, paragraph 3 is replaced by the following:

"3. Integrated natural gas undertakings shall, in their internal accounting, keep separate accounts for their natural gas transmission, distribution, supply, LNG and storage activities, and, where appropriate, consolidated accounts for non-gas activities, as they would be required to do if the activities in question were carried out by separate undertakings, with a view to avoiding discrimination, cross-subsidisation and distortion of competition. The internal accounts shall include a balance sheet and a profit and loss account for each activity."

- (10) Articles 14 and 15 are replaced by the following:

"Article 14

1. Member States shall ensure the implementation of a system of third party access to the transmission and distribution system and LNG facilities based on published tariffs, applicable to all eligible customers and applied objectively and without discrimination between system users. These tariffs shall be approved prior to their entry into force by a national regulatory authority established in conformity with Article 22.
2. Transmission system operators shall, if necessary and for the purpose of carrying out their functions including in relation to cross-border transmission, have access to the network of other transmission system operators based on the same conditions and principles as set out in paragraph 1.

Article 15

1. For the organisation of access to storage and equivalent flexibility instruments when technically and/or economically necessary for providing efficient access to the system for the supply of customers, as well as for the organisation of access to other ancillary services, Member States may choose either or both procedures referred to in paragraphs 2 and 3. These procedures shall operate in accordance with objective, transparent and non-discriminatory criteria
2. In the case of negotiated access, Member States shall take the necessary measures for natural gas undertakings and eligible customers either inside or outside the territory covered by the interconnected system to be able to negotiate access to the system so as to conclude supply contracts with each other on the basis of voluntary commercial agreements. The parties shall be obliged to negotiate access to the system in good faith.

Contracts for access to the system shall be negotiated with the relevant system operator or natural gas undertakings. Member States shall require natural gas undertakings to publish their main commercial conditions for the use of the system by [indicate date] at the latest and every year thereafter.

3. Member States opting for a procedure of regulated access shall take the necessary measures to give natural gas undertakings and eligible customers either inside or outside the territory covered by the interconnected system a right of access to the system, on the basis of published tariffs and/or other terms and obligations for use of that system. This right of access for eligible customers may be given by enabling them to enter into supply contracts with competing natural gas undertakings other than the owner and/or operator of the system or a related undertaking."

(11) Article 16 is deleted.

(12) Articles 18 and 19 are replaced by the following:

"Article 18

1. Member States shall ensure that all non-domestic customers are free to purchase gas from the supplier of their choice and shall have the rights of eligible customers for third party access in order to execute such supplies in accordance with Articles 14 and 15 from 1 January 2004 at the latest.
2. Member States shall ensure that all customers are free to purchase gas from the supplier of their choice and have the rights of eligible customers for third party access in order to execute such supplies in accordance with Articles 14 and 15 from 1 January 2005 at the latest.

Article 19

1. To avoid imbalance in the opening of gas markets:
 - (a) contracts for the supply of gas with an eligible customer in the system of another Member State shall not be prohibited if the customer is considered as eligible in both systems involved;
 - (b) in cases where transactions as described in subparagraph (a) are refused because the customer is eligible in only one of the two systems, the Commission may oblige, taking into account the situation in the market and the common interest, the refusing party to execute the requested gas supply, at the request of the Member State where the eligible customer is located."

(13) Article 22 is replaced by the following:

"Article 22

1. Member States shall establish national regulatory authorities. These authorities shall be wholly independent of the interests of the gas industry. They shall at least have the sole responsibility:

- (a) to fix or approve terms and conditions for connection and access to national networks, including transmission and distribution tariffs, and terms, conditions and tariffs for access to LNG facilities;
 - (b) to define the rules on the management and allocation of interconnection capacity, in conjunction with the national regulatory authority or authorities of those Member States with which interconnection exists;
 - (c) to fix or approve any mechanisms to deal with congested capacity within the national gas system;
 - (d) to ensure the respect of the requirements set out in Article 3(3) and (4).
2. Member States shall create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of dominant position, in particular to the detriment of consumers, and any predatory behaviour. These mechanisms shall take account of the provisions of the Treaty, and in particular Article 82 thereof.
 3. Member States shall ensure that the appropriate measures be taken, including administrative action or criminal proceedings in conformity with their national law, against the natural or legal persons responsible where confidentiality rules imposed by this Directive have not been respected."

(14) Article 28 is replaced by the following:

"Article 28

The Commission shall review the application of this Directive and submit a report to the European Parliament and the Council, by [indicate date] at the latest and by [indicate date] at the latest, on the experience gained and progress made in creating a complete and fully operational internal market in natural gas in order to allow the European Parliament and the Council to consider, in due time, the possibility of provisions for further improving the internal market in natural gas. In particular, the report shall examine the extent to which the unbundling and tarification requirements of this Directive have been successful in ensuring fair and non-discriminatory access to the Community's gas system. The report shall also examine possible necessary harmonisation requirements which are not linked to the provisions of this Directive."

(15) The Annex, the text of which is set out in Annex II to this Directive, is added.

Article 3

Directives 90/547/EEC and 91/296/EEC are repealed with effect from 1 January 2003.

Article 4

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 2002 at the latest. They shall forthwith inform the Commission thereof.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

Article 5

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Communities*.

Article 6

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament

For the Council

The President

The President

ANNEX I

"Annex

(Article 3)

Without prejudice to Community rules on consumer protection, in particular Directive 97/7/EC of the European Parliament and of the Council¹ and Council Directive 93/13/EC²:

- (a) Member States shall ensure that final customers have a right to a contract with their electricity service provider that specifies:
- the identity and address of the supplier;
 - services provided, the service quality levels offered, as well as the time for the initial connection;
 - the types of maintenance service offered;
 - the means by which up-to-date information on all applicable tariffs and maintenance charges may be obtained;
 - the duration of the contract, the conditions for renewal and termination of services and of the contract;
 - Any compensation and the refund arrangements which apply if contracted service quality levels are not met; and
 - The method of initiating procedures for settlement of disputes in accordance with point (f).
- (b) Member States shall ensure that final customers shall be given adequate notice of any intention to modify contractual conditions and shall be free to withdraw from contracts if they do not accept the new conditions.
- (c) Member States shall ensure that transparent information on applicable prices and tariffs, and on standard terms and conditions, in respect of access to and use of electricity services is available to the public, and particularly to final customers.
- (d) Member States shall ensure that electricity suppliers specify in the bills sent to each final consumer, the composition of the fuel mix used to generate the electricity that is consumed by the final consumers they supply. The relative costs of the different fuels used to generate a unit of electricity supplied to the final consumers shall be specified and the relative importance of each energy source with respect to the production of greenhouse gases.
- (e) Member States shall also implement appropriate measures to protect vulnerable customers.

¹ OJ L 144, 4.6.1997, p. 19.

² OJ L 95, 21.4.1993, p. 29.

- (f) Member States shall ensure that transparent, simple and inexpensive procedures are available for dealing with final customer complaints. Member States shall adopt measures to ensure that such procedures enable disputes to be settled fairly and promptly with provision, where warranted, for a system of reimbursement and/or compensation. They should follow, wherever possible, the principles set out in Commission Recommendation 98/257/EC³."

³ OJ L 115, 17.4.1998, p. 31.

ANNEX II

"Annex

(Article 3)

Without prejudice to Community rules on consumer protection, in particular Directive 97/7/EC of the European Parliament and of the Council¹ and Council Directive 93/13/EC²:

- (a) Member States shall ensure that final customers have a right to a contract with their gas service provider that specifies:
- the identity and address of the supplier;
 - services provided, the service quality levels offered, as well as the time for the initial connection;
 - the types of maintenance service offered;
 - the means by which up-to-date information on all applicable tariffs and maintenance charges may be obtained;
 - the duration of the contract, the conditions for renewal and termination of services and of the contract;
 - any compensation and the refund arrangements which apply if contracted service quality levels are not met; and
 - the method of initiating procedures for settlement of disputes in accordance with point (e).
- (b) Member States shall ensure that final customers shall be given adequate notice of any intention to modify contractual conditions and shall be free to withdraw from contracts if they do not accept the new conditions.
- (c) Member States shall ensure that transparent information on applicable prices and tariffs, and on standard terms and conditions, in respect of access to and use of gas services is available to the public, and particularly to final customers.
- (d) Member States shall also implement appropriate measures to protect vulnerable customers.

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³ OJ L 115, 17.4.1998, p. 31.

REGULATION ON CONDITIONS FOR ACCESS TO THE NETWORK FOR CROSS-BORDER EXCHANGES IN ELECTRICITY

EXPLANATORY MEMORANDUM

I. Introduction

The ultimate objective of the Electricity Directive is the creation of a real integrated single market, as opposed to a situation characterised by fifteen more or less liberalised but largely national markets. This objective has not yet been achieved. It is true that cross-border trade – in terms of physical exchanges of electricity between countries – has been progressing over time and is currently equivalent to around 8% of total electricity production. However, this figure is still relatively modest when compared to other sectors of the economy.

There are strong indications that whilst nearly all Member States have implemented the Directive and transmission capacity would be in most cases physically available, for many eligible customers, it still remains organisationally and economically difficult to choose a supplier situated in another Member State.

