



# OPENING UP TO CHOICE



▶ Launching the single European gas market



EUROPEAN  
COMMISSION

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Published by the European Commission, Directorate-General for Energy and Transport,  
Unit for Internal Market, Public Service, Competition and Application of Community Law.

Additional information on the single European gas market  
is available on the Internet.  
It can be accessed through the Europa server  
([http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)).

Manuscript completed in July 2000.

Some of the illustrations used in this brochure have been provided by Centrica, Distrigas, Eurogas,  
Gas Natural, the International Petroleum Exchange (IPE), Ruhrgas, Statoil and  
the Swiss gas association (ASIG).

Additional information on the European Union is available on the Internet.  
It can be accessed through the Europa server (<http://europa.eu.int>).

Luxembourg: Office for Official Publications of the European Communities, 2000  
ISBN 92-828-9701-X

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*Printed in Italy*

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# FOREWORD



**T**he fundamental changes now taking place in the European gas sector have been triggered by the adoption of the EU gas directive in 1998 following nearly a decade of consultation and negotiation. This is just the start of the changes to come.

Since 1998, things have been moving fast. Member States have prepared the implementation of the gas directive to allow competition and market opening to take effect as from 10 August 2000, the date by which Member States must transpose the directive into national legislation.

Also, the European gas market players, gas suppliers and system operators are preparing for the opening-up of the market to competition and have been organising themselves internally to comply with the new rules. Market operators will have to provide competitively priced services and sufficient transparency to customers in the new market context.

The date 10 August 2000 is a milestone in this process and will mark the beginning of a new era in European gas market development. While it is only a beginning, it represents a fundamental change in the organisation and operation of the European gas market.

The basic objective of the internal market for natural gas, as in all other sectors of the

European economy, is to create one large, single market in Europe by integrating national markets, which have hitherto been compartmentalised in separate markets typically dominated by one or a few players.

By opening up national markets to competition and by integrating the 15 national gas markets into one single market free of artificial obstacles to cross-border trade, wide scope for gas-to-gas competition will be created.

Customer choice is key to competition. As from 10 August 2000, so-called 'eligible customers' will be free to choose their gas supplier. In order to be effective, this freedom of choice of supplier will require non-discriminatory access to the gas network throughout Europe.

Empowering the consumer through customer choice will give rise to many effects as it puts pressure on all operators along the gas chain to improve customer service, cut costs and reduce prices. Opportunities for new entrants into the gas market will increase this pressure to the advantage of customers.

New entrants will be able to trade in the internal gas market and to embark on new infrastructure projects hence expanding and diversifying supply capacity and enhancing security of supply. Competition will provide a sound new

*‘Empowering the consumer through customer choice will give rise to many effects as it puts pressure on all operators along the gas chain to improve customer service, cut costs and reduce prices.’*

driving force for innovation in how best and most cost-effectively to meet customer needs.

Liberalisation should serve the general interests of society. It must be achieved without endangering the provision of public services. In the end, liberalisation and public policy should pursue the same goal — to serve and benefit EU citizens.

There is reason to be encouraged by the process of implementation of the gas directive even if some Member States need to accelerate efforts in order to ensure the formal implementation of the directive in their national legislation. The directive only requires an initial market opening of a minimum of 20 %. The actual level of market opening from 10 August 2000 is, however, much higher — around 80 % of total EU gas demand — as Member States have moved more quickly than required.

However, although a high average level of market opening is an encouraging indicator and a very important first precondition for customers to be able to exercise their right of choice, it is not a guarantee in itself that we will achieve a competitive gas market in Europe and not enough to ensure that customers will fully benefit from liberalisation.

Much work therefore remains to be done to make a single European gas market a reality.

While opening up European gas markets to competition has made an encouraging start, we now have to ensure that customers will enjoy the benefits of competition. We will also have to consider the next steps towards completing the internal market for gas. The EU Heads of State or Government at their spring European Council meeting in Lisbon on 23 and 24 March 2000 called for a speeding-up of liberalisation in sectors such as gas and electricity and asked the Commission to prepare a progress report and appropriate proposals for their meeting next spring.

The preparation of proposals regarding the next steps in opening up EU gas and electricity markets to competition will be a key priority for the European Commission in the coming months and I intend to table such proposals later this year.

Loyola de Palacio

*Vice-President of the European Commission*

*Relations with the European Parliament, transport and energy*

*10 August 2000*



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# INTRODUCTION

The single market for gas will, progressively, produce a competitive and vibrant gas market across the European Union. It will contribute to the achievement of the three main EU energy policy objectives of increased competitiveness through better service for energy consumers, security of supply, and protection of the environment including meeting the EU's Kyoto commitments to reduce emissions of greenhouse gases such as carbon dioxide (CO<sub>2</sub>).

**T**he date 10 August 2000 is a milestone in what has been a very long process of creating a single market for natural gas in the European Union. From that date, national exclusive rights and gas supply monopolies will no longer exist and so-called 'eligible customers' will be free to choose their supplier of natural gas across Europe. Until 10 August 2000, gas-to-gas competition has been the exception to the rule in Continental European gas

markets. Following 10 August 2000, however, the situation will be very different, and gas-to-gas competition will become the norm.

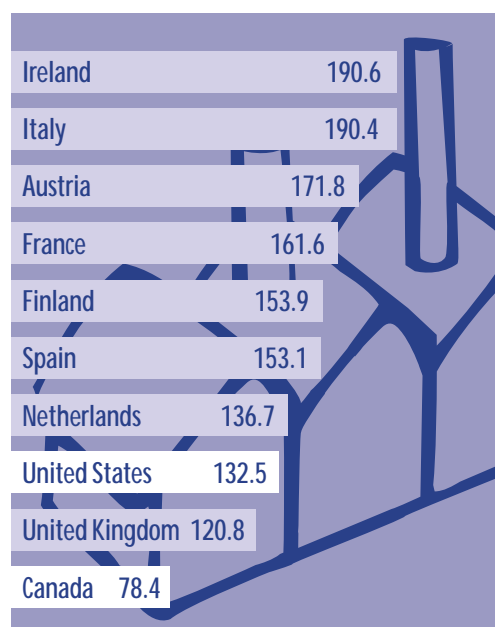
Customer choice will be key in opening up European gas markets to competition as it will allow consumers to look for lower prices and better service. New entrants into the gas market will provide new opportunities to the advantage of customers.

## Six reasons why a single market for natural gas has been created

- European gas prices have long been considerably higher than gas prices in other G7 countries, notably the United States of America and Canada (see the first figure on the next page). This obviously handicaps European industry when competing with North American industry in the global market place. In certain industrial sectors, energy and even gas prices represent a significant part of the total production costs. The competitiveness of European industry can be enhanced by opening up gas markets to more competition.
- Gas prices within the EU for the same type of customer still vary considerably between Member States and even within Member States, to an extent which cannot be explained merely by differences in supply situations and costs. These large differences in gas prices (see the second figure on the next page) create distortions of competition within the EU.
- The integration of markets will generate advantages and efficiencies, for example in relation to security of supply. Cross-border cooperation in relation to gas supply can provide synergies and economies of scale, thus reducing costs in providing the same level of security of supply.
- Market opening will stimulate intra-Community trade and the free movement of gas. Potential obstacles to cross-border trade will be identified in this process and will thus provide the starting point for their own removal.
- The introduction of gas-to-gas competition, in addition to the already existing inter-fuel competition (notably between gas and oil), will increase the competitive pressures on gas suppliers and force them to provide the best possible service at the lowest possible price in order to maintain customer loyalty.
- Experiences from gas and electricity liberalisation wherever it has taken place around the world have been positive — and also within the EU. While gas sector circumstances vary from region to region and from country to country, competition is also expected to have an overall very positive effect within the EU. Gas companies are already preparing for competition and responding by improving customer service and ensuring competitive gas prices. In the UK, where full market opening and gas-to-gas competition were introduced in 1998, 30 % of gas customers (more than five million) have already changed supplier and, as a result, achieved significant benefits. It has been estimated, for example, that British households have benefited to the tune of GBP 2 billion (EUR 3,2 billion) due to lower energy bills following the liberalisation of the gas and electricity markets.

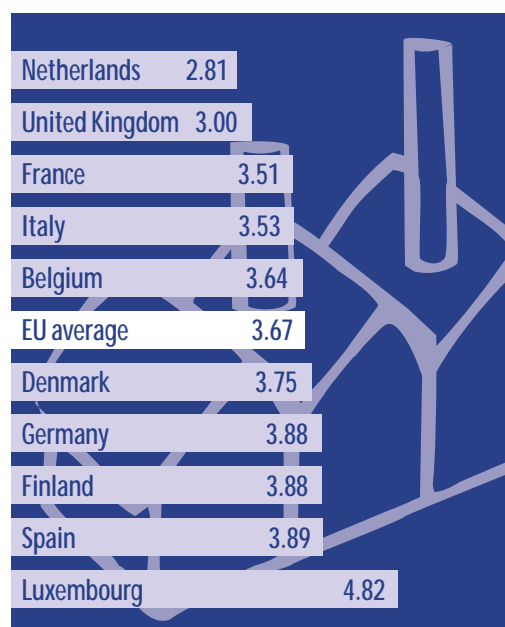


**Natural gas prices for industry**  
(USD/toe, 1998)



Source: OECD.

**Gas prices for EU industry — excluding taxes**  
(EUR/GJ — January 2000, 14-1 ≙ 10 million m<sup>3</sup>/year)



NB: Highest price 72 % over lowest price.

Source: Eurostat. EL, IRL, A, P and S: figures not available.

Tangible benefits have already been seen as the result of the liberalisation of the EU electricity market and also in gas markets around the world which have already been opened up to competition.

It is Community Directive 98/30/EC <sup>(1)</sup> — the gas directive — adopted on 22 June 1998 by co-decision of the European Parliament and the Council based on unanimity among all EU Member States which has provided the basis for these profound changes in the European gas sector and the creation of a single market for gas.

<sup>(1)</sup> 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 gas (OJ L 204, 21.7.1998, p. 1).

The key features of the gas directive include abolition of exclusive rights, non-discriminatory rights to build new gas infrastructure facilities, non-discriminatory access to the gas system and unbundling of the internal accounts of vertically integrated companies. Over the period 2000–08, the gas directive will allow at least all gas-fired power generators and all large and medium-sized industrial gas consumers to choose freely their gas supplier from anywhere in the EU and to have such gas transported through the gas network of third parties to their site of consumption.

Liberalisation of the gas markets is a very important tool which contributes to the development of the European economy towards its goals of efficiency and competitiveness in an ever-increasing global market place.

# OPENING UP THE EUROPEAN GAS MARKET

## ELIGIBLE CUSTOMERS FREE TO CHOOSE SUPPLIER

The key element of the gas directive is the freedom of choice of gas supplier for eligible customers.

Introducing gas-to-gas competition in the European gas market will have a major impact throughout the gas sector. In order to enable markets to adapt to changes in the transition from the existing market order to the new competitive environment, the gas directive has allowed Member States to phase in market opening in three steps.

**T**he minimum requirements of the gas directive with regard to market opening are the following.

### Phase 1

At least all gas-fired power generators, irrespective of their annual consumption level, and all other final customers consuming more than 25 million m<sup>3</sup> per year shall be specified as eligible customers as from **10 August 2000**.

Market opening in phase 1 shall be at least 20 %.

### Phase 2

At least all gas-fired power generators, irrespective of their annual consumption level, and all other final customers consuming more than 15 million m<sup>3</sup> per year shall be specified as eligible customers as from **10 August 2003**.

Market opening in phase 2 shall be at least 28 %.