As regards tariffs, each transmission system operator ("TSO") concerned will require a transmission fee, which is not necessarily coordinated with the transmission fees already payable to other TSOs. As a consequence, due to differences in the structure of the tariffication system applied in Member States, the actual amount payable for cross-border access to the system can vary considerably, depending on the TSOs involved and without necessarily a link to the costs actually incurred. Furthermore, in cases where several Member States have to be transited, this situation can lead to "pancaking" of tariffs, if in all systems concerned the operators charge a tariff.

The second key aspect in this context is the limited capacity of the interconnections between national transmission systems. It is expected that in the next decade congestion at the international borders will remain a major limiting factor to free electricity trade between certain regions of Europe. This will result not only from an increasing volume of flows but also from a changing pattern of flows. Therefore, the number of interconnections between systems and the capacity of the existing installations need to be extended.

Given the limitations of interconnection capacities, the principles of allocation of this capacity to market operators will be important in determining which players will profit from the trading possibilities that the internal market offers. Discrimination between market players will occur if no transparent, non-discriminatory rules are set. Incumbents might ward off new market entry, in particular if substantial parts of this capacity are tied up under long-term contracts. This will hinder the development of trade resulting in significantly less advantages from the internal market.

In view of this situation, a harmonised Community framework on tariffs for cross-border transactions and on the allocation of available interconnection capacities is necessary.

The Electricity Directive does not contain specific rules for cross-border transactions. However, this does not mean that this issue can be solved by relying exclusively on national measures. It was in the logic of a gradual approach to implementing the internal electricity market that specific issues remain to be addressed after the principal strategic implementation choices have been made by the Member States. Experience has confirmed the assessment

made by the Commission already at an early stage that the issue needs to be addressed through joint action at the Community level.

As a first response, the Commission, in 1998, initiated the creation of the European Regulatory Forum for electricity, the so called "Florence Forum". The Forum brings together representatives of the Commission, of the national administrations, of the European Parliament, of the Council of European Regulators and of the Association of European Transmission System Operators (ETSO). Producers, consumers and operators on the market are also represented. Its objective has been to clarify and discuss possible solutions with all key players, in particular on cross-border tariffication and congestion management.

The Florence Forum has proven a highly effective tool in developing consensus on highly complicated, rapidly evolving and controversial issues. Whilst it will remain an important instrument in this respect, in particular because it ensures the representation of industry and consumers, recent experience has demonstrated that the process suffers from a number of disadvantages when it is necessary to reach concrete decisions on specific issues :

- the process is an informal one, based on bi-annual meetings lasting two days. As such it is inappropriate to take concrete decisions on very detailed issues that require in-depth discussions;
- to make progress on any issue requires full consensus of all parties;
- any decisions reached can only be implemented if all parties respect them; there are no procedures to ensure implementation;
- certain issues such as the calculation of the correct level of inter-TSO payments require regular detailed decisions to be taken. The Forum is not able to appropriately address such issues.

In this light, the Commission has concluded that for making final progress on the issues of cross-border transmission tariffication and congestion management on interconnections it is now necessary to adopt a legislative instrument for a clear decision-making process, building on the progress achieved at the Forum,.

Against this background, the objective of the draft Regulation is to establish a robust framework for cross-border trade in electricity. The rules contained in the Regulation are as simple as possible and are limited to what is necessary to regulate in EC legislation, in compliance with the principle of subsidiarity. The main objective is to ensure that costs actually incurred by transmission system operators are accurately reflected in charges for access to the system, including interconnections, whilst at the same time excluding excessive transactions costs for cross-border operations.

II. Basic structure of the draft Regulation

With regard to tariffication, the system envisaged is based on the principle of compensations between TSOs for transit flows of electricity that they cause one another, including for transit flows commonly denominated as "loop-flows" or "parallel-flows". The draft Regulation provides, therefore, for compensation payments to be received by transmission system operators hosting transit flows of electricity on their network, financed through contributions of those TSOs causing these transit flows. Furthermore, the Regulation provides for a certain degree of harmonisation of charges for access to national systems, as far as such

harmonisation is necessary in order to exclude possible distortive effects stemming from different national approaches.

As regards the allocation of available interconnection capacity, the Regulation lays down the main principles, which shall be respected when such allocation is made. In an Annex to the Regulation, further technical details are outlined.

In addition to the basic principles with regard to tariffication and congestion management, the draft Regulation provides for the subsequent adoption of guidelines detailing further relevant principles and methodologies. These guidelines can be adopted and amended without changing the Regulation in order to allow rapid adaptation to changed circumstances. In fact, for instance, on issues such as cost calculation methodologies and the concrete identification and measurement of physical flows, there has been continuous progress in the past and further refinements and improvements can be expected in future.

The Regulation empowers the Commission with certain regulatory competencies, as far as this is necessary to ensure the functioning of the internal market. Thus, the Commission adopts and amends the above mentioned guidelines and determines, on a regular basis, the level of the compensation payments to be made between TSOs. In order to ensure the involvement of Member States' regulatory authorities in this process, the Commission would take these decisions after consultation of a committee made up of representatives of Member States, created in accordance with Council Decision 1999/468 laying down the procedures for the exercise of implementing powers conferred on the Commission ("Comitologie"). For the purpose of the determination of the level of the compensation payments, the draft Regulation foresees an advisory committee¹, to allow rapid decisions, whereas for the purpose of the adoption of the guidelines, a regulatory committee² is foreseen.

Regarding the representation of Member States in the committee, it is important to note that Article 22 of the Electricity Directive, after its amendment proposed by the Commission³, stipulates that national regulatory authorities shall, *inter alia*, have the sole responsibility at national level with respect to the definition of methodologies for cross-border transmission, including the setting of tariffs.

III. Main contents of the rules contained in the draft Regulation

1. Compensations for transit flows of electricity

Unlike in other sectors involving transport, such as rail and road transport, tariffs for the transmission of electricity cannot be fixed with reference to the distance between the producer and the consumer of the electricity. In fact, the physical flows of electricity do not necessarily coincide with the contractual relationship between the seller and the buyer: if a generator in northern Europe sells electricity to a consumer in southern Europe, this does not mean that the electrons produced by the generator will actually flow from north to south. It will rather mean a shift of the power balance towards the south.

¹ Before taking a decision, the Commission consults the committee, which delivers an opinion of which the Commission shall take utmost account.

² Unlike in case of an advisory committee, under a regulatory committee procedure the Commission can be forced to incorporate the committee's opinion in the intended decision.

³ Proposal from the Commission for a Directive of the European Parliament and of the Council amending Directives 96/92/EC and 98/30/EC concerning common rules for the internal market in electricity and natural gas.

However, even if not clearly attributable to individual economic transactions, trade in electricity gives rise to physical flows within and between transmission systems. It implies in practice that a certain amount of power is injected into the transmission system of the exporting Member States while at the same time the same amount of power is extracted for consumption from the transmission system of the importing Member State. It is thus appropriate and generally accepted that exporters and/or importers pay the national network charges applicable to generation in the exporting country and/or to consumption in the importing country.

However, in the interconnected European electricity system, exports of electricity not only affect the networks of the exporting and the importing countries. Export transactions are susceptible to cause flows of electricity also in countries where the electricity is neither injected into the network nor taken out for consumption. This seems plausible in case of a transaction between non-neighbouring countries, i.e. where the “direct path” to the consumer necessarily leads through the transmission system of a third. In addition, however, due to the physical laws determining the “behaviour” of electricity on the network, export transactions often cause physical flows in countries which are not on the – theoretical – direct path of the electricity⁴. Such transit flows are commonly denominated as “loop-flows” or “parallel-flows”.

In a liberalised, competitive market, transmission system operators need to be compensated for costs incurred by such transit flows of electricity. Otherwise, the local network users would be burdened with those costs, despite the fact that the flows of electricity concerned are entirely caused by market actors located in other transmission system areas.

Against this background, the draft Regulation contains a system based on three elements:

First, it stipulates that transmission system operators shall receive compensations for costs incurred by hosting transit flows of electricity on their network (Article 3(1)).

Secondly, it sets rules on the determination of the costs incurred from transits. In fact, whilst a compensation for such costs is necessary, it must be ensured that these compensations are indeed cost-reflective. The costs actually incurred by such flows need to be accurately determined, in order to avoid windfall profits and excessive transaction costs.

The draft Regulation opts in this respect for a model under the forward looking long-run average incremental costs that a network bears from hosting transits are identified and taken into account, compared to a situation without transits.

The reasoning underlying this approach is the prevention of “windfall contributions” by TSOs hosting transits, in practice to the benefit of TSOs of those Member States which are located in the centre of the European electricity system and at the expense of those in peripheral countries. In fact, the core horizontal network of every national network is constructed for the service of domestic customers. This core network must be constructed irrespective of the existence of transits. On the other hand, TSOs may have additional costs in taking specific measures to deal with transits. This may involve, for example, additional administrative measures, additional operational requirements for the management of transits, arrangements

⁴ In a simulation, it has been shown, for instance, that in case of a transport of 1 000 MW from Northern France only around 60% of the electricity reaches Italy “directly”, i.e. by crossing the French-Italian border or through Switzerland. The remainder reaches Italy “indirectly” causing flows on the network in Belgium, the Netherlands, Germany, Austria and Slovenia.

regarding losses, and additional investment through new lines or the reinforcement of existing lines. Such costs are clearly specific costs incurred by transits and TSOs must be able to recover them. It will be necessary to ensure adequate return on investment for new installations needed to host transits, in order to provide appropriate incentives for operators to make such investment. Finally, in order to be cost-reflective, benefits stemming from transits should also be taken into account, for instance in case transit flows contribute to the overall stabilisation of a national network.