### Phase 3

At least all gas-fired power generators, irrespective of their annual consumption level, and all other final customers consuming more than 5 million m<sup>3</sup> per year shall be specified as eligible customers as from **10 August 2008**.

Market opening in phase 3 shall be at least 33 %.

Member States may decide whether gas distribution companies shall be eligible. Distributors shall, however, always have the right to have third-party access for volumes contracted for the supply of eligible customers within their distribution system.

In exceptional circumstances, in order to safeguard the balance of the electricity market, for example in case of safety or security of supply risks, Member States may introduce a threshold for the eligibility of combined heat and power producers (CHP).

The gas directive also allows Member States to introduce a 'ceiling' on market opening, if the definition of eligible customers as referred to above results in a market opening which is higher than 30 % in phase 1, 38 % in phase 2 and 43 % in phase 3. Member States may then limit market opening in a balanced manner to this ceiling level.

In the light of experience gained, the application of the directive shall be reviewed for the period after August 2008.



## Member States are moving faster and further in market opening than required by the gas directive



The gas directive only defines the minimum requirements which Member States have to follow in their market opening. Most Member States will, however, be moving both faster and further in their market opening than required by the directive. Two Member States are expected to choose a full market opening (the UK gas market, which has been fully liberalised since May 1998, and Germany, which in principle intends to open its market to 100 % subject to progress in liberalisation in other Member States).

Before 2008, seven Member States — including some of the largest gas markets — will be fully open to competition (Germany, Spain, Italy, the Netherlands, Austria, Sweden and the United Kingdom). Some Member States (including Belgium and Spain) have recently decided to speed up liberalisation beyond the level that had already been decided.

On average (on a weighted volume basis), it is expected that around 80 % of the total gas demand of those countries that have

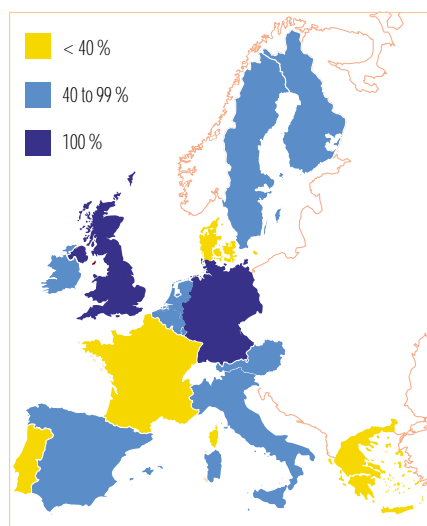
implemented the directive will be open to competition by 10 August 2000. This level of market opening is expected to increase to 90 % by 2008.

While these assumptions may even be conservative, it is also clear that a distinction should be made between eligible markets and real competitive markets, i.e. markets in which all eligible customers have a real choice of supplier. Eligibility will be reinforced and made effective through supply-side competition, fair and non-discriminatory access to the entire gas system as well as the general removal of obstacles to the free movement of gas and interoperability of networks in its broadest sense.

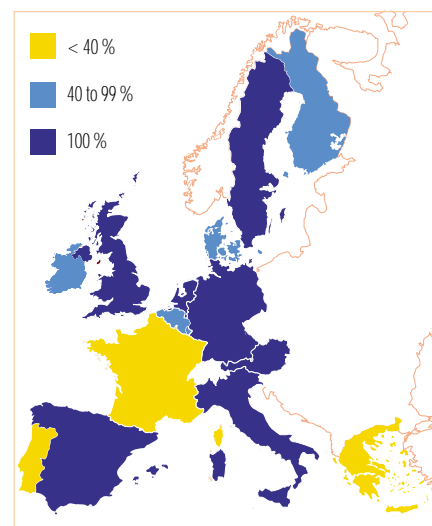
Eligibility is, however, the first important precondition of a customer to exercise a right of choice and to participate in the new dynamic market context.

The expected levels of market opening of the Member States are illustrated in the figures below.

Opening of the markets upon implementation (10 August 2000)



Expected situation in 2008



# ACCESS TO THE EUROPEAN GAS SYSTEM



For competition to work in practice, eligible customers need to have access to the gas pipelines and other gas system facilities in order to transport gas, which they have bought from a gas supplier. Access to the gas pipelines by others apart from the owner of the pipelines — so-called 'third-party access' (TPA) — is fundamental in making competition work.

I

n order to enable eligible customers and gas suppliers to conclude and execute a gas supply contract, the gas directive provides for third-party access to the European gas system. The gas directive offers Member States two options with regard to how to organise third-party access to this system:

- **regulated access** based on published tariffs and other terms for the use of the system; or
- **negotiated access** based on commercial agreements between the parties and publication of the main commercial conditions for the use of the system.

Member States may also choose a combination of both systems, for example regulated access at distribution level and negotiated access for transmission.

## What is the gas system to which eligible customers may get access?

The gas system covered by the gas directive to which non-discriminatory access shall be granted includes, in principle, the entire gas chain from the upstream production installations to the end-consumer. The gas system therefore includes:

- upstream pipelines from production facilities to landing or processing terminals including ancillary facilities;
- processing and landing terminals;
- terminals for importing and exporting liquefied natural gas (LNG);
- high-pressure transmission pipelines;
- natural gas storage facilities;
- blending, load balancing and other ancillary facilities;
- regional and local distribution pipelines.

The gas directive provides for access in principle in some form to all these types of facilities to the extent capacity is available. With regard to access to storage, however, access may be restricted to access connected with system use and to 'when such access is technically necessary for providing efficient access' to pipelines.

This is important because underground gas storage plays a key role in matching gas supply and demand and in optimising the operation of the entire gas system and can be of considerable importance in allowing competition to develop on fair and equal terms. This is because while gas production and long-distance gas transportation flow are relatively stable over the year in order to maximise the use of pipelines, gas demand fluctuates much more and is, for example, much higher in winter than summer. Underground gas storage facilities are used to help balance this inevitable mismatch between supply and demand. Gas is injected into underground storage facilities during the summer when demand is lower than production and withdrawn from storage during the winter when demand exceeds production.

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.

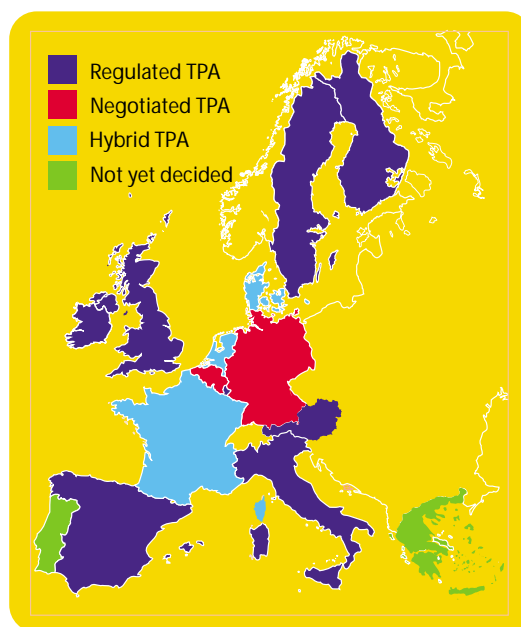
### Choices of access system

Eight Member States have chosen regulated access to their gas system based on published tariffs (see table below). Three Member States have chosen a hybrid or a combination of negotiated and regulated access. Denmark and the Netherlands have chosen regulated access

for the distribution network while choosing negotiated access for the transmission network and storage. France is envisaging a system of access based on published standard tariffs approved by the regulator requiring only negotiation in exceptional circumstances when specific conditions justify an individual contract.

Two Member States (Belgium and Germany) have chosen negotiated access for the entire system. But even in these Member States, the tariffs applicable for access will not be subject only to negotiation between individual parties but also to prior approval by the authorities. Hence, a purely negotiated access regime on an agreement-by-agreement basis is unlikely to develop in the EU.

### System of access chosen



Regulated TPA	Hybrid TPA	Negotiated TPA
Spain, Ireland, Italy, Luxembourg, Austria, Finland, Sweden, the United Kingdom	Denmark, France, the Netherlands	Belgium, Germany

# EFFECTIVE REGULATION

## Non-discriminatory access and protection of the consumer



The implementation of the gas directive means that the regulatory framework for the internal gas market is now in place throughout the EU. Legislation in itself is, however, no guarantee of competition. It is vital that the rules are enforced and consumer rights protected. Efficient dispute settlement and other regulatory mechanisms are therefore foreseen by the gas directive to ensure non-discrimination.

**T**he most prominent principle of the gas directive is that of non-discrimination. Member States shall not discriminate in favour of any particular gas company, for example a State-owned company, when granting authorisations to build new gas facilities. Similarly, when providing access to the system, a gas company may not discriminate between system users and particularly not in favour of its own related affiliates.

The principle of non-discrimination has significant implications with regard to providing access to the system. Where transmission or distribution activities belong to vertically integrated companies, non-discrimination would, in principle, require such an entity to make available to eligible customers and new entrants the **same** range of services that is available to its related undertakings and on the **same** commercial conditions.

It is vital that these operators are subject to careful regulation; otherwise, where vertically integrated, they may actively discriminate in favour of their own group companies, limiting effective competition. Equally, they may endeavour to charge excessive prices for transmission services, producing monopoly profits.

When implementing the gas directive, Member States have therefore had to adopt measures and mechanisms which will ensure non-discrimination. These measures include the designation of a competent and independent authority with the task of expeditiously settling disputes in case of disagreement on the terms of access.

In nearly all Member States, this dispute settlement authority is being established in the form of an independent regulator for both the gas and electricity sectors.

The role of these national regulators will be extremely important in ensuring protection of the consumer, avoiding abuse of dominant positions and ensuring fair and non-discriminatory competition.

However, the regulatory role will be carried out in partnership between national regulators and competition authorities, and the European Commission, using the EU competition rules.

The gas directive provides a number of principles and instruments, which may facilitate the tasks of the regulators. According to the gas directive, vertically or horizontally integrated gas companies shall, as a minimum, keep separate



internal accounts for their transmission, distribution, storage and non-gas activities as if they were carried out by separate companies.

This unbundling can help the regulators in ensuring non-discrimination and fair access tariffs, and avoiding cross-subsidisation and the distortion of competition.

Gas companies will also be obliged to preserve the confidentiality of commercially sensitive information obtained during the course of their business, and shall not, in the context of sales or purchase of natural gas by the gas transmission or distribution company or related undertakings, abuse commercially sensitive information obtained in the context of providing or negotiating access to the system. This provision — known as 'Chinese walls' — has the objective of preventing the flow of commercially sensitive information between the activities of companies acting as both system operators deciding on access to the network and as suppliers of gas so that competition is not distorted through discrimination.

There is a clear and increasing understanding across the EU of the need for effective regulation in this area, while subjecting companies to the minimum red tape possible.