Finally, the appropriate way of financing the compensations must be determined. In this context, it must be taken into account that transits are caused by export/import transactions. However, apart from exceptional cases, it is technically not – yet – possible to identify whether and to what extent an *individual* exporter/importer causes transits. Therefore, the draft Regulation does not foresee a mechanism whereby individual exporters or importers are directly held responsible for transit flows. Instead, it stipulates that the operators of transmission systems from which transits originate and/or the operators of the systems where these flows end (exporting and/or importing TSOs) shall – on a *pro rata* basis – pay the compensations (Article 3(2)).

In order to ensure accurate and rapid decisions on the level of the compensations to be made and received between TSOs, the draft Regulation stipulates that the Commission would make, on a regular basis, the decisions on these compensation payments (Article 3(3)). Member States' regulatory authorities would, however, be involved in this process through an advisory committee made up of representatives of Member States, created in accordance with Council Decision 1999/468/EC laying down the procedures for the exercise of implementing powers conferred on the Commission. ("Comitologie"), which the Commission would consult prior to making its final decision.

It should be noted that the Community budget will not be affected by these compensation payments since they would be made directly between TSOs concerned.

In order to recuperate the payments made to finance the compensations, the TSOs are required to adapt their national tariff system accordingly (Article 4(3)).

As regards the manner in which this adaptation is made, one possibility could be to charge exporters and/or importers with these costs, on the grounds that this is the fair and cost-reflective solution since the exporters and/or importers cause the flows in question.

However, such a solution would result in some important disadvantages. First, as already explained, it is in general impossible to determine whether and to what extent *individual* export transactions lead to physical transit and loop-flows. Commercial export transactions may not lead to any physical flows, namely in case of two cross-border transactions involving counterflows between systems. To require in such a situation exporters to pay a specific charge could not be considered fair or cost-reflective. Also, participants of an internationally operating power exchange would not know the exact amount of due cross-border charges before the daily close of exchange, because only after that, the exchange could determine the traded energy per TSO area. This would lead to the unpredictability of transmission charges and, thus, prices of electricity. Finally, low transaction costs and the resulting potential for trade benefit all consumers and generators in the internal market. It leads to increased competition and a bigger market for generators, which is particularly important in case of over-capacities at the national level.

In view of these considerations, the draft Regulation stipulates that whilst payments and receipts resulting from the compensation mechanism shall be taken into account when setting network tariffs, this shall not lead to a specific tariff to be paid only by exporters or importers (Article 4(4)).

2. Harmonisation of national network charges

As explained, exporters and/or importers pay the national network charges applicable to generation in the exporting country and/or to consumption in the importing country. If these charges, in particular those on generation, differ considerably between Member States, the market will be distorted. In fact, since generators will have to incorporate in their power pricing the costs arising from the network charges they have to pay, generators with low network charges will have a competitive advantage compared to those with high charges.

The levels of the network charges depend on the general structure of the national tariff system, the cost calculation principles applied and, of course, the particularities of the national networks concerned.

An important element of the structure of national tariff systems in the context of cross-border trade is therefore the ratio between the costs allocated to generation and the costs allocated to consumption. It is clear, for instance, that generators in a country where all network costs are paid by consumers are in a better position than a producer from a country where generators are charged a proportion of these costs when competing in the internal market. Therefore, this ratio and/or the absolute level of the network charges applied to generation need to be harmonised in order to ensure competitive neutrality.

In view of these considerations, the draft Regulation foresees that the network costs shall mainly be recovered through charges imposed on consumption (Article 4(2)). However, a lower proportion of the total costs charged on network users may be recovered through a charge on generation. This enables national regulatory authorities to include locational signals in the tariff structure, in order to send signals on the most appropriate and inappropriate zones to locate new generation, e.g. in view of local circumstances with regard to network losses and network congestion. The draft Regulation stipulates that, where appropriate, charges should contain elements providing such locational signals. Such locational signals, for example, will need to be in place as an integral part of the cross-border tariffication system established by this Regulation, and in particular taking into account of Article 4(4).

Even if a sufficient degree of harmonisation of the ratio between generation and consumption charges and/or of the absolute level of the charges applied to generation is achieved, considerable differences in the level will persist if cost accounting principles differ significantly. On the other hand, the specific circumstances prevailing in each national system need to be taken into account. Therefore, complete harmonisation of the level of the charges would not be appropriate. However, basic principles should be identical in all Member States. Therefore, the draft Regulation stipulates that access charges shall be cost-reflective, transparent, approximated to those of an efficient network operator and be applied in a non-discriminatory manner. They shall also not be related to the distance between the generator and the consumer.

As regards the payments and receipts resulting from the compensation mechanism for transits, the draft Regulation stipulates that they shall be taken into account when setting the charges. In fact, in order to ensure a maximum of cost-reflectiveness of the charges actually applied and fixed in advance, i.e. before the precise result of the compensation mechanism is known,

it is necessary to anticipate, as far as reasonably possible, the likely outcome of the mechanism (Article 4(3)).

3. Guidelines on details with regard to principles and methodologies (Article 7)

The draft Regulation contains in Article 3 and 4 the main principles with regard to cross-border tariffication.

However, in order to ensure that these basic principles are applied in a consistent manner throughout the Community, it may prove necessary to provide more detail with regard to those principles. On the other hand, in particular with regard to technical details, such as cost calculation methodologies and technical possibilities to identify and measure physical flows, there has been continuous progress in the past and further refinements and improvements can be expected in future.

In view of these considerations, the draft Regulation does not fix these details but provides for their determination in guidelines (Article 7). These guidelines must be in compliance with the principles laid down in the Regulation. They would be adopted and amended by the Commission, after consultation of a regulatory committee made up of Member States' experts, created in accordance with Council Decision 1999/468 laying down the procedures for the exercise of implementing powers conferred on the Commission ("Comitologie"), in order to ensure involvement of Member States regulatory authorities in this process, in particular their National Regulator.

The guidelines would be adopted, where appropriate, with regard to the following issues:

- (a) With regard to the inter-transmission system operator compensation mechanism mentioned in Article 3 of the Regulation:
- the precise details of methodologies to determine the amount of transits hosted and exports/imports of electricity made, in accordance with the principles mentioned in Article 3(5) of the Regulation;
 - the methodology to determine the costs incurred by hosting transits of electricity, in accordance with the principles mentioned in Article 3(6) of the Regulation;
 - details on the determination of the TSOs which have to pay the compensations for transit flows, in accordance with Article 3(2) of the Regulation;
 - details of the payment procedure to be followed, in accordance with the principles mentioned in Article 3(3) of the Regulation, including the determination of the first period of time for which compensations shall be made;
 - details on the participation of national systems which are interconnected through direct current lines in the inter-transmission system operator compensation mechanism.

- (b) With regard to national tariff systems mentioned in Article 4 of the Regulation:
- details regarding the harmonisation of the levels of tariffs applied to generators and consumers (load) under national tariff systems, in accordance with the principles mentioned in Article 4(2) of the Regulation.

National regulatory authorities would ensure that national tariffs are set and applied in compliance with the principles laid down in this Regulation and the guidelines adopted (Article 8).

4. Allocation of interconnection capacity (Articles 5 and 6)

Congestion in the sense of the draft Regulation is a situation in which the capacity of an interconnection between national transmission systems is insufficient to accommodate all transactions resulting from international trade by market operators⁵. In such a situation, it is important that the limited available capacity is allocated to undertakings under conditions compatible with the competitive circumstances that now prevail on the internal electricity market. At the same time, special measures need to be taken to ensure system security.

The draft Regulation lays down the main principles, which shall be respected when meeting these requirements. In order to maintain the *reliability of the European network*, information exchange and cooperation between transmission system operators is of primordial importance, in particular in view of the changing patterns of transactions and thus physical flows under the new circumstances of an open market. Transmission system operators have to know in advance the flows that they can expect on their network. Therefore, the draft Regulation contains in Article 5(1) an obligation to implement coordination and information exchange mechanisms for this purpose. In order to allow an optimal use of the available interconnection capacity, *information regarding the capacity actually available* must be made public to market parties. Currently, the transfer capacities on the interconnections in Europe are being published for winter and summer values. However, to ensure an optimal use of the available capacities, its publication must be more regular than that, i.e. at several time intervals before the day of transport, which is therefore required by the draft Regulation (Article 5(3)). Furthermore, it contains an obligation on TSOs to publish their security standards and their operational and planning standards in open and public documents, in order to ensure full transparency of the methodologies used by TSOs when establishing the amount of available capacity (Article 5(2)).

The draft Regulation also stipulates that the maximum capacity of the interconnections shall be made available to market operators, that complies with the safety standards of secure network operation, and that any allocated capacity that is not used by a market actor should be reattributed to the market.