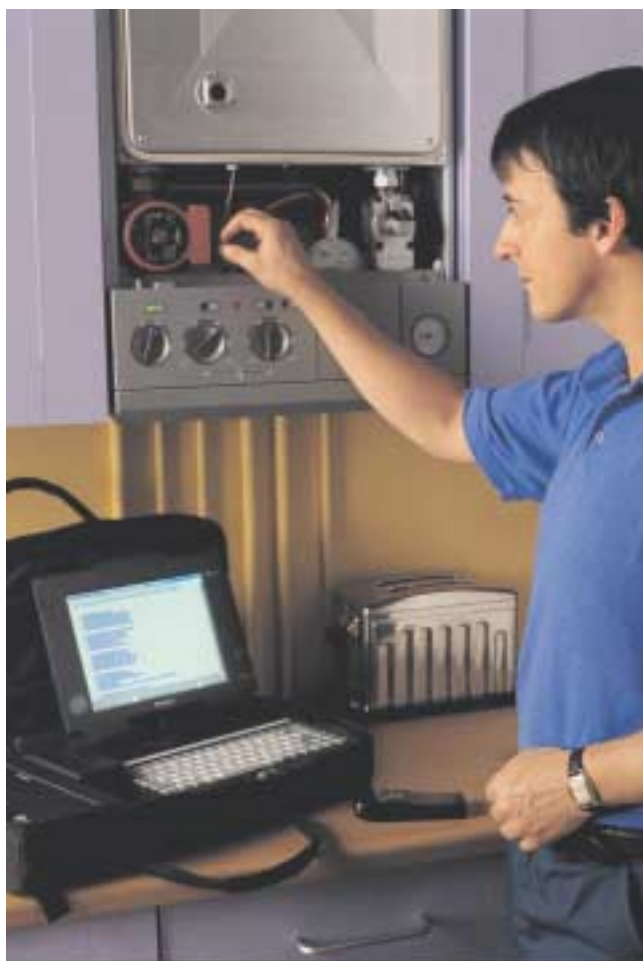
A European gas regulatory forum has been created which meets regularly in Madrid, bringing together national regulators, Member States, the Commission and all relevant gas market players. The Madrid forum discusses and seeks practical solutions to obstacles to the creation of a well-functioning internal market for gas. The European gas industry has created a new body representing all gas transmission system operators, which will also contribute to facilitating non-discriminatory cross-border access to the European gas network.

The new body will provide information on issues such as measures taken to ensure non-discrimination and transparency, the range of services offered for TPA and the terms and tariff mechanisms for such access as well as available transmission capacities between key points in the European gas network.

The availability of such comprehensive information will provide a good and necessary basis for further progress in facilitating cross-border trade and the creation of a single European gas market.

# HIGH STANDARDS OF SERVICE IN EUROPEAN GAS SUPPLY

Liberalisation is a tool for achieving economic integration, but public service policy objectives can and must 'coexist' within this framework. The gas directive lays special emphasis on the provision of public service obligations (PSOs) to ensure that not only public service objectives can be fully achieved in the context of a liberalised market, but can even be improved. The Community's objective in this respect is the achievement of ever-higher standards of public service throughout the Community.



**C**ompetition in European gas supply is not an end in itself. The underlying objective is to create competitive pressures all along the gas chain to improve customer service levels through innovation, increased efficiencies and lower costs.

Natural gas is not used universally, as is the case for electricity. However, for the tens of millions of customers relying on gas supply, high standards of service are essential.

In most European countries, special provisions exist to ensure that essential public service rules are respected by the gas industry. These rules usually ensure, for example, that all citizens are guaranteed secure gas supplies at fair prices. They may also provide special protection for those most vulnerable, such as the elderly or the sick. The directive provides measures to ensure that these vital issues are provided for in the context of a competitive market place.

High standards of service and liberalisation are not incompatible or contradictory objectives. On the contrary, public service will and must play an important role in a liberalised market. This approach is clearly reflected in the gas directive, which provides for a mechanism enabling Member States to pursue public policy considerations for the gas sector without, in normal circumstances, limiting the liberalisation process.

The continued increase in the quality of public service is one of the basic underlying objectives of the gas directive.

In this light, Member States can define public service obligations in the general economic interest in relation to the following five considerations:

- security, including security of supply;
- regularity;
- quality of supplies;
- price of supplies;
- environmental protection.

Member States may take the measures necessary to achieve these objectives by imposing obligations on gas companies. What is important, however, is that the measures and mechanisms Member States put in place to achieve these objectives should not restrict trade and competition more than necessary.

Public services should be adapted to a new environment. Monopolies are not necessary to preserve and meet public service objectives. There are less restrictive means than monopolies to achieve them. Ensuring security and continuity of gas supply, obligations to provide unprofitable services, guaranteed gas supply to the sick and disabled, and limits on the ability of gas companies to disconnect customers because of non-payment or debt, are and will remain obligations that can be met in the context of a liberalised gas market. Governments can, for example, impose an obligation on their distribution companies to supply all their customers.

Member States have the choice of imposing such obligations on all operators in their country. The only constraint that the directive requires is that these obligations should be objective, transparent and imposed on a non-discriminatory basis on all operators equally.

The gas directive gives Member States a certain discretion in deciding which public service objectives to pursue and how to meet them. Nevertheless, the objectives pursued and approaches chosen by the Member States are similar. Experience to date indicates that as competition takes hold, Member States require, and the companies meet, increasingly high standards in this area. Furthermore, not only must companies meet the minimum standards legally required by Member States, but it is often in their commercial interest to exceed them. This continued increase in the quality of public service is one of the basic underlying objectives of the gas directive.

The Commission is currently conducting a survey on how Member States ensure high standards of service in the gas and electricity sectors. The results of this exercise will provide benchmark information, which may help identify best practices leading to the highest service standards across the EU.

Liberalisation should serve the general interests of society. It must be achieved without endangering the provision of public services and without adversely affecting consumers. Both imperatives (liberalisation and public policy) can coexist. In the end, both liberalisation and public policy should pursue the same goal — to serve and benefit EU citizens.



# SOCIALLY RESPONSIBLE LIBERALISATION

**T**he internal market has fostered growth and employment opportunities to the benefit of the citizens of the Union. The restructuring of the gas sector in Europe and its adaptation to the new environment should not therefore be seen as a threat. In fact, it is an opportunity. The active entry of new players, for example in new markets, will create job opportunities. Furthermore, the competitive position of the energy-consuming industry will be enhanced as a result of liberalisation, which will also provide for new employment opportunities in the medium term.

It is clear, however, that the introduction of competition will bring about change, and while this change is vital and unavoidable if Europe wishes to maintain and indeed develop employment levels in energy-intensive industry, it will result in restructuring. Experience to date indicates that after competition is introduced, the national ex-monopoly companies tend to reduce their workforces in the medium to longer term, but many new employment opportunities are created as new jobs are created by new market entrants as well as in other sectors benefiting from competition in the energy sector.

The European Union has a complementary role in helping Member States to take the measures to reduce the difficulties that result from this process. It can use the experience of countries that have already undertaken liberalisation, to help Member States to set up programmes to increase the awareness of employees of job opportunities, to assist their retraining, to enhance the mobility of employees, and to

inform and consult employees about gas market restructuring.

The Commission has launched a study focusing, in particular, on experience gained with regard to employment effects from liberalisation in the countries furthest ahead with introducing competition. The results of this study will make it possible later this year to present an analysis of the principal trends and of appropriate measures to be taken.



# A FAIR MARKET OPENING

## Creating a level playing field for gas in Europe

**T**he ambition of the gas directive goes beyond that of merely liberalising 15 separate national gas markets. The ultimate goal is to create a single, fully operational internal market for gas with comparable levels of market opening. Due to the freedom left to Member States with regard to minimum market opening and due to the differences in gas market structures (for example very little gas-fired power generation exists in France), the initial level and speed of market opening will differ between Member States.

A few Member States have chosen to limit initial market opening to 20–30 % while others will open their markets by 100 %.

In order to avoid that such different levels of market opening lead to unfair competition and imbalances in market access, the gas directive contains a temporary, so-called 'reciprocity clause', which may allow for refusal of access to the network of an eligible customer in one Member State, opening up its market more than the minimum requirements of the directive, being supplied from another Member State in which the same type of customer is not eligible.

The objective of this provision is to guarantee a level playing field by enabling Member States to liberalise more quickly than required by the directive, without exposing their gas industry to 'unfair' competition from gas suppliers in countries that open markets less quickly.

### How does the reciprocity clause work?

Country A liberalises 20 % of its market: all gas-fired power generators and other customers consuming more than 25 million m<sup>3</sup> of gas per year are eligible.

Country B liberalises its entire market (100 %). Under the relevant provision of the directive, country B can prevent gas suppliers from

country A selling to customers in country B which it has liberalised but which are not eligible in country A; for example an industrial customer using 10 million m<sup>3</sup> per year. In this manner, gas suppliers from country A are not in a position of having free access to all customers in country B, while most of their own market remains closed.

### External reciprocity

In view of the growing EU import dependency, it is obvious that the external dimension of the internal market is important.

EU gas market liberalisation should not be a one-way street. It must go both ways — upstream and downstream.

A reciprocal opening of upstream and downstream markets based on free trade, and

integration of markets and closer and strengthened cooperation should be in the interest of all parties and would create new business and investment opportunities for both EU buyers and external suppliers. Depending on developments, the Commission may consider whether initiatives are required in order to ensure external reciprocity.

### Inclusion of a reciprocity clause in national legislation

Belgium	yes
Denmark	yes
Germany	yes
Greece	?
Spain	yes
France	no
Ireland	no
Italy	yes
Luxembourg	yes
Netherlands	yes
Austria	yes
Portugal	?
Finland	no
Sweden	yes *
UK	no

? = not yet known

\* as a possible future option

# TRANSITIONAL REGIMES AND TAKE-OR-PAY CONTRACTS

**T**he introduction of competition in gas will lead to the loss of market shares for the incumbent suppliers. These companies have often purchased large volumes of gas from gas producers under so-called 'take-or-pay' contracts, which are long-term contracts under which buyers guarantee to take and pay, or in any case pay, for a large proportion of the contract volume even if they cannot sell the gas.

As competition increases with the progressive development of the internal market for gas, prices are expected to fall. This could give rise to serious financial difficulties for gas companies having entered into take-or-pay obligations at higher prices. The gas directive does, however, provide specific safeguard mechanisms if such a situation should arise. In case of serious economic difficulties related to a take-or-pay obligation, access to the network may, as a last resort, temporarily be refused thereby protecting the market of a supplier.

Before any such refusal of access can be granted by national authorities and accepted by the European Commission, the company has, however, to explore alternative and less restrictive solutions such as seeking alternative outlets for its gas elsewhere in the internal market.