As regards the *allocation of interconnection capacity* by TSOs in case of network congestion problems, the draft Regulation stipulates that market-based solution shall be applied which give efficient economic signals to market operators and transmission system operators involved (Article 6(1)). There are several specific methodologies, which comply with this requirement. An examination of the current state of the European markets leads to the conclusion that in Continental Europe the – in practice – most feasible methods seem to be for

⁵ It should be noted that in the technical jargon the term “congestion” is often also used to describe a situation of lack of capacity within a national transmission system.

the moment implicit and explicit auctions combined with cross border coordinated redispatching. Recent experience, however, illustrates the significant limitations of this approach. Thus, further improvements in this respect and continued re-examination of alternative approaches are necessary. In particular, regarding the medium term, it is widely recognised that a very efficient and transparent way to deal with scarce interconnection capacity is the system of market splitting⁶ currently operated in the Nordpool. Its introduction as soon as possible should be envisaged, however adapted to the network topology and market circumstances of Continental Europe.

As regards the revenues from congestion management, the Regulation stipulates that they shall be used to guarantee the reliability of the allocated capacity, towards investment into the network maintaining or increasing the capacity of the interconnection, or towards the lowering of the network tariffs. In any event, the congestion revenues shall not constitute a source of extra profit (Article 6(6)).

Based on the above rules and principles, detailed technical provisions and requirements regarding the management and allocation of interconnection capacities, based on the guidelines agreed between the Commission, national regulators and Member States at the Florence Forum, are contained in an Annex to the draft Regulation. In order to allow that experience which is constantly being developed can be taken into account in a flexible manner, for instance with regard to various allocation methods, the Commission would amend these guidelines, after consultation of the regulatory committee made up of Member States' experts, which the draft regulation provides for (see above under point 3 and Article 7(2) of the draft regulation).

National regulatory authorities would ensure that methodologies for congestion management are designed and applied in compliance with the principles laid down in the Regulation and the guidelines (Article 8).

5. Provision of information and confidentiality (Article 9)

In order to adopt the guidelines and decide on the compensations to be made for transits between TSOs, the Commission needs to have access to the relevant information and data. Consequently, the draft Regulation stipulates that this information shall be provided by Member States and national regulatory authorities, on request.

The Commission shall in turn ensure that this information is treated confidentially.

In addition, the Commission may obtain all necessary information directly from the undertakings concerned, where necessary to fulfil its tasks under the Regulation.

6. Conclusions

The adoption of this draft Regulation is an important part of the Community strategy to complete the internal electricity market. Through the provision of fair, cost-reflective, transparent and directly applicable rules with regard to tarification and the allocation of available interconnection capacities – completing the provisions contained in the Electricity Directive, it will ensure efficient access to transmission systems for the purpose of cross-border transactions.

⁶ Under a system of market splitting, the optimal use of the interconnection is determined on the basis of a comparison of market prices prevailing in the interconnected markets concerned.

Its entry into force at this time, i.e. together with the revision of the Electricity Directive providing for complete market opening, will ensure that such market opening translates into effective cross-border trade in practice. The Regulation is thus a key instrument to promote the creation of a real internal electricity market, as opposed to a situation characterised by fifteen more or less liberalised but largely national markets.

The financial implications of the Regulation for the Community budget would amount to around EUR 850 000 per year. In the year 2002, these financial needs would be made available under the Energy Framework Programme (ETAP programme). As regards the subsequent years, a proposal for a new Energy Framework Programme, succeeding the current one which expires in 2002, will be made in 2001, in accordance with the work programme of the Commission for 2001. This new proposal will take into account the financial needs for the action in the coming years.

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on conditions for access to the network for cross-border exchanges in electricity

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission¹,

Having regard to the opinion of the Economic and Social Committee²,

Having regard to the opinion of the Committee of the Regions³,

Acting in accordance with the procedure laid down in Article 251 of the Treaty⁴,

Whereas:

- (1) Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity⁵ constituted an important step in the completion of the internal market in electricity.
- (2) At its meeting in Lisbon on 23 and 24 March 2000, the European Council called for rapid work to be undertaken to complete the internal market in both the electricity and gas sectors and to speed up liberalisation in these sectors with a view to achieving a fully operational internal market in these areas.
- (3) The creation of a real internal electricity market should be promoted through an intensification of trade in electricity, which is currently underdeveloped compared to other sectors of the economy.
- (4) Fair, cost-reflective, transparent and directly applicable rules, completing the provisions of Directive 96/92/EC, should be introduced with regard to cross-border tariffication and the allocation of available interconnection capacities, in order to ensure effective access to transmission systems for the purpose of cross-border transactions.

¹ O J C

² O J C

³ O J C

⁴ O J C

⁵ O J L 27, 30.1.1997, p. 20; Directive as amended by Directive .../.../EC (O J L ..., ..., p. ...).

- (5) In its Conclusions, the Energy Council of 30 May 2000 invited the Commission, Member States and national regulatory authorities/administrations to ensure a rapid introduction of a robust tariffication system and methodology to allocate available *interconnection* capacity for the longer term.
- (6) The European Parliament, in its Resolution of 6 July 2000 on the Commission's second report on the state of liberalisation of energy markets, called for conditions for using networks in Member States that do not hamper cross-border trade in electricity and called on the Commission to submit specific proposals geared to overcoming all the existing barriers to intra-Community trade.
- (7) This Regulation should lay down basic principles with regard to tariffication and capacity allocation, whilst providing for the adoption of guidelines detailing further relevant principles and methodologies, in order to allow rapid adaptation to changed circumstances.
- (8) In an open, competitive market, transmission system operators should be compensated for costs incurred as a result of hosting transit flows of electricity on their networks by the operators of the transmission systems from which transits originate or for which they are destined.
- (9) Payments and receipts resulting from compensation between transmission system operators should be taken into account when setting national network tariffs.
- (10) The actual amount payable for cross-border access to the system can vary considerably, depending on the transmission system operators involved and as a result of differences in the structure of the tariffication systems applied in Member States. A certain degree of harmonisation is therefore necessary in order to avoid distortions of trade.
- (11) It would not be appropriate to apply distance-related tariffs, or a specific tariff to be paid only by exporters or importers.
- (12) Competition on the internal market can only truly develop if access to the lines interconnecting the different national systems is granted in a non-discriminatory and transparent way. The available capacities of these lines should be set at the maximum complying with the safety standards of secure network operation. Any discrimination in the allocation of available capacities should be shown not to unreasonably distort or hinder the development of trade.
- (13) There should be transparency for market actors concerning available transfer capacities and the security, planning and operational standards that affect the available transfer capacities.
- (14) Any revenues flowing from congestion-management procedures should not constitute a source of extra profit for the transmission system operators.
- (15) It should be possible to deal with congestion problems in various ways as long as the methods used provide correct economic signals to transmission system operators and market parties and are based on market mechanisms.

- (16) To ensure the smooth functioning of the internal market, provision should be made for procedures which allow the adoption of decisions and guidelines with regard to tariffication and capacity allocation by the Commission whilst ensuring the involvement of Member States' regulatory authorities in this process.
- (17) National authorities should be required to provide relevant information to the Commission. Such information should be treated confidentially by the Commission. Where necessary, the Commission should have the possibility to request relevant information directly from undertakings concerned.
- (18) National regulatory authorities should ensure compliance with the rules contained in this Regulation and the guidelines adopted on the basis of this Regulation.
- (19) Member States should lay down rules on penalties applicable to infringements of the provisions of this Regulation and ensure that they are implemented. Those penalties must be effective, proportionate and dissuasive:
- (20) In accordance with the principles of subsidiarity and proportionality as set out in Article 5 of the Treaty, the objectives of the proposed action, namely the provision of a harmonised framework for cross-border exchanges of electricity, cannot be achieved by the Member States and can therefore, by reason of the scale and effect of the action, be better achieved by the Community. This Regulation confines itself to the minimum required in order to achieve those objectives and does not go beyond what is necessary for that purpose.
- (21) In accordance with Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission⁶, measures for the implementation of this Regulation should be adopted by use of the regulatory procedure provided for in Article 5 of Decision 1999/468/EC, or by use of the advisory procedure provided for in Article 3 of that Decision, according to the nature of the measures to be adopted,

HAVE ADOPTED THIS REGULATION:

Article 1

Subject-matter and scope

This Regulation aims at stimulating cross-border exchanges in electricity and thus competition within the internal electricity market, through the establishment of a compensation mechanism for transit flows of electricity and the setting of harmonised principles on cross-border transmission charges and the allocation of available capacities of interconnections between national transmission systems.

Article 2

Definitions

1. For the purpose of this Regulation, the definitions contained in Article 2 of Directive 96/92/EC shall apply.

⁶ OJ L 184, 17.7.1999, p. 23.

2. The following definitions shall also apply:
 - (a) "transit" means a physical flow of electricity hosted on the transmission system of a Member State, which was neither produced nor is destined for consumption in that Member State, including transit flows which are commonly denominated as "loop-flows" or "parallel-flows";
 - (b) "congestion" means a situation in which an interconnection linking national transmission networks cannot accommodate all transactions resulting from international trade by market operators due to a lack of capacity.