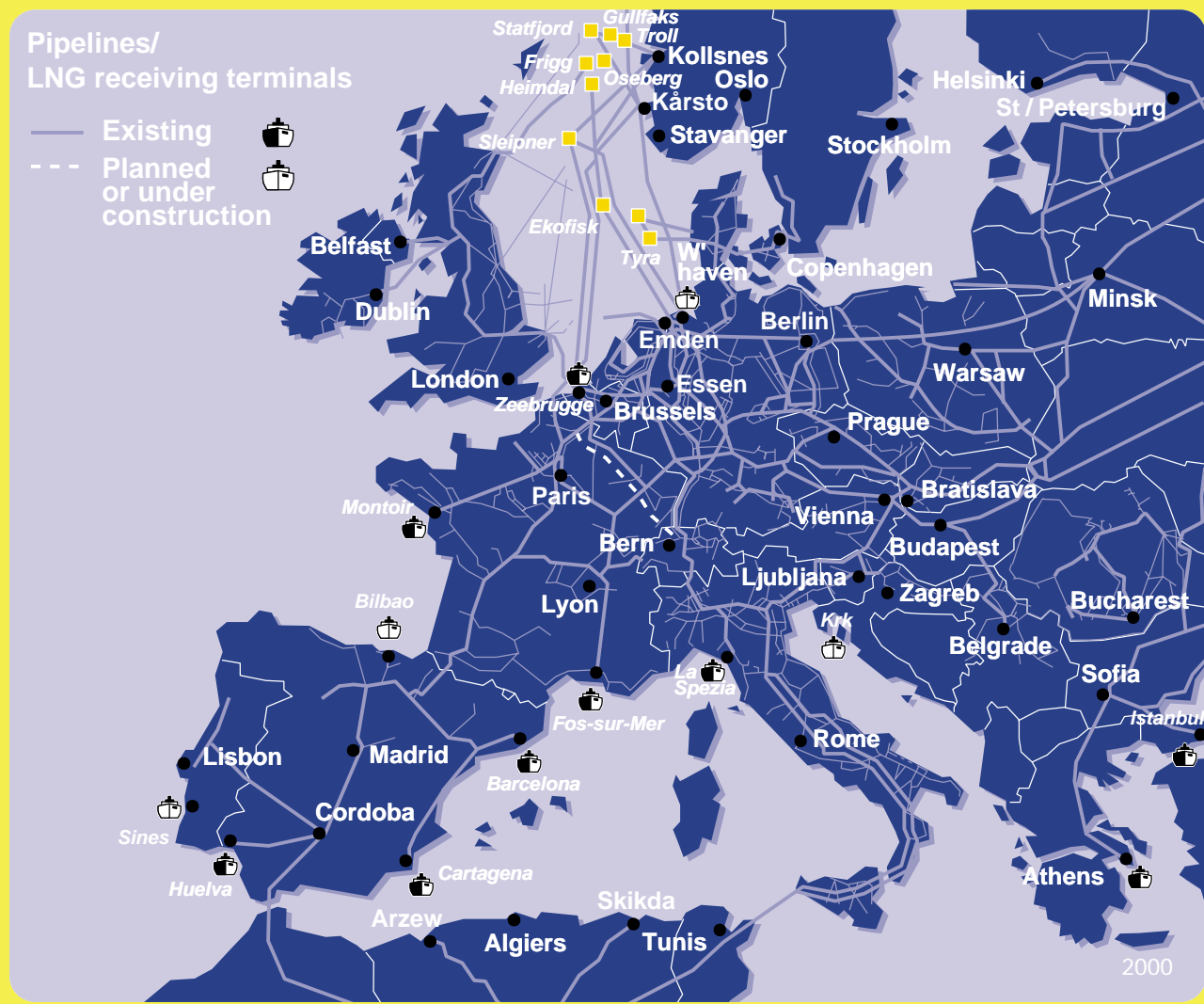
Transitional regimes may also be granted to 'emergent markets' and regions in which initial commercial gas supply started less than 10 years before the entry into force of the gas directive. This may notably apply to Greece and Portugal, the most recently developing gas markets within the EU, which may apply for derogation from key parts of the directive thereby postponing the

introduction of competition. Similar derogation from the gas directive may also be granted to Member States which are not directly connected to the interconnected system of any other Member State and having only one main external supplier with a market share of more than 75 %. Greece and Finland are currently in this situation.



# THE GAS GRID IS THE MARKET PLACE

## European natural gas transmission system in 2000



**T**he integrated European gas pipeline network represents the physical market place for gas. A well-integrated and trans-European gas grid is a precondition for integrating national gas markets and achieving the full benefits of the internal market. Sufficient interconnection capacity between Member States is obviously fundamentally important in integrating markets and as a

prerequisite for cross-border trade and third-party access. Congestion management in areas with scarce interconnection capacity is therefore given high priority by the Commission and in the Madrid forum. The removal of bottlenecks will also become increasingly important as a guiding principle for Community actions in relation to promoting trans-European networks (TENs) for energy.

# A SINGLE MARKET WIDER THAN THE EU

**Enlargement of the EU will result in increased gas trade, an increasing number of market players and enhanced security of supply.**

**T**he single market for gas will, over time, be wider than the European Union. Norway will be participating under the European Economic Area (EEA) Agreement. Switzerland, which is also considering liberalising, can also be expected to play a role. Countries which have applied for membership of the EU will progressively join and become an integral part of the internal market. This offers additional benefits and opportunities and must be welcomed and encouraged.

Natural gas has been traded and transited between EU countries and their neighbours for decades. The EU gas market is already well integrated with the Norwegian gas system and parts of the gas network of central and eastern Europe, in particular in relation to transit of Russian gas supplies to the EU. Switzerland is also an important gas transit country for gas supply from northern Europe to Italy. Many of these countries are currently undergoing market reforms similar to, and indeed based upon, the EU gas directive.

The EU accession candidates are well aware of the challenges facing their gas sectors and are preparing for these. Transition is under way both in terms of preparation of new regulatory frameworks and gas pricing reforms as well as restructuring of the industry.

Assistance by the EU in preparing the applicant countries for restructuring their gas sector in line with the directive is vital, as their integration into the internal energy market will be a challenging task. It is a high priority for the Commission and a specific action plan is being implemented to assist these countries in meeting this challenge.

Over time, therefore, the single market for gas will become wider than the EU. This can only be of benefit to all European citizens. It will assist in ensuring security of supply, and will provide increasing economies of scale, leading to increased efficiencies and lower prices. It is therefore an opportunity which the Commission will pursue during the coming months and years.



# SECURING SUPPLIES FOR GROWING DEMAND



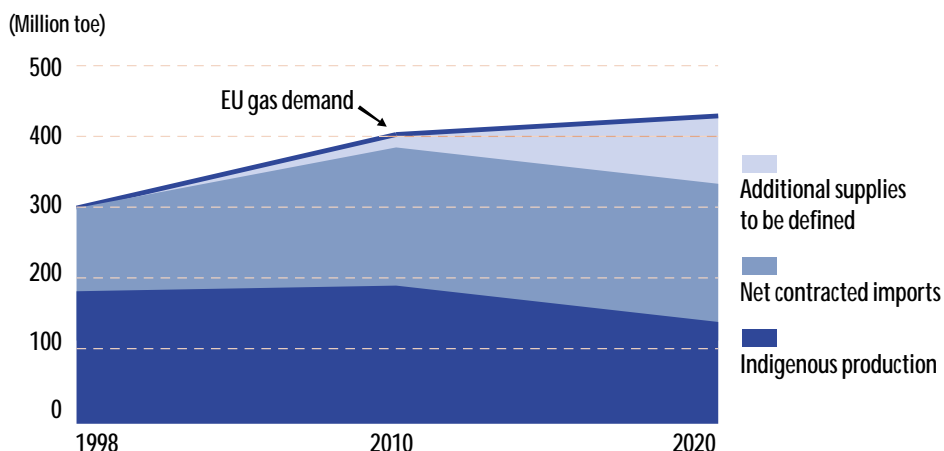
natural gas is currently the fuel of choice throughout Europe and is continuing to increase its market share in virtually all market sectors and in all EU Member States.