Article 3

Inter transmission system operator compensation mechanism

1. Transmission system operators shall receive compensation for costs incurred as a result of hosting transit flows of electricity on their network.
2. The compensation referred to in paragraph 1 shall be paid by the operators of national transmission systems from which transit flows originate and/or the systems where those flows end.
3. Compensation payments shall be made on a regular basis with regard to a given period of time in the past. *Ex-post* adjustments of compensation paid shall be made where necessary to reflect actual costs incurred.

The first period of time with regard to which compensation payments shall be made shall be determined in the guidelines referred to in Article 7.

4. Acting in accordance with the procedure referred to in Article 13(2), the Commission shall decide on the amounts of compensation payments payable.
5. The amounts of transit hosted and the amounts of transit flows originating and/or ending in national transmission systems shall be determined on the basis of the physical flows of electricity actually measured in a given period of time.
6. The costs incurred as a result of hosting transit flows shall be established on the basis of the forward looking long-run average incremental costs (reflecting costs and benefits that a network bears from hosting transit flows compared to the costs it would bear in the absence of such flows).

Article 4

Charges for access to networks

1. Charges applied by national network-operators for access to national networks shall reflect actual costs incurred, and shall be transparent, approximated to those of an efficient network operator and applied in a non-discriminatory manner. They shall not be distance-related.

2. Generators and consumers (load) may be charged for access to national networks. The proportion of the total amount of the network charges borne by generators shall be lower than the proportion borne by consumers. Where appropriate, the level of the tariffs applied to generators and/or consumers shall provide locational signals, and take into account the amount of network losses and congestion caused.
3. Payments and receipts resulting from the inter-transmission system operator compensation mechanism shall be taken into account when setting the charges for network access. Actual payments made and received as well as payments expected for future periods of time, estimated on the basis of past periods, shall be taken into account.
4. Subject to paragraph 2, charges for access to national networks applied to generators and consumers shall be applied independently of the country of destination and respectively origin of the electricity, as specified in the underlying commercial arrangement. Exporters and importers shall not be charged any specific charge in addition to the general charge for access to national networks.
5. There shall be no specific network charge on individual transactions for transits of electricity covered by the inter-transmission system operator compensation mechanism.

Article 5

Provision of information on interconnection capacities

1. Coordination and information exchange mechanisms shall be put in place by transmission system operators to ensure the security of the networks in the context of congestion management.
2. The safety, operational and planning standards used by transmission system operators shall be made public. This publication shall include a general scheme for the calculation of the total transfer capacity and the transmission reliability margin based upon the electrical and physical features of the network. Such schemes shall be subject to the approval of the national regulatory authority.
3. Transmission system operators shall publish estimates of available transfer capacity for each day, indicating any available transfer capacity already reserved. These publications shall be made at specified time intervals before the day of transport and shall include, in any case, week-ahead and month-ahead estimates.

The data published shall include a quantitative indication of the expected reliability of the available capacity.

Article 6

General principles on congestion management

1. Network congestion problems shall be addressed with non-discriminatory market based solutions which give efficient economic signals to the market participants and transmission system operators involved.

2. Transaction curtailment procedures shall only be used in emergency situations where the transmission system operator must act in an expeditious manner and redispatching or countertrading is not possible.

Market participants who have been allocated capacity shall be compensated for any curtailment of this capacity.

3. The maximum capacity of the interconnections shall be made available to market participants, complying with safety standards of secure network operation.
4. Any allocated capacity that will not be used shall be reattributed to the market.
5. Transmission system operators shall, as far as technically possible, net the capacity requirements of any power flows in opposite direction over the congested interconnection line in order to use this line to its maximum capacity. In any event, transactions that relieve the congestion shall never be denied.
6. Any rents resulting from the allocation of interconnection capacities shall be used for one or more of the following purposes:
 - (a) guaranteeing the actual availability of the allocated capacity;
 - (b) network investments maintaining or increasing interconnection capacities;
 - (c) reduction of network charges.

These rents may be put into a fund that is managed by transmission system operators. They shall not constitute a source of extra profit for the transmission system operators.

Article 7

Guidelines

1. Where appropriate, the Commission shall, acting in accordance with the procedure referred to in Article 12 (2), adopt and amend guidelines on the following issues with regard to the inter-transmission system operator compensation mechanism:
 - (a) details of the determination of the transmission system operators liable to pay compensations for transit flows, in accordance with Article 3(2);
 - (b) details of the payment procedure to be followed, including the determination of the first period of time for which compensations are to be paid, in accordance with the second subparagraph of Article 3(3);
 - (c) details of methodologies to determine the amount of transits hosted and exports/imports of electricity made, in accordance with Article 3(5);
 - (d) details of the methodology to determine the costs incurred as a result of hosting transits of electricity, in accordance with Article 3(6);
 - (e) the participation of national systems which are interconnected through direct current lines, in accordance with Article 3.

2. The guidelines shall also determine details of the harmonisation of the charges applied to generators and consumers (load) under national tariff systems, in accordance with the principles set out in Article 4(2).
3. Where appropriate, the Commission shall, acting in accordance with the procedure referred to in Article 12(2), amend the guidelines on the management and allocation of available transfer capacity of interconnections between national systems set out in the Annex, in accordance with the principles set out in Articles 5 and 6. Where appropriate, in the course of such amendments common rules on minimum safety and operational standards for the use and operation of the network, as referred to in Article 5(2) shall be set.

Article 8

National regulatory authorities

National regulatory authorities shall ensure that national tariffs and methodologies for congestion management are set and applied in accordance with this Regulation and the guidelines adopted pursuant to Article 7.

Article 9

Provision of information and confidentiality

1. Member States and national regulatory authorities shall, on request, provide to the Commission all information necessary for the purpose of Articles 3(4) and 7.

In particular, for the purpose of Article 3(4), national regulatory authorities shall provide on a regular basis, costs actually incurred by national transmission system operators associated with hosting transit flows as well as the amount of exports and imports made in a given period. They shall also provide the relevant data and information used for the calculation of those figures.
2. Member States shall ensure that national regulatory authorities and administrations are able and entitled to provide the information required pursuant to paragraph 1.
3. The Commission may also request all information necessary for the purpose of Article 3(4) and Article 7 directly from undertakings and associations of undertakings.

When sending a request for information to an undertaking or an association of undertakings, the Commission shall at the same time forward a copy of the request to the regulatory authority, established pursuant to Article 22 of Directive 96/92/EC of the Member State in whose territory the seat of the undertaking or the association of undertakings is situated.

4. In its request for information, the Commission shall state the legal basis of the request, the time-limit within which the information is to be provided, the purpose of the request, and also the penalties provided for in Article 11(2) for supplying incorrect, incomplete and misleading information.

5. The owners of the undertakings or their representatives and, in the case of legal persons, companies of firms, or of associations having no legal personality, the persons authorised to represent them by law or by their constitution, shall supply the information requested. Lawyers duly authorised to act may supply the information on behalf of their clients, in which case the client shall remain fully responsible if the information supplied is incomplete, incorrect or misleading.
6. Where an undertaking or association of undertakings does not provide the information requested within the time-limit fixed by the Commission or supplies incomplete information, the Commission shall by decision require the information to be provided. The decision shall specify what information is required and fix an appropriate time-limit within which it is to be supplied. It shall indicate the penalties provided for in Article 11(2). It shall also indicate the right to have the decision reviewed by the Court of Justice of the European Communities.

The Commission shall at the same time send a copy of its decision to the regulatory authority referred to in the second subparagraph of paragraph 3 of the Member State within the territory of which the residence of the person or the seat of the undertaking or the association of undertakings is situated.

7. Information collected pursuant to this Regulation shall be used only for the purposes of Articles 3(4) and 7.

The Commission shall not disclose information acquired pursuant to this Regulation of the kind covered by the obligation of professional secrecy.

Article 10

Right of Member States to provide for more detailed measures

This Regulation is without prejudice to the rights of Member States to maintain or introduce measures that contain more detailed provisions than those set out in this Regulation and the guidelines referred to in Article 7.

Article 11

Penalties

1. The Member States shall lay down the rules on penalties applicable to infringements of the provisions of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. The Member States shall notify those provisions to the Commission by [indicate date] at the latest and shall notify it without delay of any subsequent amendment affecting them.
2. The Commission may by decision impose on undertakings or associations of undertakings fines not exceeding 1% of the total turnover in the preceding business year where, intentionally or negligently, they supply incorrect, incomplete or misleading information in response to a request made pursuant to Article 9(3) or fail to supply information within the time-limit fixed by a decision adopted pursuant to the first subparagraph of Article 9(6).

In setting the amount of a fine, regard shall be had both to the gravity and to the duration of the infringement.

3. Penalties provided for pursuant to paragraph 1 and decisions taken pursuant to paragraph 2 shall not be of criminal law nature.

Article 12

Regulatory committee

1. The Commission shall be assisted by a committee composed of the representatives of the Member States and chaired by the representative of the Commission.
2. Where reference is made to this paragraph, the regulatory procedure laid down in Article 5 of Decision 1999/468/EC shall apply, in compliance with Article 7 and Article 8 thereof.
3. The period provided for in Article 5(6) of Decision 1999/468/EC shall be two months.

Article 13

Advisory committee

1. The Commission shall be assisted by a committee composed of the representatives of the Member States and chaired by the representative of the Commission.
2. Where reference is made to this paragraph, the advisory procedure laid down in Article 3 of Decision 1999/468/EC shall apply, in compliance with Article 7 and Article 8 thereof.

Article 14

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Communities*.

It shall apply from [indicate date].

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the European Parliament

For the Council

The President

The President

ANNEX

Guidelines on the management and allocation of available transfer capacity of interconnections between national systems

General

1. Congestion management method(s) implemented by Member States should deal with short-run congestion in an economically efficient manner whilst simultaneously providing signals or incentives for efficient network and generation investment in the right locations.
2. In order to minimise the negative impact of congestion on trade, the current network should be used at the maximum capacity that complies with the safety standards of secure network operation.
3. The TSOs should provide non-discriminatory and transparent standards, which describe which congestion management methods they will apply under which circumstances. These standards, together with the security standards, should be described in open and publicly available documents.
4. Different treatment of the different types of cross-border transactions, whether they are physical bilateral contracts or bids into foreign organised markets, should be kept to a minimum when designing the rules of specific methods for congestion management. The method for allocating scarce transmission capacity must be transparent. Any differences in how transactions are treated must be shown not to distort or hinder the development of competition.
5. Price signals that result from congestion management systems should be directional.
6. Every effort should be made to net the capacity requirements of any power flows in opposite direction over the congested tie line in order to use the congested tie line to its maximum capacity. In any adopted congestion management scheme, transactions that relieve the congestion should never be denied.
7. Any unused capacity must become available to other agents (the use-it-or-lose-it principle). This may be implemented by devising notification procedures.
8. Any rents resulting from the allocation of interconnection capacities may be used for redispatching or counter trading in order to comply with the firmness of the capacity that was allocated to market parties. In principle, any remaining rents should be spent on network investments for relieving the congestion or on reducing the total network tariff. TSOs may manage these funds, but cannot retain them.
9. TSOs should offer transmission capacity to the market as 'firm' as possible. A reasonable fraction of the capacity may be offered to the market under condition of decreased firmness, but at all times the exact conditions for transport over cross-border lines should be made known to market parties.

10. Considering the fact that the European continental network is a highly meshed network and that the use of interconnection lines has an effect on the power flows on at least two sides of a national border, national Regulators shall ensure that no congestion management procedure with significant effects on power flows in other networks, be devised unilaterally.

Position of long-term contracts

1. Priority access rights to an interconnection capacity can not be assigned to those contracts which violate Articles 81 and 82 of the EC Treaty.
2. Existing long-term contracts shall have no pre-emption rights when they come up for renewal.

Provision of information

1. TSOs should implement appropriate coordination and information exchange mechanisms to guarantee security of the network.
2. TSOs should publish all relevant data concerning the cross-border total transfer capacities. In addition to the winter and summer ATC values, estimates of transfer capacity for each day should be published by the TSOs at several time intervals before the day of transport. At least accurate week-ahead estimates should be made available to the market and the TSOs should also endeavour to provide month-ahead information. A description of the firmness of the data should be included.
3. The TSOs should publish a general scheme for calculation of the total transfer capacity and the transmission reliability margin based upon the electrical and physical realities of the network. Such a scheme should be subject to approval by the regulators of the involved Member States concerned. The safety standards and the operational and planning standards should form an integral part of the information that TSOs should publish in open and public documents.

Preferred methods for congestion management

1. Network congestion problems should in principle be addressed with market-based solutions. More specifically, congestion management solutions are preferred which give appropriate price signals to the market parties and the TSOs involved.
2. Network congestion problems should preferentially be solved with non-transaction based methods, i.e. methods that do not involve a selection between the contracts of individual market parties.
3. The system of market splitting, as used in the Nordpool area, is the congestion management procedure that, in principle, best meets this requirement.
4. In the short term, however, methods for congestion management in Continental Europe that may be used are implicit and explicit auctions and cross-border coordinated redispatching.

5. Cross-border coordinated redispatching or counter trading may be used jointly by the concerned TSOs. The costs that TSOs incur in counter-trading and redispatching must, however, be at an efficient level.
6. Transaction curtailment, following pre-established priority rules, should be left only for emergency situations where the TSOs must act in an expeditious manner and redispatching is not possible.
7. The possible merits of a combination of market splitting for solving 'permanent' congestion and counter trading for solving temporary congestion should be immediately explored as a more permanent approach to congestion management.

Guidelines for explicit auctions

1. The auction system must be designed in such a way that all available capacity is being offered to the market. This may be done by organising a composite auction in which capacities are auctioned for differing duration and with different characteristics (e.g. with respect to the expected reliability of the available capacity in question).
2. Total interconnection capacity should be offered in a series of auctions, which, for instance, might be held on a yearly, monthly, weekly, daily and intra-daily basis, according to the needs of the markets involved. Each of these auctions should allocate a prescribed fraction of the available transfer capacity plus any remaining capacity that was not allocated in previous auctions.
3. The explicit auction procedures should be prepared in close collaboration between the national regulatory authority and the TSO concerned and designed in such a way as to allow bidders to participate also in the daily sessions of any organised market (i.e. power exchange) in the countries involved.
4. The power flows in both directions over congested tie lines should in principle be netted in order to maximise the transport capacity in the direction of the congestion. However, the procedure for netting of flows should comply with safe operation of the power system.
5. In order to offer as much capacity to the market as possible, the financial risks related to the netting of flows, should be attributed to those parties causing those risks to materialise.
6. Any auction procedure adopted should be capable of sending directional price signals to market participants. Transports in a direction opposite the dominant power flow relieve the congestion and should therefore result in additional transport capacity over the congested tie line.
7. In order not to risk creating or aggravating problems related to any dominant position of market player(s), capping of the amount of capacity that can be bought/possessed/used by any single market player in an auction should be seriously considered by the competent regulatory authorities in the design of an auction mechanisms.
8. To promote the creation of liquid electricity markets, capacity bought at an auction should be freely tradeable before the moment of notification.

LEGISLATIVE FINANCIAL STATEMENT

Policy area(s): Energy and Transport

Activity(ies): Energy Industry and Internal Market

Title of action: Regulation of the European Parliament and of the Council on conditions for access to the network for cross-border exchanges in electricity

1. BUDGET LINE(S) + HEADING(S)

In 2002: Chapter B4-10, Article B4-1040 (ETAP)

2. OVERALL FIGURES

2.1. Total allocation for action (Part B): EUR 5 million (1998 – 2002)

2.2. Period of application:

2002¹

2.3. Overall multiannual estimate on expenditure:

(a) Schedule of commitment appropriations/payment appropriations (financial intervention) (see point 6.1.1)

EUR million (to 3rd decimal place)

	1998	1999	2000	2001	2002	Total
Commitments	1.449	0.869	1.635	0.5	0.6	5.053
Payments	1.144 ²	1.160	1.207	1.2	0.5	5.211 ²

¹ In accordance with the work programme of the Commission for 2001, a proposal for a new Energy Framework programme succeeding the current one, which expires in 2002, will be made this year. This new proposal will include the financial needs for the action in the coming years.

² Including payments for commitments made prior to 1998.

- (b) Technical and administrative assistance and support expenditure
(see point 6.1.2)

Non-Applicable

Commitments						
Payments						

Subtotal a+b						
Commitments	1.449	0.869	1.635	0.5	0.6	5.053
Payments	1.144 ²	1.160	1.207	1.2	0.5	5.211 ²

- (c) Overall financial impact of human resources and other administrative expenditure (see points 7.2 and 7.3)

Commitments/ payments					0.258	
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TOTAL a+b+c						
Commitments	1.449	0.869	1.635	0.5	0.858	5.311
Payments	1.144 ²	1.160	1.207	1.2	0.758	5.469 ²

2.4. Compatibility with the financial programming and the financial perspective

- Proposal compatible with the existing financial programming
- This proposal will entail reprogramming of the relevant heading in the financial perspective
- This may entail application of the provisions of the Interinstitutional Agreement.

2.5. Financial impact on revenue³:

No financial implications (involves technical aspects regarding implementation of a measure)

or

Financial impact – the effect on revenue is as follows:

EUR million (to 1 decimal place)

		Prior to action (Year n-1)	Situation following action					
Budget line	Revenue		Year n	n+1	n+2	n+3	n+4	n+5
	(a) Revenue in absolute terms							
	(b) Change in Revenue Δ							

3. BUDGET CHARACTERISTICS

Type of expenditure		New	EFTA participation	Participation applicant countries	Heading Financial Perspective
Comp/Non-comp	Diff/Non-diff	YES/NO	YES/NO	YES/NO	No 3
Non-Comp	Diff	Yes	Yes	No	

4. LEGAL BASIS

The Treaty establishing the European Community, in particular Article 95.

Council Decision 1999/21/EC, Euratom of 14 December 1998 adopting a multiannual framework programme for actions in the energy sector (1998 to 2002) and connected measures (OJ L 7, 13.1.1999, p. 16).

Council Decision 1999/22/EC of 14 December 1998 adopting a multiannual programme of studies, analyses, forecasts and other related work in the energy sector (1998 to 2002) (OJ L 7, 13.1.1999, p. 20).

³ For further information, see a separate guidance paper.

5. DESCRIPTION AND GROUNDS

5.1. Need for Community intervention⁴

5.1.1. Objectives pursued

The Electricity Directive progressively opens up national electricity markets to competition. However, in order to create a real integrated internal market, effective trading rules are necessary, and notably a harmonised approach on cross-border tariffication for transmission tariffs and commonly implemented mechanisms for dealing with congestion at borders. In order to deal with this, the Commission launched the "Florence process", a Forum composed of the Commission, national Regulators, Member States and industry. Much progress has been made, but no final agreement has been reached or mechanisms put in place. To deal with this the Commission will propose, on 7 March 2001, a Regulation which (a) sets out the basic principles according to which cross-border tariffication and congestion management must be dealt with (b) permits the Commission, subject to a comitology procedure, to adopt binding guidelines on the precise mechanism according to which the harmonised rules on tariffication and congestion will enter into force, and (c) calculate and implement, on the basis of data provided by national regulators, cross-border tariffs. Thus, the Commission takes on new executive responsibilities, acting in many respects as a European regulator regarding cross-border electricity trade.

The objectives pursued by the Regulation are, therefore, the rapid entry into force of cost-reflective mechanisms on tariffs and congestion permitting trade to function freely. It is expected that the Regulation may enter into force in late 2001/early 2002. A new tariffication system through guidelines should therefore be in place by september 2002. Tariffs should then be adopted by end 2002. Finally, common rules on congestion management will enter into force on the adoption of the Regulation, as they are contained in Annex to the legislative text. These will need to be reviewed and, if necessary, amended by end 2002. The objectives pursued by this financial action is to provide the Commission with the means to effectively carry out these new responsibilities.

5.1.2. Measures taken in connection with ex ante evaluation

To prepare the adoption of the proposed Regulation, the Commission set up the Florence Forum. This has now met five times. Equally, the results of the Forum have been discussed on four occasions by the energy Council which has underlined the importance of the rapid introduction of such measures. On the basis of the work at the Forum, the Commission adopted on 16 May 2000 a Communication on "recent progress with building the internal electricity market". Furthermore, this issue was addressed at a Public Hearing organised by the Commission on 14 September 2000. Furthermore, this issue was examined in the Green Paper on security of supply (COM(2000) 769).

⁴ For further information, see a separate guidance paper.

The discussions at the Florence Forum and at Council, as well as the reaction to the Commission's Communication on this subject, has shown that the introduction of effective rules on cross-border tariffication and congestion management is a fundamental requirement for the creation of a real internal market for electricity. It has also shown that the development of such rules is technically extremely complex, and controversial. Furthermore, once a robust methodology is determined, calculation of costs relating to cross-border trade will be difficult and time-consuming. In this light, a Regulation has been viewed as necessary to deal with the issues effectively.

5.1.3. *Measures taken following ex post evaluation*

It is believed that a detailed review of the effectiveness of the approach set out in the Regulation in developing common rules, as well as the effectiveness of the financial actions taken by the Commission to support this effort, should take place two years after the entry into force of the Regulation.

5.2. **Actions envisaged and arrangements for budget intervention**

The adoption of common rules on cross-border tariffication and congestion management would lead to increased competition throughout the EU and thus lower electricity prices, thus benefiting all consumers, both domestic and industrial. The financial actions envisaged are to prepare the entry into force of such rules, and are thus highly technical and specific in nature, and would thus be of interest to national regulators, Member States, the European Parliament and relevant industry.

– *the specific objectives set for the programming period*

The specific objectives of the Regulation are the entry into force, by end 2002 of a harmonised system for cross-border transmission tariffication based on principles of simplicity, cost-reflectiveness and non-discrimination. Also they are the entry into force of common rules on congestion management at the adoption of the Regulation and, if necessary in the light of experience, their revision by end 2002. The specific objectives of the financial actions are thus to (i) complete the studies leading to the entry into force of a detailed guidelines on tariffication by september 2002, (ii) the fixing and entry into force of actual tariffs through the verification of data submitted by national Regulators by end 2002 and (iii) the entry into force of any revision of the guidelines on congestion management, on the basis of necessary study, by end 2002. Thereafter, the specific objective is the revision of these guidelines, if necessary, on the basis of additional studies on an annual basis, and the recalculation and re-adoption of tariffs.

– *the concrete measures to be taken to implement the action*

First, the launch of studies leading to the adoption and agreement of guidelines on cross-border tariffication (to September 2002); secondly, the adoption of a decision on actual tariffs (end 2002) on the basis of figures submitted by Regulators and received by the Commission, thirdly, the re-examination of guidelines on congestion management contained in the Regulation on the basis of necessary study work (end 2002).

To achieve these objectives, two financial actions are envisaged:

Action 1: In order to develop the detailed guidelines with respect to tariffication upon which the new system will be based, considerable preparatory work is necessary, often technical (engineering) and financial (accounting) in nature. This also applies to the question whether and how the guidelines contained in the Regulation on congestion management are amended. To achieve this, it is cost effective to prepare the guidelines through expert studies.

Action 2: Once the guidelines on cross-border tariffication have been adopted, national Regulators will forward calculations on the costs/benefits to their network resulting from electricity trade. The Commission must determine whether these figures are correctly calculated, and on the basis of these, calculate the individual payments between systems to compensate for trade. This will require very specialised auditing skills, for a limited period every year. The most cost-effective manner of carrying out much of this verification work is therefore to engage outside expertise.

– *the immediate outputs of each action, and their contribution to*

The expected outcome is the entry into force, and subsequent maintenance and refinement of a system of cross-border tariffication and congestion management permitting electricity trade to function effectively.

– *the expected outcomes solving needs or problems*

1. The Commission should adopt and amend guidelines which further detail the basic principles with regard to tariffication and congestion management contained in the draft Regulation. These guidelines can be adopted and amended without changing the Regulation in order to allow rapid adaptation to changed circumstances. This is necessary since issues, such as cost calculation methodologies and the concrete identification and measurement of physical flows, develop continuously and, therefore, it must be possible to make refinements and improvements in future.
2. The Commission determines, on a regular basis, the level of compensation payments to be made between transmission system operators for transit flows of electricity hosted. The main objective of this action is to ensure that transmission system operators are accurately compensated for costs incurred, in particular with a view to exclude overcompensation and thus excessive transaction costs.

Member States alone cannot resolve this issue: to develop an effective tariffication system a harmonised approach is imperative and cannot be developed at national level. As demonstrated above, an informal collaborative approach will not lead to the implementation of an appropriate system with necessary procedural and democratic safeguards. Such a proposal is therefore wholly in line with the subsidiarity principle, and indeed is made necessary by it.

However, Member States' regulatory authorities need to be involved in this process. The Commission would therefore take these decisions after consultation of a committee made up of representatives of Member States, created in accordance with Council Decision 1999/468 laying down the procedures for the exercise of implementing powers conferred on the Commission ("Comitologie").

5.3. Methods of implementation

The financial actions seek to provide the Commission with the resources necessary to effectively carry out the new executive functions accorded to it by the adoption of the proposed Regulation on cross-border tariffication and congestion. The Regulation provides three new tasks: the adoption via a comitology committee of detailed rules on cross-border tariffication, the fixing and imposition of those tariffs, and the amendment, through a comitology procedure, of guidelines contained in the Regulation on congestion management.

Much of this work will be carried out internally by the Commission, preparing the final text of guidelines, ensuring their adoption through the comitology procedure, and adopting decisions on actual tariff levels. However, in preparing this work:

Action 1: In developing and improving the guidelines, it will be necessary to have recourse to external studies providing economic, accounting and technical expertise.

Action 2: once the methodology is established and guidelines adopted, the Commission will have to calculate exact tariff levels. This will be done on the basis of data provided by national regulators, calculated in accordance with the guidelines. The Commission has the role of verifying the data provided at national level. As this is highly specialised audit work, needed for a relatively short period each year, it is cost efficient that this verification is carried out by external expertise.

6. FINANCIAL IMPACT

6.1. Total financial impact on Part B – (over the entire programming period)

6.1.1. Financial intervention

Commitments in EUR million (to 3rd decimal place)

Breakdown	1998	1999	2000	2001	2002		Total
Action 1: Studies to prepare guidelines					0.234		
Action 2: Verification of financial data					0.370		
Etc.							
TOTAL					0.604		

6.1.2. *Technical and administrative assistance, support expenditure and IT expenditure (Commitment appropriations)*

Non-Applicable

	Year N	N + 1	N + 2	N + 3	N + 4	N + 5 and subs. Years	Total
1. Technical and administrative assistance							
(a) Technical assistance offices							
(b) Other technical and administrative assistance: – intra muros: – extra muros: <i>of which for construction and maintenance of computerised management systems</i>							
Subtotal 1							
2. Support expenditure							
(a) Studies							
(b) Meetings of experts							
(c) Information and publications							
Subtotal 2							
TOTAL							

6.2. Calculation of costs by measure envisaged in Part B (over the entire programming period)⁵

Commitments in EUR million (to 3rd decimal place)

Breakdown	Type of outputs (projects, files)	Number of outputs (total for years 1...n)	Average unit cost	Total cost (total for years 1...n)
	1	2	3	4 = (2 X 3)
<u>Action 1</u>				
<i>Studies to prepare guidelines</i>	Studies	2	0.117	0.234
<u>Action 2</u>				
<i>Verification of financial data</i>	Studies/analysis	1	0.370	0.370
<i>Etc.</i>				
TOTAL COST				0.604

If necessary, explain the method of calculation

Explanation of the method of calculation:

Action 1: Studies to assist the Commission in preparing guidelines on cross-border tariffication and congestion management,

Two studies per year are necessary in order to prepare the adoption and/or amendment of the guidelines: *per study 130 man/days at EUR 900 (average rate of auditors and other experts) = 2 x 117 000 = EUR 234 000*

Action 2: Verification of cost-calculations regarding the costs of transits incurred by national transmission system operators.

- verification of documents submitted and benchmarking exercise: *Cost per Member State: 20 man/days at EUR 1 000 (average rate of auditors) = EUR 300 000*

⁵ For further information, see a separate guidance paper.

- following the benchmarking exercise: On-spot verification with regard to seven Member States (estimate). *Cost per Member State: 10 man/days per Member State at EUR 1 000 = EUR 70 000*

Since the above calculations are based on estimates, **an indicative amount of EUR 600 000 needs to be foreseen.**

7. IMPACT ON STAFF AND ADMINISTRATIVE EXPENDITURE

7.1. Impact on human resources

Types of post		Staff to be assigned to management of the action using existing and/or additional resources		Total	Description of tasks deriving from the action
		Number of permanent posts	Number of temporary posts		
Permanent officials or Temporary staff	A	2			1. <i>Preparation of guidelines on cross-border tarification and congestion management</i> 2. <i>Preparation of decisions on the level of compensation payments for transit</i>
	B				
	C				
Other human resources					
Total		2			

7.2. Overall financial impact of human resources

Type of human resources	Amount (EUR)	Method of calculation *
Officials	216 000	2 x EUR 108 000
Temporary staff		
Other human resources (give budget line)		
Total	216 000	

The amounts are total expenditure for twelve months.

7.3. Other administrative expenditure deriving from the action

Budget line (number and heading)	Amount (EUR)	Method of calculation
Overall allocation (Title A7)		
A0701 – Missions		
A07030 – Meetings		
A07031 – Compulsory committees ⁽¹⁾	42 000	4 meetings of the committee per year x 15 experts x EUR 700
A07032 – Non-compulsory committees ⁽¹⁾		
A07040 – Conferences		
A0705 – Studies and consultations		
Other expenditure (state which)		
Information systems (A-5001/A-4300)		
Other expenditure – Part A (state which)		
Total	42 000	

The amounts are total expenditure for twelve months.

⁽¹⁾ Specify the type of committee and the group to which it belongs.

I.	Annual total (7.2 + 7.3)	EUR 258 000
II.	Duration of action	not limited
III.	Total cost of action (I x II)	EUR 258 000/year

The requirements in terms of human and other administrative resources are to be met within the resources made available to DG TREN in the framework of the annual allocation process.

8. FOLLOW-UP AND EVALUATION

8.1. Follow-up arrangements

The result of the measures foreseen in the draft Regulation will be assessed in the light of the future development of intra-Community trade in electricity, as of the relevant Eurostat Statistics.

8.2. Arrangements and schedule for the planned evaluation

Two years following the entry into force of the Regulation it is intended to carry out an internal evaluation of the success in adopting the necessary guidelines and rules permitting a tariffication and harmonised congestion management system to enter into force. The success of this system will be evaluated in terms of its ability to reduce transaction costs for electricity consumers. The use and value of the study work carried out in achieving this will also be evaluated as well as the accuracy of the audit work carried out on calculations of individual country tariffs and the cost-effectiveness of the approach.

9. ANTI-FRAUD MEASURES

Reimbursement of experts and payment of experts for studies carried out will be made in compliance with applicable financial rules.

IMPACT ASSESSMENT FORM

THE IMPACT OF THE PROPOSAL ON BUSINESS WITH SPECIAL REFERENCE TO SMALL AND MEDIUM-SIZED ENTERPRISES (SMEs)

TITLE OF PROPOSAL

- Communication from the Commission to the Council and the European Parliament: Completing the internal energy market
- Proposal for a Directive of the European Parliament and of the Council amending Directives 96/92/EC and 98/30/EC concerning common rules for the internal market in electricity and natural gas
- Proposal for a Regulation of the European Parliament and of the Council on conditions for access to the network for cross-border exchanges in electricity

DOCUMENT REFERENCE NUMBER

COM(2001) 125 of

THE PROPOSAL

1. **Taking account of the principle of subsidiarity, why is Community legislation necessary in this area and what are its main aims?**

The creation of the internal energy market forms part of the objective of creating a fully operational internal market in the European Union, with a view to encouraging the possibilities of growth and of employment to the benefit of the citizens of the Union.

The main goals of the proposals are:

- the complete opening of the markets of electricity and of gas in 2005, accompanied with guarantees on non-discriminatory access to the transmission and distribution networks;
- additional guarantees for the European citizens as regards energy supply and public service;
- the guarantee of a genuine European market, and not 15 open national markets, thanks, in particular, to a regulation on the cross-border tariffication of electricity and management of congestions.

These objectives cannot be carried out, or be achieved adequately by the Member States and can, owing to the dimensions and owing to the effects of the envisaged action, better be achieved at the Community level.

THE IMPACT ON BUSINESS

2. What areas of business will be affected by the proposal?

General competitiveness of the European companies

With regard to the electricity price, the degree of competition already reached in this sector made it possible to lower the prices considerably. The proposed measures will make it possible to maintain and improve the general competitiveness of the European companies. At the time when the opening of the markets progresses quickly in the majority of the countries where the principal competitors of the European companies are situated, the completion of the internal market is essential in order not to fall behind on this point.

Reduction of the inequalities between the industrial and private energy users

All the companies will have the possibility of choosing their electricity suppliers as from 2003 and as from 2004 also their gas supplier. This aspect is particularly important for small and medium-sized enterprises which for the moment are often handicapped in relation to the large industrial consumers, in particular if they are still captive customers in their Member State. This denies them the benefit that competition is creating for eligible customers, in terms of competitive prices and of tailor-made energy services. Moreover, the opening of the market in all the companies will end the distortions of competition induced by the eligibility of the distributors in certain Member States, while they are not eligible in others.

Innovation and development of new technologies

The total opening of the market also encourages innovation and the development of new technologies. The techniques of energy production are in full development, in particular with regard to the renewables and micro-power stations and to fuel cell technology.

Improvement of the quality of services

The increasing opening of the markets should also improve the quality of the services rendered to the consumers, especially to the final consumers. The quality of services offered concerns, for example, repairs, new services and billing arrangements, which constitute some of the sectors where companies are exposed to competition. This development is already observed in the countries where markets are completely open.

Facilitate the introduction of competition within the gas sector itself

The completion of the internal market would make it possible to facilitate the introduction of competition within the gas sector (gas-to-gas competition). At the present time, the natural gas price in mainland Europe is linked to the oil price. It will be beneficial therefore for the EU companies to continue developing competition inside the gas sector, so as to gradually eliminate the link between oil prices and gas prices, because that will improve the diversity of energy supply in the EU and increase the competitiveness of the supplies as well.

– Which sectors of companies are affected?

All the European companies consuming electricity and gas, as well as the electric and gas sectors.

- Are there in the Community individual geographical areas where these companies are established?

No.

3. What measures will companies have to take to conform to the proposal?

Aspects relating to legal unbundling of distribution activities of electricity and gas companies in particular.

4. Which economic effects is the proposal likely to have:

- on employment

The energy price reduction, as well as the new outlets for new technologies following the introduction of competition into the energy sector will bring increased employment in European industry as a whole.

Nevertheless, with regard to the short-term development, the introduction of competition is likely to result in a reduction of manpower following the adaptation to competition of the old national monopolistic companies. Until now, however, no forced redundancies have been made by energy companies due to the introduction of competition.

During the last years, the technical jobs for semi-skilled and skilled employees, as well as the use of junior staff and the related administrative jobs were reduced gradually. New job profiles appeared in fields such as marketing, services to customers, information technology and services for the companies. Moreover, the appearance of new economic activities, such as the exchanges in the field of energy, created new jobs.

5. Does the proposal contain measures aiming to take account of the specific situation of small and medium-sized enterprises (reduced or different requirements, etc.)?

The draft proposal for a Directive envisages legal unbundling for electricity and gas distribution network operators. Insofar as distribution is often ensured by communal services having small structures, the unbundling requirement could prove to be disproportionate in relation to their size. This is why, the proposal for a Directive enables the Member States to exonerate from this obligation the companies having less than 100 000 consumers.

CONSULTATION

6. List of the organisations which were consulted on the proposal and statement of the essential elements of their position

A public hearing on the completion of the internal energy market was organised on 14 September 2000, in which almost 120 professional organisations and undertakings took part (social partners, undertakings of distribution and of supply, traders, gas and electricity companies, network managers, SME, consumers' associations, non governmental environmental organisations, power exchanges).

The complete list of the organisations and their comments are available on the site europa at the following address:

http://europa.eu.int/comm/energy/en/elec_single_market/hearing/index_en.htm

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