With an expected 45 % increase in demand from 1998 to 2020, natural gas will increase its share of EU primary energy supply from around 21 % in 1998 to around 27 % by 2020. Approximately two thirds of this increase in demand will be due to power generation including combined heat and power production (CHP).

On the supply side, domestic EU gas production is expected to start declining after 2005 gradually leading to a significant increase in import dependency.

In 1998, 40 % of the EU's gas demand was covered mainly by imports from three gas-producing countries: Algeria, Norway and Russia. The import dependency may reach approximately two thirds by 2020.

## Gas demand and supply outlook — EU-15



World gas reserves are, however, abundant and Europe is in a relatively favourable gas supply situation being surrounded by large gas reserves. More than 80 % of total proven gas reserves in the world are located in regions from which the EU is already importing gas or from which it is within reasonable distance. Europe is therefore expected to have sufficient potential for broadening its supply base provided that the necessary economic and price incentives prevail. Technological development is continuously driving down gas transportation costs.

Security of supply and competition are compatible objectives and gas security of supply can be enhanced in the single European gas market. In a competitive gas market, security of gas supply, i.e. product availability and regularity,

becomes a competitive parameter in itself, contributing to the quality of the products and services offered by individual gas suppliers.

Moreover, the more the energy networks are integrated and the larger markets become, the fewer consumers in one Member State need to rely only on the production, supply or storage capacity in their own country. Cross-border cooperation and synergies in terms of optimising national security back-up capacities can be more fully exploited while the same degree of overall security can be achieved at a lower cost. The opening-up of markets and removal of obstacles to system use, trade and investments will yield new sources of supply, flexibility and security of supply.

# NEW GAS TRADING MECHANISMS

While more than 50 % of all gas consumed within the EU crosses at least one border on its way to its final consumer, cross-border gas trade has until now been restricted to import/export and transit contracts between the incumbent gas suppliers. This pattern will change in the future with new players entering the market and competition leading to more liquid and transparent markets based on emerging new gas trading forms and mechanisms.



The trading floor of the International Petroleum Exchange in London

**O**pening up European gas markets to competition and third-party access will lead to changes in the way in which gas trading is organised and performed.

Competition through third-party access will lead to the emergence of new players in the market such as traders. Another inevitable effect of gas-to-gas competition will be more transparency in the market.

Spot gas trading developed rapidly in the UK once full market access was achieved. Gas trading hubs are also gradually developing on the Continent. The first Continental gas trading hub has come into operation at Zeebrugge in Belgium, which plays a strategic role in European gas flows with a throughput capacity of more than 10 % of west European gas consumption. An important factor in the development of the Zeebrugge gas trading hub has been the Interconnector gas pipeline which, since 1998, has linked the British and Continental European gas markets together.

Commodity exchanges or 'pools' for trade in electricity are further developed in Europe than for gas, but market opening is expected to enhance the conditions for spot gas trading to develop including the emergence of sufficient players for markets to become more liquid and transparent.

The introduction of the euro (€) will further promote transparency and comparability in gas prices and tariffs across Europe.



The rapid development in information technology including Internet-based e-commerce is also fundamentally transforming trading mechanisms and the relationship between customers and suppliers.

The prices for gas and related services will then increasingly be set by competitive markets. Gas prices have long been linked to the price of oil as a substitute source of energy. As already happened in other gas markets in the world, gas prices may over time become increasingly defined in terms of supply and demand for gas and costs of gas supply, or gas-to-gas competition, thus to a large extent decoupled from the developments in oil prices.

Promoting liquidity in the European gas market will be essential. Technical and commercial obstacles to trade and market entry must be removed as much as possible to ensure interoperability.

# COMPLETING THE INTERNAL MARKET FOR GAS THE NEXT STEPS



The European Council meeting in Lisbon  
on 23 and 24 March 2000

In order to contribute to profound economic reforms of the European economy, the EU Heads of State or Government at their spring 2000 meeting in Lisbon called for 'rapid work' to complete the internal market and 'to speed up liberalisation' in sectors such as gas and electricity. Thus, even before the gas directive has been fully implemented in all Member States, a call has been made for an acceleration of liberalisation of the EU gas sector. This is well in line with developments already taking place at national level in most Member States, where gas market liberalisation is moving faster than foreseen by the directive.

**D**uring its special meeting in Lisbon on 23 and 24 March 2000, the European Council (the EU Heads of State or Government) agreed a new strategic goal for the European Union — to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. Among the wide-ranging measures agreed with a view to achieving this ambitious goal were a set of economic reforms for 'a complete and fully operational internal market':

In order to achieve a fully operational internal market in the gas, electricity and other sectors, the European Council has asked the Commission, Council and Member States 'to speed up liberalisation' in these sectors. The European Council will assess the progress achieved when it meets in March 2001 in

Stockholm on the basis of a Commission report and appropriate proposals.

The meeting of the Council of EU Energy Ministers on 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' and also to present, by the end of 2000, a report on the state of play and experience with regard to the functioning of the internal markets for gas and electricity and the development of a real level playing field. In order to meet this demand, the Commission will prepare a communication for the Council and Parliament during the course of the second half of 2000 on the state of play, together with concrete proposals for the way forward to complete the internal market in these sectors.



European Commission

**Opening up to choice — Launching the single European gas market**

Luxembourg: Office for Official Publications of the European Communities

2000 — 22 pp. — 21 x 29.7 cm

ISBN 92-828-9701-X





OFFICE FOR OFFICIAL PUBLICATIONS  
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg