

A comparative perspective of the liberalisation of the gas market and the effects on welfare

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Geerte Hesen



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A comparative perspective of the liberalisation of the gas market and the effects on welfare: Belgium, Germany and the Netherlands

Geerte Hesen*

Abstract

Gas Directive (2003) stipulates that all consumers must be free to choose their gas supplier by July 2007. The liberalisation of the gas market contributes to the establishment of a competitive internal market. In general, the liberalisation process is aimed at increasing welfare, in particular consumer welfare. Most of the literature relating to the liberalisation of the gas market is, however, primarily concerned either with the general economic notions of liberalisation and welfare, or with the specific legal aspects of the Gas Directive (2003). This paper takes an interdisciplinary and novel approach: both the legal and economic ramifications of the Gas Directive (2003) are examined. More specifically, this paper reviews the main legal obligations emanating from the Gas Directive (2003) and examines their effect on (consumer) welfare in three Member States: Belgium, Germany and the Netherlands. Full liberalisation was achieved in the three Member States by July 2004, but the positive effects of liberalisation are predominantly evident in Belgium and the Netherlands. The current structure of the German gas market seems to impede competition.

Keywords: gas market, regulation, welfare, internal market

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1 Introduction

The creation of a European Community is based upon the establishment of a common internal market in which goods, services and persons are able to move freely between the different Member States (Article 2 EC Treaty). Gradually, European legislation in diverse areas has led to European harmonisation between the Member States. Unrestricted intra-state trade proceeds from an open and liberalised market driven by competitive market forces. Such liberalised markets will increase the total welfare of the European Community, in particular the consumer welfare.

One sector within the EU which has however, remained regulated over the past few years (thereby restricting competition between Member States), is the energy sector, more specifically in the light of this paper, the gas sector. The continued regulation of the gas sector has been justified by the specific network characteristics of the sector, such as natural monopolies and large specific investments, which according to public economic theory, necessarily imply regulation. Over the past few years technological

development has changed the structure of the gas market. As a result, parts of the market have actually become suitable for competition and hence liberalisation. Proponents of liberalisation argue that the former monopolists are inefficient, restricting the correct functioning of the market mechanism. Monopoly gains are reaped by incumbents and monopolists have no incentive to produce, distribute or market gas in a cost efficient manner, to the detriment of consumers.

In order to reply to the call for liberalisation, the Commission has, in 1998, after numerous years of negotiations, finally issued EC Gas Directive 1998¹. The Gas Directive 1998 has recently been amended by Gas Directive 2003². The directives are aimed at the gradual liberalisation of the European gas markets and accordingly the introduction of competition in parts of these markets. Both directives contain provisions based on particular ideas of how competition is best achieved and hence introduced in markets. It is however, not clear if these directives will truly be able to introduce competition and accordingly increase consumer welfare (the benefits of liberalisation must accrue directly to consumers).

At the time of writing, not much literature is available on the liberalisation of the gas market. The literature which is available is in general concerned with the scope of the EC Gas Directive 1998 and is not up to date. In addition, this literature is primarily concerned with the legal aspects of liberalisation, more in particular the Gas Directive 1998. It would be interesting however, to also approach and assess the effectiveness of the liberalisation process from an economic point of view, more specifically from a welfare theory perspective. In addition, it is interesting to assess how the different existent market structures in three Member States, namely Germany, The Netherlands and Belgium respond to the process of

¹ 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, Official Journal L 204, 21/07/1998 P. 0001 - 0012.

² Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC, Official Journal L 176, 15/07/2003 P. 0057 - 0078.

liberalisation and to which amount the liberalisation within these markets is able to achieve the desired welfare effects. More specifically the research question of this paper may be formulated as follows:

Can the European process of liberalisation of the gas markets be deemed successful, in particular in achieving the desired effects on consumer welfare?

The paper will focus on three Member States, namely (as already mentioned): Germany, The Netherlands and Belgium.

The paper will first discuss the economic theory on (de)regulation and the corresponding theory on markets and welfare standards (Chapter 2). In the third chapter, the general European legislative framework which must secure liberalisation of the markets will be reviewed. Chapter four is concerned with European Energy policy leading to the liberalisation process. Chapter five in particular discusses the content of the European gas market legislation, more specifically the EC Gas Directive 1998 and 2003. Chapter six and seven address the state of implementation of the directives, and the corresponding welfare effects of liberalisation, in the different Member States namely: Belgium, Germany and The Netherlands. The paper is closed with a conclusion.

2 Economic theory and (de)regulation

Article 14 EC Treaty articulates the desire of the Community to establish a competitive internal market, in which barriers to trade are abolished, and the free movement of goods and services is assured. The creation of an internal market is based upon the premise that “the market is the best means to efficiently allocate resources, to integrate economies of the Member States and to promote sustainable and non-inflationary growth.”^{3,4} In this context, the market resembles a competitive economy in which market forces determine socially optimal output⁵ which is produced at minimum resource cost. In such societies, the economic activities of undertakings increase economic development and therefore consumer welfare. Even though the Commission recognizes that a competitive market generally produces better quality services and goods at lower prices, the market mechanism has its limits. In certain situations, gains from trade are not exhausted and total surplus is not maximized. As such, the potential benefits do not extend to the entire population and the objective of promoting social and territorial cohesion is not achieved.⁶ In the case of such market failure, governmental intervention might be justified in order to induce efficient market outcomes.⁷ Elements which may indicate market failure and justify regulation are 1) natural monopolies and 2) large sunk / specific investments.

³ Commission of the European Communities, Green Paper: *For a European Union Energy policy*, COM(94) 659, 23.02.1995, p. 97.

⁴ When economists refer to a (perfectly) competitive market, such a market is based upon four basic assumptions: 1) the economies of scale are small and relative to the size of the market; 2) output is homogeneous; 3) information is perfect and 4) there are no entry or exit barriers. In such markets, the market equilibrium is reached when price is equal to marginal cost.

⁵ Socially optimal output refers to the competitive equilibrium output which maximizes total surplus (the sum of consumer and producer surplus) and thus is Pareto optimal. An outcome is Pareto optimal if it is not possible to make one person better off without making another person worse off.

⁶ Cseres, K.J. (2004), *Competition law and consumer protection: a love-hate relationship*, Proefschrift ter verkrijging van de graad van doctor aan de Universiteit Utrecht.

⁷ Market failure is the public interest explanation for regulation and plays a central role in this paper. Additionally, economic theories of regulation are based upon the premise that regulatory intervention allows certain groups to benefit from the redistribution of income and wealth and that the political process induces governments and politicians to regulate (Church, J., Ware, R. (2000), *Industrial organization, a strategic approach*, Boston: Irwin McGraw-Hill).

2.1 Market failure and regulation

In perfectly competitive markets, the price is equal to marginal cost at the minimum of the long-run average cost function. At this equilibrium, the efficient level of output is produced (allocative efficiency)⁸ at minimum opportunity cost (cost or productive efficiency)⁹. At industry level, a cost efficient equilibrium indicates that the number and size distribution of firms is such that average cost for industry output is minimized. Market failure will occur if competitive market forces fail to bring about a socially desirable outcome, due to the fact that the minimisation of production costs requires production by a single firm (natural monopoly). More specifically, a natural monopoly exists if the cost function is sub additive (featuring economies of scope), which means that any distribution of an output level q among N firms results in greater industry costs than if q is produced by a single firm ($N=1$). In a natural monopoly, entry by more than one firm will thus be inefficient. In addition, a natural monopoly is often characterised by substantial economies of scale (unit costs decrease sharply with volume). In order to avoid allocative inefficiencies, a natural monopoly may thus justify price and entry controls (regulation).¹⁰

Regulation however, may also be called for when there is uncertainty and asymmetry of information and service provision is efficiently provided by making large investments in durable specific assets¹¹. In such circumstances, regulation minimizes transaction costs¹², and acts as an efficient mechanism to address opportunistic behaviour on the part of the

⁸ More specifically, allocative efficiency occurs when resources are allocated in such a manner that the goods and services produced are those most highly valued by the consumers.

⁹ More specifically, productive/cost efficiency is achieved when the products are produced at lowest possible cost using a minimum of resources under the existing technology.

¹⁰ The conclusion that a natural monopoly warrants regulation has been challenged by various authors, see amongst others Demsetz, H. (1968), Why regulate utilities?, *Journal of Law and Economics* 11, p. 55-65, concerning the auction of a monopoly franchise; Church, J., Ware, R. (2000), *Industrial organization, a strategic approach*, Boston: Irwin McGraw-Hill, p. 764, on the contestability of the market, and Braeutigam, R. (1979), Optimal pricing with intermodal competition, *American Economic Review* 69, p. 38-49.

¹¹ Transaction specific assets mostly resemble sunk investments and have a very low value in their next-best alternative use.

¹² Transaction costs incorporate the costs of negotiating and concluding a separate contract for each transaction and the cost of discovering relevant market prices (Williamson, O.E. (1996), *The mechanisms of governance*, New York: Oxford University Press.).

consumers and firms. Opportunistic behaviour refers to the fact that human agents will act in their own interest, and thus exhibit conduct contrary to the other party's reasonable expectations. Such conduct is aimed at the expropriation of the quasi-rents¹³ or capital investment(s) of the other party. Opportunistic behaviour increases the transactions costs and thereby raises the incompleteness¹⁴ of contracts, and creates the following inefficiencies: 1) increased cost of contracting; 2) costly renegotiation; 3) costs associated with hold-ups; 4) unexploited gains from trade due to inflexibility; 5) second sourcing; 6) underinvestment in specific assets.¹⁵ Such inefficiencies may warrant regulatory intervention, as illustrated more clearly with the following example.

An example of a market in which the above inefficiencies occur, is the gas market.¹⁶ The construction of gas pipelines construes a considerable sunk specific investment. Moreover, producers of natural gas, distribution companies and consumers must make sunk investments themselves in order to produce, distribute or consume natural gas. If pipeline owners raise their prices (tolls) before producers have made their investments, they will limit development of the gas field. Producers are only willing to invest in the development of a gas field if the average total cost of development exceeds the difference between the tolls they pay and the prices they receive for their gas (netback). Once the field has been developed, producers will continue to exploit the gas field if the average variable cost exceeds the netback. The large sunk capital investment creates a large discrepancy between the average total cost and the average variable cost. Pipeline owners can expropriate the investment of producers by raising their tolls after the producers have made their investments (opportunistic behaviour). The ability of the pipeline owners to expropriate is negatively correlated to the

¹³ Quasi rents are the difference between the cost of an asset and its salvage value (value in its present use and its next best alternative use or opportunity cost).

¹⁴ Incomplete contracts indicate that *ex ante* not all future contingencies can be accounted for in a contract (see Williamson, O.E. (1996), *The mechanisms of governance*, New York: Oxford University Press.).

¹⁵ Church, J., Ware, R. (2000), *Industrial organization, a strategic approach*, Boston: Irwin McGraw-Hill, p. 926.

¹⁶ The example is taken from Church, J., Ware, R. (2000), *Industrial organization, a strategic approach*, Boston: Irwin McGraw-Hill, p. 767.

alternative means of gas transportation. If producers cannot mitigate this opportunistic behaviour, they will under-invest or not invest at all (hold-up behaviour). However, the incentive for opportunistic behaviour is likely to be symmetric, as the success of a pipeline depends on throughput. Producers can threaten to delay development or refrain from investing at all, once the pipeline has sunk its costs into the ground. The pipeline owner will agree to any toll that exceeds its variable costs rather than have no throughput at all. In reaction to this risk, the pipeline owner will reduce its level of investment, or demand complicated contracts, or both. A solution to the display of opportunistic behaviour and the hold-up problem is regulation. Regulation may mitigate the inefficiencies associated with private contracts. Goldberg (1976) observes that intervention by regulation creates an administered contract: the regulator administers the relationship between the firm and the consumer through an institutional framework. As such, the regulator may control entry to the market by granting firms exclusive rights in exchange for an obligation to provide services. Such Public Service Obligations (PSOs), reduce the ability to refuse supply. In addition, the regulator may control prices (tolls) and as such allow prices to adapt in a cost-effective manner and reduce the costs of incomplete contracts.

2.1.1 Network industries

Markets that are characterised by large sunk investments and which qualify (in part) as natural monopolies are network industries such as natural gas, electricity and telecommunications. The elements of natural monopoly and large capital investment have - in the past - motivated the introduction of regulation. Such government intervention is driven by four dimensions: 1) the provision of a legal framework that enables efficient and reliable enforcement of private contracts; 2) substitution for missing private contracts; 3) the existence of network facilities raise concerns with regard to the efficient functioning of the markets, regardless of antitrust enforcement;

4) redistribution may induce the State to depart from pure economic efficiency.¹⁷

In its simplest economic definition, a network may be defined as a set of nodes and interconnecting lines between the nodes, organised within the object of transporting a flow of energy, material or information.¹⁸ Each node can be characterised as an originating node (point from which the flow is emitted), terminating node (the node which receives the flow) or intermediary node (such a node may incorporate the transmission, storage, dispatching, coordination etc.). Networks may be one-way such as gas, or two-way, such as transportation systems or telephone networks. Given the flows to be emitted, the best network is the one that minimises total costs. The identification of the final points of the network may be exogenous or endogenous depending on the nature of the transported flow. For storable products such as gas, the consumer can choose between a connection to the distribution network or the purchase gas cylinders. In addition, the design of the network depends upon the type of good transported. For standardised goods such as gas, the destination of the good is not important once it has been injected into the network, as units are perfectly substitutable. The path which the units follows is however, largely controlled by the operators. In most networks goods have a tendency to take the path of least resistance (Kirchhoff law). In networks with a low circulation level (e.g., gas, water) the path can be controlled by switching the commutation nodes on and off.¹⁹

Network utilities, are public utilities which require a fixed network to deliver their services, as such linking upstream supply with downstream customers.²⁰ The network structure is costly to establish and thus embodies large fixed costs, implying relatively lower average production costs for large scale production. The network infrastructure may form an essential

¹⁷ European Economy (1999), Reports and Studies: *Liberalisation of the network industries, economic implications and policies*, no 4, Luxembourg: Office for Official Publications of the European Communities, p. 70-71.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ Newbery, D.M. (1997), Privatisation and liberalisation of network utilities, *European Economic Review* 41.

input to competitive service providers and thus be qualified as an essential facility. In such network industries, the construction of a parallel network is not possible because of the enormous cost of these investments. Natural monopolies form a part of the network industries.²¹ When the monopoly remains unregulated, this may give rise to market foreclosure issues, where foreclosure refers to “any dominant firm’s practice that denies proper access to an essential input, with the intent of extending monopoly power from one segment of the market (bottleneck segment) to the other (potentially competitive segment).”²² Such foreclosure can be complete (refusal to deal) or partial (the incumbent favours certain downstream firms, generally its own subsidiaries). The natural monopolies are however, dependent upon technological progress in the specific sector and in other sectors²³; technological change alters the state of the natural monopoly. Technological change may thus for example, allow competition to be introduced in certain areas of production, which were previously reserved for incumbents. In the gas industry for example, the introduction of new technologies in electricity generation, more specifically gas generating units and cogeneration, has affected the structure of the industry by reducing the minimum efficient scale of generating units.²⁴

Network industries often deliver goods or services which are of importance to the general public and the business sector. Some of these goods or services are qualified as basic needs to which everyone should have access. As a consequence, public services obligations (PSO)²⁵ have been introduced, which require network industries to provide services even when it is not economically profitable.²⁶ The PSOs may take on various forms: provisions of a minimal service or minimal quality at reasonable price, tariff per equation etc. The PSOs may be financed in various ways: through internal cross-subsidies between an incumbent's products, through access

²¹ *Supra* n. 17, p. 73.

²² *Ibid.*

²³ Natural monopolies may also depend on demand conditions.

²⁴ *Supra* n. 17, p. 67-68.

²⁵ Also referred to in the literature as Universal Service Obligations (USOs).

²⁶ Slot, P-J., Competition and Public Service Obligations: the example of the energy sector in Gormley, L. (ed.) (1997), *Current and future perspectives on EC competition law*, London: Kluwer Law International.

charges, through subsidies from a public service fund, or by awarding the incumbent a monopoly position. Compared with other network industries such as telecommunications, postal services and electricity, the gas industry seems to have relatively few PSOs.

Network industries make up more than 6% of European GDP and employment.²⁷ These industries are thus important for European growth and the competitiveness, and are essential to the functioning of the internal market. Network industries share common characteristics, such as the existence of natural monopolies, the dominance of incumbents, PSOs, etc. However, amongst the diverse Member States, network industries are organised quite differently according to three different categories: 1) centralisation/decentralisation; 2) vertical integration/separation; 3) private/public ownership.²⁸

A more specific example of a network industry is the gas market.

2.1.1.1 Gas market

Natural gas has important environmental advantages as a primary fuel over other hydrocarbon sources, and consumption is increasing substantially. The gas sector is a grid-based industry. The gas industry can be characterised as a one-way network where the transport infrastructure is the critical element (essential facility). In this network structure, the transportation system or gas transmission system (pipeline network, power grid), resembles the interconnecting line between the nodes. The transportation of gas depends on the availability of transmission grids.²⁹ However, in the gas sector, the interoperability of networks is frustrated due to the differences in quality and other technical specifications of the network. In addition, the capacity of the interconnectors might be insufficient for the expected increase in the gas trade caused by liberalisation.

²⁷ *Supra* n. 17, p. 21.

²⁸ *Ibid.*, p. 24.

²⁹ *Supra* n. 26.

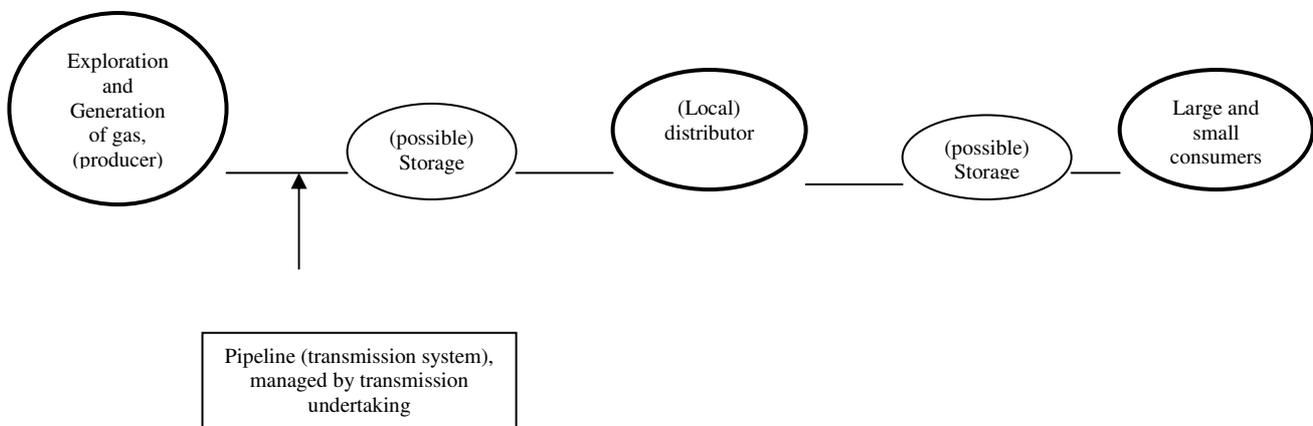
The transportation system may be characterised as a natural monopoly in two aspects. Firstly, the construction of the system entails large sunk costs rendering duplication costly. Due to the large capital costs, pipeline costs are not directly related to throughput.³⁰ Second, in order to establish an efficient allocation of resources and system security, centralised operations are essential. Due to the fact that the infrastructure required for the transmission of gas is a natural monopoly (the network is owned and exploited by one firm), the industry has been heavily regulated or operated by single state-owned undertakings. The need for security of supply tends to reinforce the justification for government regulation, subsidies and the grant of exclusive rights. The security of supply depends on the ability to ensure that internal resources can meet the essential energy needs together with accessible stable external sources, supplemented as appropriate by stocks. Due to the fact that natural gas reserves are located only in certain member states, the transportation (pipelines), security of supply and dependence on imports are significant. These factors have tended to reinforce national monopolies with public distribution and transmission undertakings granted exclusive operating rights. Over the past decade however, technological change has made it possible to deregulate certain parts of these markets, opening them up to competition.

The supply side (upstream) of the gas market consists of gas producers and power generators, and is potentially competitive. The efficiency gains of increased competition in gas production will however be limited as there are only a limited number of producers (main producers: The Netherlands, Norway, Russia, Algeria) and in practice no newcomers will enter the market, unless significant new gas fields are discovered. Demand is articulated by distribution companies (downstream market) and industrial users, whose quantity demanded may fluctuate on a daily, weekly or monthly basis. In addition, gas demand is heterogeneous: whilst some corporations require a constant flow of gas, others don't mind interruptability. Due to the fact that demand exhibits a seasonal pattern,

³⁰ *Supra* n. 17.

suppliers are confronted with a demand management problem. Seasonal fluctuations are not easily matched by producers (regardless of the seasonal storage facilities) and demand causes aggregate uncertainty. In order to satisfy demand, gas may be stored with the help of two types of facilities: seasonal storage facilities and emergency back-up storage facilities. Such facilities have a cost-reducing or efficiency enhancing effect on the production process. Although the storage of gas is potentially competitive, geographical or historical conditions may make existing storage an essential facility to which suppliers must have access in order to compete effectively. In contrast, storage facilities which are intended to smooth daily peaks and meet emergency requirements are often an integral part of the transportation system. These storage facilities substitute for pipeline and compressor capacity and cannot easily be unbundled from the transportation services. With the help of such storage facilities the pipeline operator can maintain system balance without the need to depend on suppliers for extra input.

FIGURE OF GAS INFRASTRUCTURE



As the capital of the network utility is large and sunk, once it has been created, the balance of the bargaining advantage shifts from the investor to the consumer. The networks are directly linked to consumer giving their owner potentially large exploitative power. There is thus a need to devise an institution that will balance these interests and powers.

The gas Market is structured by horizontal and vertical demarcation³¹, a situation which is partly created by the long-term supply contracts signed between members of the vertical supply chain, from gas producers to end-users. Vertical demarcation means that each operator holds a well-defined function and place in the supply chain and generally refrains from entering markets of its customers and or suppliers (e.g. no direct sales by producers to end-users). Horizontal demarcation means that each importer/wholesaler and or regional/local distributor has its traditional supply area and generally does not enter into the neighbouring supply area. Furthermore, most upstream markets (exploration) are characterised by cooperation between competitors, whilst most downstream markets (distribution and storage) appear to be dominated by national champions.

2.2 Deregulation in network industries

Before 1984, it was accepted that network utilities of gas, telecoms and electricity should be organised as vertically integrated monopolies centred on and justified by the natural monopoly of the network.³² The last twenty years have however, been characterised by substantial deregulation. Some industries have been essentially deregulated, while others have only been partially deregulated requiring restructuring of the industry and a regulatory regime. Due to technological change, network industries such as natural gas, electricity and telecommunications remain characterised by natural monopolies in certain stages of production (usually the network infrastructure due to the exorbitant duplication costs), but competition has been introduced in other stages of production. The stages of production which are potentially competitive require entrants to have access to complementary inputs produced by the incumbent monopolist. These complementary inputs can be provided through access to the network. Due to the characteristics of network industries, liberalisation has meant that the network infrastructure remains regulated whilst other parts of the industry must comply with the competition rules.

³¹ XXXth Report on Competition Policy 2000.

³² *Supra* n. 20.

2.2.1 Constraints with respect to liberalisation

Liberalisation however, does not automatically ensure fully competitive markets. The incumbent monopolist will generally remain dominant during the initial phase of market opening as the incumbent alone has access to the network and/or a substantial amount of market power. In addition, the incumbent is often vertically integrated, e.g. in the gas market, pipeline owners have often extended their activities to the sale of gas.³³ In light of the above, a specific issue of liberalisation concerns the monopoly segment: should operators divest themselves and if so, should there be lines-of-business restrictions, or should they remain vertically integrated? Certain actions are indeed prescribed in order to render network markets competitive, usually competition rules are applied and/or some form of *ex ante* regulation is enforced. These actions should pursue two objectives: 1) ensure that new operators have non-discriminatory access to the network and to other essential facilities controlled by the incumbent and 2) prevent incumbents from applying cross-subsidies which might distort competition.³⁴

2.2.1.1 *Non-discriminatory access*

As the incumbent has substantial market power, the regulator should create a temporary constraint on this market power in order to enable competitors to enter and develop within the market. The vertical structure of the incumbent may lead to tying and discriminatory access. The effects of tying are twofold: the price in the unregulated market is raised above marginal cost and if the incumbent is an inefficient producer of the product in the unregulated market, this will lead to the exclusion or reduction of the market share of more efficient firms. In this light, the incumbent may be required to divest certain assets, which will automatically lead to the creation of competitors. In addition, the incumbent monopolist is often required to

³³ Other obstacles to competition may also arise, such as state aids. More specifically, Member States may distort competition through the grant of state aids to incumbent operators. Additionally, incumbent operators may attempt to suppress competition through restrictive agreements, see Gérardin, D., The opening of State monopolies to competition: main issues of the liberalisation process in Gérardin, D. (ed.) (2000), *The Liberalisation of state monopolies in the European Union and beyond*, London: Kluwer Law International.

³⁴ *Ibid.*, p. 182-183.

unbundle its services, in other words, the monopolist must separate its merchant and transportation functions and price them individually. As such, this separation will provide consumers access to the incumbent's distribution system, but leave them the choice over which retail services they wish to purchase and who will provide the services. In order to prevent discrimination by the incumbent concerning access and access prices, regulators should introduce mandatory non-discriminatory access and aim to regulate the prices of network access. Some authors argue that even without such regulatory intervention, operators will be able to gain access to the network on the basis of the EU competition rules, more specifically the doctrine of essential facilities.³⁵ According to this doctrine, a dominant operator that owns an essential network should grant access to third parties on pain of breaching Article 82 of the EC Treaty.³⁶ However, as Geradin (2000) states "The possibility of operators having recourse to the essential facilities doctrine to be granted access does not deprive the legislative intervention of the Community of its usefulness. Specific legislative provisions allow the Community to elaborate a more comprehensive and coherent access policy than that which could be achieved by judicial intervention."³⁷ Indeed, regulation may allow regulators to impose more stringent and specific conditions upon the incumbent than is possible under Article 82 of the EC Treaty.

Once third parties have been granted access, the terms upon which they will be granted access will have to be defined. One of the difficulties in defining such terms is the determination of the access price. Economists have proposed several solutions,³⁸ however, due to complexity; these will not be

³⁵ Hancher, L., Trepte Armin, P. (1992), Competition and the Internal Energy Market, *European Competition Law Review* 4, p. 149. See also Larouche, P. (2000), *The bases of EC Telecommunications law after liberalisation*, proefschrift.

³⁶ See Commission Decision 88/589, London European/SABENA, 1988 OJ, L 317/47; Commission Decision 92/213, British Midland v. Aer Lingus, 1992 OJ, L 96/34; Commission Decision 94/19 Sea Containers v. Stena Sealink, 1994 OJ, L 15/8 and Commission Decision 94/119 of 21 December 1993, Port of Rödby, 1994 OJ L 55/22.

³⁷ *Supra* n. 33, p. 185-186.

³⁸ *Supra* n. 15; Competition issues of access pricing, Study carried out for the European Commission, December 1995. For a survey of the literature see Armstrong, M., Doyle, C. (1995), *The Economics of Access pricing*, OECD Conference on Competition and Regulation in Network Infrastructure Industries; European Economy (1999), Reports and

extensively discussed within this paper. In general, fixing inadequate charges could distort competition and investments: whilst excessive charges could lead to barriers to entry, extremely low charges could induce entry of inefficient operators.³⁹

2.2.1.2 *Cross-subsidies*

The Notice on the application of competition rules to the postal sector⁴⁰ defines cross-subsidies as a technique by which “an undertaking bears or allocates all or parts of the costs of its activity in one geographical or product market to its activity in another geographical or product market.”⁴¹ Other definitions refer to a transfer of revenues between diverse activities: revenues of a profitable activity are used to cover the losses of an unprofitable activity.⁴² Cross-subsidies cause economic inefficiency as some products or services will be over-priced while others are sold below cost. Cross-subsidies have often been used by state monopolies in order to achieve social or political objectives.⁴³ Whilst cross-subsidies might not be harmful when they accrue solely to monopolised services, their effects in a partially liberalised market can be substantial. The welfare effects of cross-subsidies are such that the price will increase in the regulated market. If the unregulated market is characterised by perfect competition than the regulated firm will produce where price is less than marginal cost. When the unregulated market is characterised by imperfect competition and the regulated firm is an inefficient producer of the unregulated product it may exclude or reduce the market share of more efficient firms. In addition, tactics could result in an increase in the price of the product produced on the

Studies: *Liberalisation of the network industries, economic implications and policies*, no 4, Luxembourg: Office for Official Publications of the European Communities; Armstrong, M., Vickers, J. (1995), Welfare effects of price discrimination by a regulated monopolist, *Rand Journal of Economics* 22; Laffont, J.J., Tirole J. (1994), Access pricing and competition, *European Economic Review* 38; Ramsey, F. (1927), A contribution to the theory of taxation, *Economic Journal* 47.

³⁹ Gérardin, D., The opening of State monopolies to competition: main issues of the liberalisation process in Gérardin, D. (ed.) (2000), *The Liberalisation of state monopolies in the European Union and beyond*, London: Kluwer Law International, p. 181-206.

⁴⁰ 1998 OJ, C 39/10.

⁴¹ *Ibid.*, point 3.1.

⁴² Green Paper on the development of the Common Market for Telecommunications Services, COM(87)290, p. 77.

⁴³ *Supra* n. 35, p. 189.

unregulated market creating market barriers.⁴⁴ If the regulated monopolist is an efficient producer, cross-subsidies may be socially beneficial as they shift production from inefficient competitors to the efficient producer. In addition, cross-subsidies do not distort competition if they entail the allocation of costs or revenues from one reserved service to another, as there is no competition within these activities. Competition is also not distorted when the revenues of competitive services are allocated to reserved services.⁴⁵

2.2.2 Beneficial effects of regulated firms in unregulated markets

The above issues such as non-discriminatory access and cross-subsidisation are related to the vertical structure of network markets: the incumbent is often vertically integrated. These issues are concerned with the question to what extent regulated firms (natural monopolists) should be allowed to enter into the unregulated market. It must be made clear that the entry of a regulated firm into unregulated markets may also have beneficial effects, such as the creation of economies of scope. If the regulated monopolist is an efficient producer, the tactics of discrimination and cost misallocation may be socially beneficial as they shift production from inefficient competitors to the efficient producer. In addition vertical structures may entail efficient governance structures: vertical integration of the regulated firm minimizes production and transaction costs if the regulated product / service is an input in the unregulated product / service. Allowing the regulated monopolist to enter the unregulated market may actually increase competition in that market thereby reducing prices and increasing input if the unregulated market is imperfectly competitive. Anticompetitive tactics may thus actually be socially beneficial to the extent that they promote output expansion in the unregulated market or deter socially inefficient entry. However, as the regulated incumbent is likely to thwart development of competition through

⁴⁴*Supra* n. 13; Hancher, L., Sierra Buendia, J.L., Cross-subsidisation and EC Law, *Common Market Law Review*, Vol. 35, 1998.

⁴⁵ *Supra* n. 35.

pricing and terms of access or interconnection, regulatory response to promote competition is often warranted.⁴⁶

Within the European Union, the driving forces of liberalisation are: 1) the technological process which reduces the scope of the natural monopoly; 2) the demand for lower prices, higher quality and more innovation; 3) European integration; 4) pressure from potential market entrants; 5) fiscal austerity and the need for investments. The forces obstructing liberalisation on the other hand are: 1) fear of reduction in the level of the public service; 2) the fear of job destruction and reduced job security; 3) incumbents' fear of loss of their privileged position; 5) the fear of stranded costs.⁴⁷ The creation of liberalisation through competition is a difficult process in which a balance must be sought between an *unregulated* market outcome (in the case of a natural monopoly) which will involve market power and cost inefficiency at industry level, and a regulated outcome (if perfect) which will lead to an efficient market outcome. Perfect regulation is however difficult to achieve due to imperfect / asymmetric information and imperfect alignment between the objective of the firm on the one hand and society on the other hand. The government must choose between imperfect regulation and imperfect markets. The efficiency loss of not regulating depends on the market power of the firm and the degree of cost inefficiency. The degree and type of efficiency which policy makers pursue and thereby the amount of regulatory intervention depends on the welfare standard which they wish to enhance. The diverse policies with respect to market intervention and the related welfare standards will be reviewed in the next paragraphs.

2.3 Markets and welfare standards

Economic efficiency refers to the value of the benefit relative to the costs incurred in obtaining that benefit. An efficient change indicates a situation where the total benefit of the change are greater than the costs of making

⁴⁶ *Supra* n. 15.

⁴⁷ The categorisation into driving and resistance forces is taken from European Economy (1999), Reports and Studies: *Liberalisation of the network industries, economic implications and policies*, no 4, Luxembourg: Office for Official Publications of the European Communities, p. 27.

that change. Economic efficiency encompasses cost efficiency, allocative efficiency and dynamic efficiency, whereby dynamic efficiency refers to the rate of technological process (allocative and cost efficiency have been explained in paragraph 2.1). Whether a change in output is efficient, is dependant upon the criteria along which such a change is judged. Economists often adhere to the criterion of Pareto efficiency⁴⁸. Pareto efficiency refers to the situation where it is impossible to introduce a change which will make at least one person better off without making another person worse off. The changes are referred to as Pareto improvements. This concept of change is rather limited in scope and economists presently favour the Kaldor-Hicks criterion of efficiency (potential Pareto improvement). A potential Pareto improvement is achieved even if an increase in social welfare for one person results in a loss in social welfare for another. Winners and losers are thus allowed. The increase in social welfare must nevertheless exceed the loss, such that the winners are able to compensate the losers and still retain a surplus for themselves.⁴⁹ This compensation is however, merely hypothetical, efficiency (social welfare) will be enhanced even if compensation does not actually take place.

The foregoing paragraphs have made clear that the rationale underlying (de)regulation is the generation of (greater) efficiency in markets. More specifically, market failures lead to cost or allocative *inefficiencies* and hence warrant regulation. Allocative, productive and dynamic efficiencies however, cannot always be simultaneously realised⁵⁰ and policy makers must make a trade-off between these efficiencies.⁵¹ The resolution of the trade-off depends on the relative weight given to the welfare of the different groups of market participants, namely consumers and producers.⁵² This

⁴⁸ Veljanovski, C.G. (1981), Wealth maximization, law and ethics on the limits of economic efficiency, *International Review of Law and Economics*, p. 11.

⁴⁹ Van den Bergh, R.J., Camesasca, P., (2001), *European Competition and economics*, Antwerpen: Intersentia, p.64-65.

⁵⁰ An example is a firm with monopoly power. Such a firm may reduce output and increase prices, possibly leading to allocative inefficiencies. On the other hand, the firm may also aim to achieve cost efficiencies.

⁵¹ Economists do not attempt to make a judgement concerning the efficiency trade-off, on the ground that it lies beyond their professional competence.

⁵² *Supra* n. 4.

allocation of welfare is referred to as the welfare standard. The efficiency of the market can be measured through consumer and producer surplus⁵³, which in combination indicate a degree of social welfare. The welfare (which can incorporate consumer, or producer surplus, or a combination of both), which the policy maker aims to maximize thus steers the type of efficiency to be realised within the market.⁵⁴ Policy makers may pursue to enhance either consumer welfare or total welfare. Both standards take as point of departure the models of perfect competition versus the models of market failure.

2.3.1 Consumer welfare model

Consumer welfare can be defined as the maximisation of consumer surplus which is realised through “direct and explicit economic benefits received by consumers of a particular product measured by its price and quality”⁵⁵. Assuming that perfect competition allocates resources optimally at minimum cost, the consumer welfare model argues that increases in consumer prices due to the exercise of market power by dominant firms should be prevented.⁵⁶ By restricting its output and raising its price, the monopolist sends a false signal about the relative value of the good to the consumer. From a private point of view, the consumer will react optimally to the price increase and reduce consumption of the good. This reduction in consumption creates a misallocation of resources among industries (allocative inefficiency): from a social point of view, too many other goods are produced in relation to the monopolized good.⁵⁷ The consumer welfare criterion does not assign any weight to producer profits⁵⁸ and disregards the

⁵³ Consumer surplus may be defined as the difference between the consumer’s willingness to pay (WTP) for another unit of output and the price actually paid. Producer surplus defines the difference between the firm’s revenues and total avoidable costs.

⁵⁴ De la Mano, M. (2002), *Enterprise Directorate – General European Commission, For the customer’s sake : the competitive effects of efficiencies in European merger control*, Enterprise papers, no. 11, European Communities.

⁵⁵ Brodley, J.F. (1987), The economic goals of antitrust: efficiency, consumer welfare and technological progress, *New York University Law Review* 62, p. 1020-1033.

⁵⁶ *Supra* n. 45, p. 246.

⁵⁷ Martin, S. (1994), *Industrial Economics: economic analysis and public policy*, New Jersey: Prentice Hall.

⁵⁸ Cost efficiencies due to economies of scale, and monopoly profits calculated as $(P_m - P_c) \cdot Q_m$ (P_m = monopoly price, P_c = price in competitive market, Q_m = quantity sold in a monopolistic market).

fact that gains to producers can be socially positive. The consumer welfare model seeks to minimize the resource misallocation effects of market power and only takes into account certain efficiencies, namely those that are of direct benefit to consumers.

2.3.2 Total welfare model

The total welfare model⁵⁹ maintains that the improvement of society's total welfare is achieved by allocating resources through the price system to those users who value them the most.⁶⁰ The total welfare model regards the redistribution in the form of wealth transfers from consumers to producers as neutral and an increase in total social welfare (generated by a potential Pareto improvement) is achieved as soon as an increase (change) in welfare exceeds a loss, such that the winners are able to compensate the losers. Within this particular model, firms do not have to pass efficiency benefits directly on to consumers, as total welfare is already increased by the realisation of efficiencies within firm. The only criterion for allocative efficiency is that firms gain more than consumers lose.

2.3.3 Chicago and Harvard school of thought

The question is, whether the transfer of income from producers to consumers (welfare redistribution) should be of concern to policy makers and thereby taken into account with respect to market intervention. More specifically, the discussion addresses which welfare standard counts and how (de)regulation should take place in order to achieve the corresponding efficiencies. In this light, two main schools of thought exist: the Chicago school and the Harvard school.⁶¹

⁵⁹ Also referred to as the deadweight loss (DWL) standard. The DWL standard may be explained as follows: the net loss of consumers' surplus due to market power is the deadweight loss. Deadweight loss measures aggregate welfare loss to producers and consumers due to output restriction. Under the deadweight loss standard, income transfer from consumers to producers is not considered social welfare loss, as this is offset by monopoly profits that go to owners of the firm exercising the market power (*Supra* n. 57).

⁶⁰ *Supra* n. 55, p. 1020, 1023.

⁶¹ Both models are concerned with market intervention, i.e. the application of competition rules in general. The models do not specifically address the issues of regulation. Both models originate from the United States.

2.3.3.1 Chicago school

The Chicago school of thought regards consumer welfare as a synonym for total welfare or allocative efficiency and thereby ignores the redistribution of income between market participants. The position that income transfers due to market power should be a concern of policy makers is rejected on the ground that consumers are producers too.⁶² This school of thought thus identifies consumer welfare with overall economic efficiency. According to the Chicago school, economic efficiency benefits consumers directly through reducing the costs of goods and services and through increasing the value of goods and services.⁶³ However, the *new* Chicago school (Post-Chicagoans), have acknowledged that assimilating consumer welfare with economic efficiency is a *contradictio in terminis*. Consumer welfare does not seek to maximize total surplus and concerns a distributional goal, whilst economic efficiency may be identified with the maximisation of total welfare. The Chicago school thus actually dictates the maximisation of total welfare (which they identify with consumer welfare) as it is not concerned with the welfare distribution as such, but merely argue that welfare should go where it is most appreciated and where it can do most.⁶⁴

According to early ambassadors of the Chicago school (e.g. Simons and Knight), social control of monopoly through regulation was not acceptable and public ownership should be prescribed for public utility industries.⁶⁵ In the late 1950s, Friedman, a representative of the new Chicago School⁶⁶,

⁶² *Supra* n. 55 and Bork, R.H., (1978), *The antitrust paradox: a policy at war with itself*, New York: Basic Books, p. 10: "Those who continue to buy after a monopoly is formed pay more for the same output, and that shifts income from them to the monopoly and its owners, who are also consumers. This is not dead-weight loss due to the restriction of output but merely a shift in income between two classes of consumers". As Martin (1994) states, this line of thought ignores the difference between monopoly profits and other categories of income. Other categories are wages, rent, interest and economic profit. Wages, rent and interest are determined in factor markets by the owners of the factors of production which offer services and goods for sale. Consumers in their capacity as consumers receive no income at all. Consumers don't get consumer surplus. Income is received by individuals who own the services of factors of production (*Supra* n. 55, p. 549).

⁶³ *Ibid.* Bork (1978).

⁶⁴ Hovenkamp, H., Antitrust policy after Chicago, *Michigan Law Review* 84 (213).

⁶⁵ Trebing, H.M. (1976), The Chicago school versus public utility regulation, *Journal of Economic Issues* X (1),

⁶⁶ Other ambassadors of the Post-Chicago school were R.A. Posner, G.J. Stigler and H. Demsetz.

argued that when technical conditions make a monopoly the natural outcome of competitive market forces, a private monopoly may be the least of evils. Subject to technical change, it was argued that a private monopoly was superior to government regulation or public ownership.⁶⁷ In general, the Chicago school is overwhelmingly critical of regulation. However, in 1971, Stigler⁶⁸ proposed a theory of economic regulation. As the government is a function of strategies of various parties and thus not capable of taking on an independent course of action, the theory of economic regulation assigns the government a passive role relative to producers as well as to consumers. The efficacy of the market mechanism should remain intact, even if it is subject to structural imperfections. The theory of economic regulation purports that the consumer, unassisted by government control or regulation, should be the final arbiter on matters of pollution, abusive practices and output (quantity and diversity). Political power in the sense of government intervention and control (regulatory constraints on prices, firm structure and service) would distort the functioning of the market and thereby consumer preferences, leading to resource misallocation and the creation of inefficiencies.

2.3.3.2 *Harvard school*

In contrast to the Chicago school, the Harvard school dictates that market power is always harmful and as such should be illegal. The Harvard school of thought is based upon the Structure-Conduct-Performance (SCP) paradigm.⁶⁹ The SCP paradigm dictates that market structure plays the most relevant role in the market. Market structure in turn determines market behaviour, and this market conduct drives market performance. Based upon the assumption that markets are not perfect, concentration leads to market strength that facilitates collusion, thereby decreasing output and increasing prices, leading to allocative inefficiencies. Even if a potential Pareto

⁶⁷ Friedman, cited in Newbery, D.M. (1997), Privatisation and liberalisation of network utilities, *European Economic Review* 41, p. 357-383.

⁶⁸ Stigler, G.J. (1971), The theory of economic regulation, *The Bell journal of economics and management science*, 2 (1), p. 3-21; Posner, R.A. (2001), *Theories of economic regulation*, internet document.

⁶⁹ This approach has been criticized for its fundamental dependence on empirical evidence and the simplistic explanation of the relationships between the variables (Cseres. K.J. (2004), *Competition law and consumer protection: a love-hate relationship*, Proefschrift ter verkrijging van de graad van doctor aan de Universiteit van Utrecht).

improvement would take place, the Harvard school would argue that welfare is not distributed equally amongst market participants, regardless of the fact that winners (in the case of collusion, the winners are the producers) are hypothetically able to compensate the losers (in this case the consumers).

The Harvard school articulates multiple aims which might justify market intervention and regulation: e.g. the distribution of equity, the decentralisation of economic power, economic stabilisation, optimal factor allocation and consumer sovereignty.⁷⁰ The Harvard school justifies regulation if it complies with these goals. In the end market intervention should lead to workable competition. As opposed to the Chicago school, public ownership and public regulation are favoured over private monopoly. The government should not remain passive; this could have a detrimental effect on equity distribution, resource allocation, consumer welfare, etc. Regulation will protect the consumer from the potential extortion inherent monopoly power.

2.3.4 The European welfare standard

The models as articulated by the Harvard and Chicago schools of thought originate from the United States, where consumer welfare is the overriding interest in competition policy. The Chicago representatives assume consumer interests are best served by a laissez-faire policy, whilst the Harvard ambassadors argue that a socially beneficial outcome can only be reached through market intervention.

In Europe, however, the primary force driving interventionist policies is market integration. Market integration has had a great influence on competition and regulation policy and often taken precedence over the economic goals.⁷¹ The policy geared towards market integration does not always promote the interest of consumers.⁷² More specifically state intervention is directed at market integration and thereby the general

⁷⁰ Taken from Cseres (2004) p. 79, Table 1.

⁷¹ Bishop, S., Walker, M. (1999), *Economics of EC competition law: concepts, application and measurement*, London: Sweet & Maxwell.

⁷² *Supra* n. 6.

functioning of the economy and consumer protection is but one aspect of the intervention policy. It seems that, only with the publication of the White Paper on the Modernisation of Competition Rules 1999, have economic theories begun to play a role and consumer welfare become more important.

The idea of enhancing European integration through the establishment of an internal market matches the ideas of Ordoliberalism. The Ordoliberals accept the ideas of classical liberalism, such as the central role competition plays as a tool to achieve a free society, and the fact that economic freedom can be viewed as a corollary to political freedom. However, the Ordoliberals argue that individual freedom must be protected against governmental interference and monopolistic power. A legal framework is essential to guarantee individual freedom. Such a legal structure should make 'complete' competition⁷³ possible and provide for the basic principles of economic conduct.⁷⁴ Competition law is assigned a central role in the economic society. Ordoliberals argued that the aim of consumer protection is the optimisation of freedoms on the market, as such, consumer protection is viewed as a complement to the freedom of competition.⁷⁵ The Ordoliberals believed that economic policy decisions are not shaped by interest groups or political institutions but by general legal principles articulated by the Community. Competition law and issues on integration were drafted in juridical terms and not political ones. Market integration served as a mechanism of division with regard to the competencies of the Member States and the Community. Treaty elements which went beyond the concept of market integration were considered functional deficiencies.

A shift has however, taken place from market integration to policy integration and from competition policy to industrial policy. In the 1960s the Harvard school became influential and provided analysis for European competition law, as it still does today. In addition, current Article 95 EC Treaty introduced by the Single European Act (SEA) in 1987, provided for

⁷³ Complete competition indicates that no firm in the market has enough power to exert influence on the conduct of other firms in that market (Cseres, 2003).

⁷⁴ *Supra* n. 6.

⁷⁵ Drexler, J. (1998), *Die wirtschaftliche Selbstbestimmung des Verbrauchers*, Mohr Siebeck.

new areas of minimum harmonisation such as health, safety and environmental and consumer protection. As a consequence the power of the Community was enlarged, allowing for sector specific regulation. At the present, the market intervention policy is concerned with market integration, effective competition (individual economic freedom) and consumer welfare, driven by the goal of workable competition. Through workable competition “perfect competition” can be maintained with certain limitations and therefore certain restrictions on competition. The Guidelines on application of Article 81(3) affirm the suggestion that consumer protection is becoming increasingly important in interventionist policy: “the objective of 81(1) is to protect competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of resources.”⁷⁶ Interventionist policies serve consumer interests through preventing market distortions. Market intervention, and specifically competition policy, is aimed at promotion of consumer welfare as articulated by the Harvard school: “[competition policy’s] aim is to ensure that business operates along competitive lines, while protecting consumer by making goods and services available on the most favourable terms possible. It therefore endeavours to cut monopoly profits.”⁷⁷ Whilst natural monopolies and vertical integration lead to cost reduction and increase productive efficiency, they also reduce competition and raise prices. Such market structures create obstacles to market entry which are not balanced with the efficiencies that such structures may generate. Allocative efficiencies are preferred over potential cost efficiencies within the firm. Vertical arrangements must benefit the consumers, whereby direct short-term benefits are preferred to long-term benefits.⁷⁸ In general, Community policy thus pursues an enhancement in social welfare where the benefits (profits) gained by producers with market power also accrue to consumers. In order to abide by this distribution, the Community prefers to rely on strong intervention by public powers rather

⁷⁶ Communication from the Commission, Notice Guidelines on the application of Article 81(3) of the Treaty (2004/C 101/08), 27.04.2004, C 101/97, point 13.

⁷⁷ European Commission, VIth Report on competition policy 1975, 9 (1977), cited in Camesasca, P.D. (2000), *European Merger Control: getting the efficiencies right*, Intersentia-Hart, p. 50.

⁷⁸ Commission Regulation (EC) No 802/2004 of 7 April 2004 implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings, Article 2 (1) (b).

than to confide in the operation of the market mechanism. This means that national monopolies should be strongly regulated in order to assure non-discriminatory access and prevent harmful cross-subsidisation, whilst the liberalised parts of the market should be subject to competition rules in order to restrain restrictive practices.

With the Community acknowledging that competition is imperfect and market failures exist, they acknowledge the need for legal protection of competition and consumers. Welfare is distributed in a way to guarantee allocative efficiency and remedy market failures. In general EC consumer law can be said to be aimed at the protection of the interests of consumers, and the economic and social aspects of the market. If market does not generate efficiency, it is legitimate for the state to intervene in order to strengthen the market and adjust the environment of consumers.

2.3.4.1 Parameters measuring European consumer welfare

In the light of this paper, it is necessary to define several parameters which may indicate the effects of liberalisation on consumer welfare. One of the most important parameters which can be used to measure changes in consumer welfare is the price. In a natural monopoly, the monopolist charges prices which are above the marginal cost price (in a competitive equilibrium prices are equal to marginal costs), and thus reaps monopolist profits. True liberalisation of markets and thus the introduction of competition will have a downward effect on price, and must accordingly lead to a decrease in prices. Specifically if new entrants are able to pressure the high prices charged by the incumbent. The entrance of new players on the market thus increases competition between market players as consumers are offered a broader range of choice. The entrance of new players however, will only be possible if barriers to entry are decreased. In the light of the gas market this means that parties must be able to gain access to the gas transmission network (TPA). Furthermore they need to be able to conclude contracts with gas producers or importers and be able supply in any territory.

In markets, such as the gas market where consumers conclude contracts with their gas supplier, it is also important that consumers are offered clear, transparent and non-discriminatory tariffs and conditions. Consumers must be able to understand the contracts such that they may compare the diverse contracts offered by suppliers.

The aforementioned parameters, are some of the parameters which may indicate an increase in consumer welfare. In Chapter 6 and 7, these parameters will be addressed more specifically for three different Member States: Belgium, Germany and The Netherlands, as well as for liberalisation in the European Community in general.

3 General European legislative framework

It is in the Community's interest to limit Community regulation to a minimum level whilst enabling reconciliation of the freedom of movement with the legitimate objectives⁷⁹ of the Member States. The Commission has made it clear that liberalisation *per se* is not a fundamental Community objective, but a tool to achieve an efficient and competitive European economy.⁸⁰ The approach of the Commission with respect to the energy market is based upon the subsidiary principle: the legislative foundation consists of a broad framework of liberalisation measures, within which each Member State is allowed to opt for the system that each considers most appropriate considering the specific characteristics of their market.

Whilst sectoral directives are aimed at dismantling Member States of monopoly or regulated industries, general competition rules apply in order to ensure that new arrangements which replace former state monopolies will not restrict competitive development. With regard to the liberalisation and subsequently integration of the energy sector: "The integration of the energy market by either harmonization, mutual recognition or direct application of the rules of the Treaty, establishes the mechanism for cooperation between companies and the basis for their competitiveness on the world markets"⁸¹. The articles concerned with striking the balance between state intervention and insuring undistorted competition are Articles 23-31 EC Treaty on the free movement of goods, Articles 81-89 EC Treaty concerning competition rules, Articles 154-156 EC Treaty on Trans-European networks and Article 16 of the EC Treaty.⁸²

⁷⁹ These legitimate objectives are: 1) protection of public service missions; 2) security of supply; 3) environmental protection; 4) energy efficiency.

⁸⁰ Speech C. Papoutsis, *Electricity and gas liberalisation: a win-win position for Europe?*, European Report 15 October 1997.

⁸¹ *Supra* n. 1, p. 97.

⁸² Compared with other network sectors such as telecommunications and postal services, the competition rules and the rules on the freedom of movement of goods are applied less extensively to the energy sector.

3.1 Article 31 EC Treaty⁸³

The EC rules on the free movement of goods and services seek to prevent barriers to trade being maintained by Member States. As such, Part III of the EC Treaty (Articles 23-31), prohibits Member States to take any measures which may directly or indirectly, actually or potentially, constitute a barrier to the free movement of goods in the light of *intra-community* trade. The provision does not apply to restrictions on trade which are inevitably related to the existence of monopolies functioning in the pursuit of public interest aims.

Article 31 in particular, requires Member States to *adjust*⁸⁴ a state monopoly of a *commercial* character in such a manner that no discrimination concerning the conditions under which goods are procured and marketed exists between nationals of Member States. More precisely Article 31(1) states:

“Member States shall adjust any State monopolies of a commercial character so as to ensure that no discrimination regarding the conditions under which goods are procured and marketed exists between national of Member States. The provisions of this Article shall apply to any body through which a Member State, in law or in fact, either directly or indirectly supervises, determines or appreciably influences imports or exports between Member States. These provisions shall likewise apply to monopolies delegated by the State to others.”

Article 31 concerns goods and does not apply to services.⁸⁵ Article 31 however, does relate to monopolies which concern the provision of services,

⁸³ See Bellamy, C., Child, G. (2001), (edited by Roth, P.M.), *European Community law of competition*, London: Sweet & Maxwell.

⁸⁴ Article 31 does not require the total abolition of national monopolies having a commercial character. See Case 59/75 *Pubblico Ministero v Maria Manghera and others*, 3 February 1976, [1976] ECR p. 91; Case 78/82 *Commission of the European Community v Italian Republic*, 7 June 1983, [1983] ECR p. 01955.

⁸⁵ Case 271/81 *Société Cooperative d'amélioration de l'élevage et d'insemination artificielle du Béarn v Lucien J.M. Mialocq and others*, [1983] ECR p. 2057; Case 30/87 *Corrine Bodson v SA Poms Funèbres des régions libérées*, 4 May 1988, [1988] ECR p. 02479, paragraph 13.

in so far as such monopolies discriminate against imported goods as opposed to domestic goods.⁸⁶ Electricity and gas are treated as goods and fall within the scope of Article 31.⁸⁷

In order to fall under Article 31, the State must be able to control, direct or influence appreciably intra-community trade through a body established for the purpose or through a delegated monopoly.⁸⁸ Article 31 precludes the establishment of bodies with exclusive rights to import or export a particular product, as this gives rise to discrimination against importers established in other Member States.⁸⁹ Various monopolies concerning the import and sale of natural gas and electricity have been held to fall under the scope of Article 31.⁹⁰ An example of a monopoly which has been delegated by the State to another body, is the grant of exclusive natural gas import and marketing rights which the Belgium Government delegated to Distrigaz.⁹¹ Article 31 only applies to national provisions which enable a public monopoly to exercise *exclusive* rights. The provision does not apply to national provisions which apply *in general* to the production and marketing of the product in question. An Italian body which was entitled to distribute tobacco products made in Italy, was held not to fall within the scope of Article 31, as the State could not use these rights to intervene in the procurement choices of retailers, nor to ensure an outlet for the monopoly's

⁸⁶ In this case, the provision of services will indirectly influence the trade in goods and thereby lead to discrimination of imported goods as opposed to domestic goods. See Case 155/73 Guiseppe Sacchi, 30 April 1974, [1974] ECR p. 00409; joined Cases 46/90 and C-93/91 Procureur du Roi v Jean-Marie Lagauche and others, 27 October 1993, [1993] ECR p. I-05267, paragraph 33.

⁸⁷ Case 6/64 Flaminco Costa v ENEL, 15 July 1964, [1964] ECR p. 00585; Case C-393/92 Municipality of Almelo and others v NV Energiebedrijf Ijsselmij, [1994] ECR p. I-01477, paragraph 28; Case 158/94 Commission of the European Community v Italian Republic, 13 October 1997, [1997] ECR p. I-05789, paragraph 17; Case 159/94 Commission of the European Community v French Republic, 23 October 1997, [1997] ECR p. I-05815.

⁸⁸ Case C-393/92 Municipality of Almelo and others v NV Energiebedrijf Ijsselmij, [1994] ECR p. I-01477, paragraph 29.

⁸⁹ In this sense, it is sufficient that the rights relate to a proportion of the imports, as long as the monopoly has an appreciable effect on the imports.

⁹⁰ Case 157/94 Commission of the European Community v the Netherlands, 23 October 1997, [1997] ECR p. I-05694; Case 158/94 Commission of the European Community v Italian Republic, 23 October 1997, [1997] ECR p. I-05789; Case 159/94 Commission of the European Community v French Republic, 23 October 1997, [1997] ECR p. I-05815.

⁹¹ 13th Competition Policy Report 1983, point 291.

product, nor to en- or discourage imports.⁹² In addition, in France, local authorities had been given the choice to 1) grant private funeral service undertakings in their area a concession; 2) to leave the sector unregulated or; 3) to extend their services to the operation of funeral services. A couple of authorities ended up granting undertakings within the same group a concession and as such, these appointed companies were able to influence imports in the new situation. However, the companies could not be characterised as a national monopoly as the new situation was a result of their conduct and not of the national or municipal authorities.⁹³

3.2 Articles 81-89 EC Treaty (competition rules)

Strong Community competition policy plays an essential role in keeping and reinforcing the internal market, and thereby enhancing integration.⁹⁴ Competition rules are complementary to the provisions on free movement (Articles 23-31 EC Treaty), as they prevent barriers to trade being re-erected by private agreements. Prior to the intervention of the Commission through sector specific regulation, competition rules were applied (and still are) in the energy market in order to ensure market integration and competitive markets.

3.2.1 Articles 81 and 82 EC Treaty

Articles 81 to 82 EC Treaty contain the rules which must warrant and govern competition within the Community. Article 81 prohibits and declares void all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market.⁹⁵ Article 82 prohibits the abuse by one or more undertakings of a

⁹² Case 387/93 Criminal proceedings against Giorgio Domingo Banchemo, 14 December 1995, [1995] ECR p. I-4663, paragraphs 26-31.

⁹³ Case 30/87 Corrine Bodson v SA Poms Funèbres des régions libérées, 4 May 1988, [1988] ECR p. 02479.

⁹⁴ European Commission, Commission staff working paper 12.03.2001, *Completing the internal energy market*, SEC(2001) 438.

⁹⁵ Article 81(1) may be declared inapplicable to certain agreements, decisions or concerted practices which fulfil the criteria mentioned in Article 81(3) EC Treaty.

dominant position within the common market or a substantial part of it, as far as it may affect interstate trade.

3.2.2 Article 86 EC Treaty⁹⁶

Article 86 is especially important in the light of this paper, as it ensures that rules on competition apply equally to the public undertakings and undertakings to which the Member States grant special or exclusive rights.

Article 86(1) of the EC Treaty states:

“In the case of public undertakings and undertakings to which Member States grant special or exclusive rights, Member States shall neither enact nor maintain in force any measure contrary to the rules contained in this Treaty, in particular to those rules provided for in Article 12 and Articles 81 to 89.”

In contrast to Articles 81 and 82, Article 86(1) is not addressed to undertakings but to Member States. Articles 86(1) and (2) are only infringed by a government measure when the undertaking acting pursuant to that measure necessarily infringes another article of the EC Treaty.⁹⁷ The most common provisions are Articles 31, 49 (services) EC Treaty, and Articles 81 and 82 EC Treaty.

Even though the EC Treaty does not define the term ‘public undertaking’, the Commission states that the term includes every undertaking over which public authorities may exercise, directly or indirectly, a dominant influence by 1) virtue of ownership of it; 2) their financial participation in it or 3) the rules which govern it. The term ‘measures’ within Article 86, refers to acts directed to undertakings. These measures may include legislative acts affecting undertakings, administrative decisions, the exercise of shareholders rights, non-binding recommendations etc.

⁹⁶ *Supra* n. 83, p. 998-1016.

⁹⁷ Case C-232/93 *Société Civile* [1995] ECR p. I-5097.

Undertakings granted special or exclusive rights may fall within the scope of Article 86, as Member States that grant the undertakings such rights, are able to adopt measures that would favour these privileged undertakings over others and as such distort competition.⁹⁸ The mere grant of an exclusive or special right is not in itself contrary to Article 86(1). However, such a grant may become incompatible with the EC Treaty in the same way as any other measure.⁹⁹ Considering the fact that a Member State has a margin of appreciation, the grant of an exclusive right is not *per se* unlawful, in the case that the exclusive right is necessary in order to perform a task of general economic interest or social task which has been entrusted to the undertaking.¹⁰⁰ In addition, the grant of an exclusive right must *inevitably* (and effectively) lead the undertaking to infringe a provision of the EC Treaty, or create a situation, in which the undertaking is inevitably led to commit abuse; the mere fact that the grant enables the undertaking (if it so wishes) to infringe the EC Treaty, is not enough to cause an infringement of Article 86(1).¹⁰¹ In several ECJ cases, State measures were challenged as the undertaking which had been granted an exclusive right, was unable to satisfy the demand for service in the Member State. Such a right then limits output and thus infringes Article 82 in conjunction with Article 86(1) EC Treaty.¹⁰² Measures which allow an undertaking to extend its market power into the neighbouring market, may also be in breach of Article 86(1) in

⁹⁸ Communication “Services of General Interest in Europe”, OJ 1996 C281/3.

⁹⁹ Case C-41/90 Klaus Höfner and Fritz Elser v Macroton GmbH, 23 April 1991, [1991] ECR p. I-01979, paragraphs 26-27 and Case C-179/90 Merci Convezionali porto di Genova SpA v Si Derurgia Gabrielli SpA, 10 December 1991, [1991] Ecr p. I-05889, paragraph 17.

¹⁰⁰ Case C-115 to 117/97 Brentjen’s Handelsonderneming BV v Stichting Bedrijfspensioenfondsvoor de Handel in bouwmaterialen, 21 September 1999, [1999] ECR p. I-6025 and Case C-219/97 Maatschappij Drijvende Blokken v Stichting Pensioenfondsvoor de Vervoer- en Handelsbedrijven, 21 September 1999, [1999] ECR p. I-06121.

¹⁰¹ Case C-67/96 Albany International BV v Stichting Bedrijfspensioenfondsvoor de Textiel Industrie, 21 September 1999, [1999] ECR p. I-05751; Case C-323/93 Société Civile Agricole du Centre d’Insémination de la Crespelle v Coopérative d’Élevage et d’Insémination Artificielle du Département de la Mayenne, 5 October 1994, ECR [1994] p. I-05077 and Case C-02/88 Republic of France v Commission of the European Community, 19 March 1991, [1991] ECR p. I-01223.

¹⁰² Case C-41/90 Klaus Höfner and Fritz Elser v Macroton GmbH, 23 April 1991, [1991] ECR p. I-01979; Case C-55/96 Job Centre Coop. arl, 11 December 1997, [1997] ECR p. I-07119 and Case C-258/98 Criminal proceedings against Giovanni Carra and others, 8 June 2000, [2000] ECR p. I-04217.

conjunction with Article 82 EC Treaty.¹⁰³ In addition, infringement of Article 86(1) in conjunction with Article 82 may be assumed when certain measures allow an undertaking to exert control over aspects of its competitors' business.¹⁰⁴ Abuse of a dominant position, and thus infringement of Article 82 in conjunction with Article 86 may also occur, if the undertaking which has been granted exclusive rights, charges excessive prices.¹⁰⁵

Article 86(2) states that:

“Undertakings entrusted with the operation of a services of general economic interest or having the character of a revenue producing monopoly shall be subject to the rules contained in this Treaty, in particular the rules on competition, insofar as the application of such rules does not obstruct performance, in law or fact, of the particular tasks assigned to them. The development of trade must not be affected to such an extent as would be contrary to the interests of the Community.”

Article 86(2) applies to undertakings - as opposed to Article 86(1) - which are generally subject to the rules of the EC Treaty, but which are dismissed from the application of these rules under certain circumstances. Article 86 “[...] makes for the best possible interaction between market efficiency and general interest requirements by ensuring that the means used to satisfy the requirements do not unduly interfere with the smooth running of the single European market and do not affect trade to an extent that would be contrary to the Community interest.”¹⁰⁶

¹⁰³ Case C-18/88 Régie des telegraphes et des téléphones v GB-Inng-BM SA, 13 December 1991, [1991] ECR p. I-05941 ; SPEGNN, IP/99/29, XXVIIIth Report on Competition Policy 1998; HFC Bank plc/British Gas Trading Ltd, COMP/36.404, 02.12.1997.

¹⁰⁴ Case C-163/96 Criminal proceedings against Silvano Raso and others, 12 February 1998, [1998] ECR p. I-0533.

¹⁰⁵ The fact that an undertaking charges excessive prices, does not *per se* indicate that Article 82 in conjunction with Article 96 EC Treaty has been infringed, when the prices have been set by State measures. See Case C-242/95 GT Link ALS v De Danske Statsbaner (DSB), 17 July 1997, [1997] ECR p. I-04449.

¹⁰⁶ European Commission, Communication from the Commission, *Services of general interest in Europe*, [2001] O.J. C17/4, paragraph 21.

A Member State may rely on Article 86(2) in combination with Article 86(1) EC Treaty, in order to justify the grant of exclusive rights (that would otherwise involve the breach of a provision of the EC Treaty) to an undertaking entrusted with the operation of services of general economic interest.¹⁰⁷ As the ECJ has stated: “that provision seeks to reconcile the Member States’ interests in using certain undertakings, in particular in the public sector, as an instrument of economic or fiscal policy with the Community’s interest in ensuring compliance with the rules on competition and the preservation of the unity of the common Market.”¹⁰⁸

In the Communication on Services of General Interest in Europe¹⁰⁹, the term ‘services of general economic interest’ (which is narrower than the term ‘services of general interest’) is defined as referring “to services of an economic nature which the Member States or the Community subject to specific public service obligations by virtue of a general interest criterion.”¹¹⁰ The term thus extends to include particular services (PSOs) provided by network industries such as transport, postal services, energy and telecommunications. As Article 86(2) applies to services of general economic interest, the provision does not apply to *non-economic* activities such as compulsory education, social security, justice diplomacy¹¹¹, nor to services that are specifically aimed at managing private interests¹¹². It seems

¹⁰⁷ Case 157/94 *Commission of the European Community v the Netherlands*, 23 October 1997, [1997] ECR p. I-05694; Case 158/94 *Commission of the European Community v Italian Republic*, 23 October 1997, [1997] ECR p. I-05789; Case 159/94 *Commission of the European Community v French Republic*, 23 October 1997, [1997] ECR p. I-05815.

¹⁰⁸ Case C-219/97 *Maatschappij Drijvende Blokken v Stichting Pensioenfonds voor de Vervoers- en Handelsbedrijven*, 21 September 1999, [1999] ECR p. I-06121, paragraph 93.

¹⁰⁹ *Supra* n. 106.

¹¹⁰ Green Paper on services of general interest, COM(2003)270, 21.5.2003, p. 7 point 17. The term must not be confused with the term public service, which is less precise. The term can have different meanings such as service that is offered to the general public, service that has been assigned specific role in the public interest or refer to ownership or status of entity providing the service (Green Paper on services of general interest, COM(2003)270, 21.5.2003, p. 7, point 19).

¹¹¹ *Supra* n. 106.

¹¹² Case 15/73 *Roswitha Schots, née Kortner, and others v Council and Commission of the European Communities and the European Parliament*, 21 February 1974, Joined cases 15 to 33, 52, 53, 57 to 109, 116, 117, 123, 132 and 135 to 137-73, ECR [1974], p. 00177

that services do not have to benefit the whole of the national economy but merely a certain group of the population.¹¹³

An act of public authority in the form of a specific national law¹¹⁴ or other act of public authority¹¹⁵ is needed to entrust an undertaking with the operation of services of general economic interest. In order for obligations assigned to the undertaking to fall within the scope of the entrusted task, the obligations must relate to the subject matter of the service and be aimed at making a direct contribution to satisfying the general economic interest relied upon.¹¹⁶ The task which has been entrusted to the undertaking must be distinguishable from other services provided by the undertaking and thus dissociable from the task. Infringement of the competition rules caused by dissociable services cannot be justified, unless these services and the restrictions they impose contribute to maintaining the economic equilibrium of the service of general economic interest.¹¹⁷

The derogation of the EC Treaty rules granted to particular undertakings under Article 86(2), does not confer upon the undertakings as such, but in respect of the particular tasks assigned to them.¹¹⁸ In case 157-159/94¹¹⁹, the ECJ reformulated the derogation test and stated that it was sufficient that the Treaty rules obstruct the performance in law or in fact of special obligations entrusted to an undertaking. In order to attain derogation, it is not necessary for the survival of the undertaking to be threatened in absence of derogation.¹²⁰ However, the tailpiece of Article 86(2) entails that derogation

¹¹³ Case C-179/90 *Merci Convezionali porto di Genova SpA v Si Derurgia Gabrielli SpA*, 10 December 1991, [1991] ECR p. I-05889.

¹¹⁴ Case 41/83 *Italy v Commission of the European Community*, 20 March 1985, [1985] ECR p. 00873.

¹¹⁵ Case C-393/92 *Municipality of Almelo and others v NV Energiebedrijf Ijsselmij*, [1994] ECR p. I-01477

¹¹⁶ *Supra* n. 83, p. 1009-1010.

¹¹⁷ Case C-320/91 *Criminal proceedings against P. Corbeau*, 19 May 1993, [1993] ECR p. I-02533.

¹¹⁸ Case 258/78 *L.C. Nungesser KG and Kurt Eisele v Commission of the European Community*, 8 June 1982, [1982] ECR p. 02015.

¹¹⁹ *supra*

¹²⁰ This test was reapplied in Case C-67/96 *Albany International BV v Stichting Bedrijfspensioenfondstextielindustrie*, 21 September 1999, [1999] ECR p. I-05751 and Cases C-115 to 117/97 *Brentjen's Handelonderneming BV v Stichting*

will only be given, if the development of trade is not “affected to such an extent as would be contrary to the interests of the Community” (this is the case, regardless of the fact that an undertaking is able to prove that normal application of the Treaty rules obstructs performance of its entrusted task). This concept is narrower than the concept of ‘effect on trade’ articulated in Articles 81 and 82 EC Treaty. Article 86(2) is thus concerned with the appraisal of a particular task entrusted to a certain undertaking and the protection of interests of the Community in relation to the development of trade.

Article 86(3) states:

“The Commission shall ensure the application of the provisions of this Article and shall, where necessary, address appropriate directives or decisions to Member States.”

On basis of this Article the Commission may construe decisions and regulation in order to enforce Article 86(1) of the EC Treaty.

The Telecommunications Directives¹²¹ have been drafted based upon Article 86(3).

3.3 Commission decisions concerning the gas sector

The Commission applies the competition rules to the gas sector. The Commission has for example, applied the competition rules to the gas sector in order to ensure Third Party Access (TPA)¹²². In 1995, two leading gas companies had the intention of establishing a joint venture. The joint venture activities would concern the construction and operation of a UK-Belgium underwater gas interconnector. This interconnector would form a

Bedrijfspensioenfonds voor de Handel in bouwmaterialen, 21 September 1999, [1999] ECR p. I-6025.

¹²¹ Directive 88/301 on competition in the markets in telecommunications terminal equipment, OJ 1988 L131/75, amended by Directive 94/46, OJ 1994 L268/15; Directive 90/388 on competition in markets for telecommunications services, OJ 1990 L192/10.

¹²² Third Party Access (TPA) refers to the access of parties to the transmission system other than the owner of the gas transmission system.

bridge between the UK and the Continent and provide for the transmission of gas. The interconnector may be characterised as a bottleneck facility. The Commission cleared the joint venture agreement under the condition that TPA remained possible on freely negotiated terms, and argued that the new pipeline would create competition between the UK and the Continent.¹²³ In 2001 however, several complaints from within the sector led the Commission to start a new investigation concerning TPA of the UK-Belgium interconnector.¹²⁴ After the companies had agreed to take measures in order to facilitate TPA to the pipeline, the Commission closed the investigation. Three other cases concerning TPA are Marathon - Thyssengas, Marathon - Gasunie and Blugas - Snam.¹²⁵

On 26 November 2004, the Commission stated that territorial restriction clause may infringe Article 81 EC Treaty.¹²⁶ Earlier cases concerning the supply of gas, in particular agreements containing territorial restriction (restriction to sell gas outside of the national territory), reduction (allow buyer to reduce the volumes bought from the seller if the latter starts selling into the supply area of the buyer) or use restriction clauses (prevent buyer from using gas for other purposes than agreed to with the seller)¹²⁷, had not led to infringement of Article 81 EC Treaty. These cases had all been closed after settlements had resulted in elimination of such clauses.¹²⁸

¹²³ Gas Interconnector, IP/95/550, 95.06.01.

¹²⁴ UK-Belgium Gas Interconnector, Case COMP/E-4/38.075, press release IP 02/401, 13.3.2002.

¹²⁵ The Marathon - Thyssengas Case (COMP/E-3/36.246, IP/01/1641, 23.11.2001) concerned the refusal of continental European gas companies to grant a Norwegian gas producer (Marathon) access to their pipelines; Blugas Snam (XXXIth Report on Competition Policy 2001) concerns the infringement of Article 82 EC Treaty as Snam Rete Gas SpA, which holds 97% of the national transport networks, gave priority access to Snam SpA to the detriment of independent operators acquiring gas supplies from third parties; see also Case Marathon - Gasunie, IP 03/547, 16.4.2003.

¹²⁶ IP/04/1310, 26.11.2004, concerning case COMP/38.662 PO - GDF. In this case, clauses in contracts between GDF (French company) and ENI and ENEL (Italian companies), prohibited ENI and ENEL to sell gas in France which GdF had transported on their behalf. As such, the French customers were prevented from obtaining gas from ENI or ENEL.

¹²⁷ XXXIIIth Report on Competition Policy 2003, p. 32.

¹²⁸ See amongst others WINGAS/EDF Trading, Case COMP/36.559, IP/02/1239, 12.9.2002, concerning a supply agreement between EDF Trading and WINGAS (German), containing a reduction clause which was only applicable to EDF Trading and not to certain incumbent wholesalers in Germany, thus favouring the latter over the former; Gas Natural – Endesa, COMP/37.542, IP/00/297, 27.3.2000, concerning a long-term gas supply agreement between Gas Natural, and the Spanish electricity generator Endesa, whilst

Other cases concerning the supply of gas, but not specifically certain restrictive clauses, are Transgàs/Turbogàs¹²⁹ and Synergen¹³⁰.

In contrast to more recent cases, which address competition concerns regarding the supply of gas (downstream markets), earlier competition cases were mainly concerned with gas production (upstream markets). Both Corrib¹³¹ and GFU¹³² regarded decisions of a group of companies to jointly market the gas they produced. Both cases were either settled or withdrawn. The upstream market was also analysed in respect of merger cases. Cases which entailed a detailed investigation by the Commission of upstream markets for the exploration and development of natural gas were Exxon/Mobil¹³³ and BP Amoco/Atlantic Richfield¹³⁴. In Exxon/Mobil, the Commission initially found that the operation would have led to a strengthening of a dominant position in the German market concerning both the long distance wholesale transmission of natural gas and the storage of natural gas. In addition the operation would restrict competition on the market concerning the wholesale transmission of natural gas in the Netherlands. However, the operation was allowed as parties remedied these concerns. The BP Amoco/Atlantic Richfield operation would have created a dominant position on the market for the transport of unprocessed natural gas to the UK mainland through off-shore pipelines from fields in the Southern North Sea (SNS) sector of the UK continental shelf and also on the market

Endesa was not allowed to resell the gas to other customers (use restriction); Dong/DUC, COMP/38.187, IP/03/566, 24.4.2003, concerning both use restriction and reduction clauses; Nigeria LNG Limited (NLLNG), COMP/E-4/37.811, IP/02/1869, 12.12.2002, concerning a territorial sales restriction clause relating to the European gas market; ENI/Gazprom, COMP/E-3/37.811, press release IP/03/1345 of 6.10.2003, which addresses territorial sales restrictions in gas supply contracts between non-EU gas producers and European gas wholesalers/importers.

¹²⁹ COMP/35.494, 17.2.1997, concerning a supply agreement between Transgàs and Turbogàs for a period of 25 years.

¹³⁰ COMP/E-4/37.732, press release IP/02/792, 31.5.2002. This case concerned the establishment of a joint venture “Synergen” relating to a power plant in Dublin, by ESB (Ireland's dominant electricity company) and the Norwegian Gas company (Statoil). Statoil was to supply Synergen with gas for 15 years, ensuring Statoil a long-term presence in the Irish market, at that time still dominated by BGE.

¹³¹ Case COMP/E-3/37.708, press release IP/01/578 of 20.4.2001.

¹³² Case COMP/E-3/36.702, press release IP/02/1084 of 17.7.2002 and IP/01/830, 13.6.2001.

¹³³ M.1383, 29.9.1999, IP/99/711.

¹³⁴ M.1532, 29.09.1999.

for processing natural gas in processing facilities on the UK mainland, servicing the SNS area. As parties undertook to divest certain pipeline and processing interests, the operation raised no further concerns.¹³⁵

In a recent ruling, the Commission objected to the acquisition of GDP by ENI and EDP, as this would lead to a strengthened dominant position of EDP and GDP on the Portuguese markets for electricity and gas.¹³⁶ The commitments offered by the companies could not reverse the opinion of the Commission. This ruling stands in contrast with earlier merger operations in the gas sector, where commitments were often enough to gain Commission approval.¹³⁷

3.4 Articles 87 to 89 EC Treaty (rules on state aid)

The provisions concerning state aid (Articles 87 to 89 EC Treaty) also play a role in the furtherance of the internal market. Fair market competition, and thereby an integrated market, would be obstructed if a Member States were able to subsidise their industries. Article 87(1) EC Treaty declares incompatible with the common market, in so far as it affects intra-Community trade, “[...] any aid granted by a Member State [...] which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods [...]”.

¹³⁵ See also GVS/EnBW/ENI, M.2822, IP/02/1905, 17.12.2002 regarding the strengthening of GVSs dominant position on the regional gas wholesale market in Germany; Neste/IVO, M.931, 02.06.1998, concerning the strengthening of Neste-IVOs position on the market for wholesales of electricity and gas in Finland; EDF/Louis Dreyfus, M.1557, 28.09.1999, the operation would reinforce the position of EDF in France and thus restrict competition; Electrabel, Cases COMP/M.3075 ECS/Intercommunale Iveka, COMP/M.3076 ECS/Intercommunale IGAO, COMP/M.3077 ECS/Intercommunale Intergem, COMP/M.3078 ECS/Intercommunale Gaselwest, COMP/M.3079 ECS/Intercommunale Imewo, COMP/M.3080 ECS/Intercommunale Iverlek, all 13.2.2003 (case was referred to the Belgian authorities, who closed the investigation on 4 July 2003). Electrabel proposed to acquire the gas and electricity supply activities of the regional utility companies (intercommunales). Initially, the Commission stated that the operations would strengthen the dominant position of Electrabel in the market for the supply of gas and electricity to eligible customers, and eliminate the possibility for competitors to become default suppliers, which enhances the credibility of suppliers in market. However, subject to commitments the Belgian authorities consented to the operation.

¹³⁶ ENI/EDP/GDP, M.3440, 09.12.2004.

¹³⁷ See amongst others: GdF/Rurhgas/Slovensky, M.2791, 06.06.2002; GdF/Preursag Energie, M.3086, 25.04.2003; GdF/BEWAG/GASAG, M.1402, IP/99/42, 21.01.1999; Fortum/Gasunie, IP/04/1425, 01.12.2004.

State aid has been granted by Member States in order to enhance development in the gas sector, in particular with regard to the distribution system. In Denmark for example, five natural gas distribution companies and the publicly owned company Dangas had been benefiting from a tax relief measure since the 1980s in order to enhance the construction and expansion of the natural gas system. The measure however was not held to infringe Article 87 on the basis of Article 86(2) EC Treaty.¹³⁸ On 6 May 1998, the Commission approved the investment aid of ECU 72.3 million in order to extend the Irish natural gas network.¹³⁹

Another State aid case concerns Italy, which granted tax exemptions and preferential loans to majority publicly owned local public service companies when they agreed to transform into joint-stock companies. As such, these joint-stock companies would take over the provision of services such as gas, electricity, water; services traditionally provided by the municipalities.¹⁴⁰ In 2001, the Commission approved state aid - in the form of grants and accelerated depreciation granted - by Greece to three newly formed natural gas distribution companies in Attica, Thessaloniki and Thessaly. As the aid was intended to promote the introduction of gas as a mainstream energy source, the Commission found that the aid had clear and obvious benefits for whole region.¹⁴¹

3.5 Article 16 EC Treaty

The Treaty of Amsterdam (datum) introduced a new Article 16 in the EC Treaty, which states that:

¹³⁸ 29 July 1998, N 449/97 and NN 50/98, OJ C 308 8.10.1998. See also N 483/98, 28.1.1999, OJ C 081 30.3.1999 aid to Gas natural group for the promotion of gas distribution in the province of Malaga (Andalusia); N 97/96 06.03.1996, modification of the aid for natural gas sector: second phase Valencia-Orihuela gas pipeline extension, OJ C 102 04-04-1996; UK: NN 101/99 25.11.1999, competitiveness in the oil and gas supplies sector aid scheme OJ C 46, 19.02.2000.

¹³⁹ N 704/97, OJ C 253, 12.8.1998. See also North Ireland gas pipeline, N 124/2002, 17.7.2002, OJ C309, 12.12.2002.

¹⁴⁰ Case C27/99 (ex NN 69/98) OJ C 213, 24.7.1999.

¹⁴¹ Natural gas Greece (EPA) (Case NN 90/2000 OJ C333, 28.11.2001).

“Without prejudice to Articles 73, 86 and 87 and given the place occupied by services of general economic interest in the shared values of the Union as well as their role in promoting social and territorial cohesion, the Community and the Member States, each within their respective powers and within the scope of the application of this Treaty, shall take care that such services operate on the basis of principles and conditions which enable them to fulfil their missions.”

This article can be seen as a reference to the role of services of general economic interest, as articulated by Article 86 EC Treaty. Article 16 EC Treaty “recognizes the fundamental character of the values underpinning such services and the need for the Community to take into account their function in devising and implementing all its policies, placing it among the principles of the Treaty [...]”.¹⁴²

3.6 Articles 154 to 156 EC Treaty (Trans-European networks)

Articles 154-156 (Title XII) EC Treaty have been introduced in order to enhance the inter-connection and inter-operability of national energy networks as well as access to those networks. In general, these provisions enable the adoption of guidelines and provisions of financial support.

¹⁴² *Supra* n.102, point 2.

4 European Energy policy

European Energy policy has long been one of the activities of the European Community. As early as 1951, the Treaty establishing the European Coal and Steel Community (ECSC)¹⁴³, signed by France, Germany, Italy and the three Benelux countries¹⁴⁴, provided for cooperation and market integration in the area of steel and coal. In 1957, the ECSC Treaty was followed by the Treaty of the European Atomic Energy Community (Euratom)¹⁴⁵, aimed at the establishment of an integrated market in atomic energy. In 1957 the Treaty of the European Economic Community (EEC)¹⁴⁶ was also signed, which concerned the establishment of a European Economic Community in goods, capital, labour and services, and (at that time) contained no specific provisions on any form of energy.

However, it soon became evident that Community energy policy should extend to include oil, gas and other sources of (renewable) energy. The awareness of the importance of a common energy policy developed in tandem with a growing awareness of environmental issues¹⁴⁷, the enlargement of the Community and the development of relations with non-member states. In 1964, the Member States of the Community gathered to establish a Community Energy Policy, the main objective being “the need for greater integration, free from barriers to trade, of the internal energy market with a view to improving the security of supply, reducing costs and improving economic competitiveness”.

The amendments made to the EC Treaty by the Single European Act (SEA)¹⁴⁸ of 1986, the Treaty on European Union (TEU or Maastricht Treaty) in 1993, the Treaty of Amsterdam in 1999; and more recently the Treaty of

¹⁴³ The ECSC Treaty was signed on 18 April 1951 and entered into force on 23 July 1952.

The ECSC Treaty expired on 23 July 2002.

¹⁴⁴ Belgium, The Netherlands and Luxemburg.

¹⁴⁵ The Euratom Treaty entered into force on 1 July 1958.

¹⁴⁶ The European Economic Community was founded on 25 March 1957 when the EEC Treaty was signed by the six founding states. The EEC Treaty entered into force on 1 July 1958. The EEC has been renamed EC by the EU Treaty.

¹⁴⁷ Council Resolution of 3 March 1975 on energy and the environment, OJ 25/07/1975, C 168 p. 2-3.

¹⁴⁸ The Single European Act entered into force on 1 July 1987.

Nice, signed on 26 February 2001, have facilitated the creation of an internal energy market. The (general) single market aim was enforced through the SEA which set the deadline for the establishment of the internal market on 31 December 1992 (Article 14, ex Article 7a EC Treaty) and defined the internal market as “an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of this Treaty” (Article 14(2) EC Treaty). In 1993, the TEU introduced “measures in the sphere of energy [...]”, as one of the activities of the Community (Article 3 EC Treaty) and added Title XV to the EC Treaty (now Articles 154-156 EC Treaty), which sets out provisions aimed at the promotion of trans-European networks in the field of transport, telecommunications and energy infrastructures. As such, the SEA and the TEU have lead to enhanced Community policy in the energy sector.

Soon after the entry into force of the SEA, the Commission presented a working paper, which set out a strategy for achieving an internal energy market.¹⁴⁹ The working document led to a range of legislation being adopted throughout the 1990s, that aimed to fully integrate the separate European electricity and gas markets, with the goal of inducing competition in the respective markets and hence reduce the prices paid by consumers. The Price Transparency Directive¹⁵⁰ of 1990 sought to encourage competition by improving the transparency of electricity and gas prices charged to industrial customers. The Electricity Transit Directive and the Gas Transit Directive respectively, aimed to remove obstacles to intra-Community trade of electricity and gas, by asking Member States to facilitate transit through transmission grids. The directives however, did not entail any actual obligation to do so.

Over the years the energy sector became increasingly important, specifically in the light of the single market aim under Article 14 of the EC Treaty. It

¹⁴⁹ *The Internal Energy Market*, Commission Working document, COM(88) 238. See also, European Commission, *Green paper: For a European Union energy policy*, COM(94) 659, 23.02.1995; and European Commission, *White Paper, An Energy Policy for the European Union*, COM(95) 682.

¹⁵⁰ Directive 90/377/EEC, OJ 1990 L185/1.

became evident that a policy which was of prime importance to the energy sector, was the establishment of the internal energy market, more specifically, the establishment of a competitive natural gas market. European gas prices were considerably higher than gas prices in other G7 countries, notably the US and Canada¹⁵¹. Gas prices within the EU for the same type of customer varied considerably between Member States and within Member States, to an extent that could not merely be explained by differences in supply situations and costs. These large differences created distortions for competition within the EU. It was however, the publication of the Green Paper on Energy Policy “*For a European Union Energy Policy*” in 1995¹⁵², that triggered the actual liberalisation of the energy (more specifically gas) markets in Europe. Taking into account the fact that the energy market in general and energy prices in particular, play a central role in overall industrial competitiveness, the Green Paper aimed to launch the policy discussion as to whether or not the Community should play a greater role in the field of energy. The Green Paper indicated that a Community policy should be able to ensure the satisfaction of all users needs at minimal cost, while meeting the requirements of security of supply and environmental protection. The advantages and efficiencies reached through market integration could decrease costs. Cross-border cooperation in the field of gas supply for example, will lead to synergies and economies of scale, reducing costs. Market opening will stimulate intra-community trade, and competition will increase competitive pressures on energy suppliers and force them to provide the best possible service at lowest possible price in order to maintain customer loyalty. In the UK where full market opening and gas-to-gas competition were introduced in 1998, 30% of gas customers (> 5 million) have already changed supplier and as result achieved significant benefits¹⁵³. Security of supply can be regarded as “ensuring that

¹⁵¹ United States 132,5 USD/toe and Canada 78,4 USD/toe, whilst Netherlands 136,7 and France 153,9 and Ireland 190,6 only UK lower 120,8 (European Commission (July 2000), *Opening up to choice: launching the single European gas market*, Luxembourg: Office for official publications of the European Communities).

¹⁵² European Commission, Green paper, *For a European Union energy policy*, COM(94) 659, 23.02.1995.

¹⁵³ Consumers have saved EUR 3,2 billion due to lower energy bills following liberalisation (European Commission (July 2000), *Opening up to choice: launching the single European gas market*, Luxembourg: Office for official publications of the European Communities).

future essential energy needs are satisfied by means of sharing of internal energy resources and strategic reserves under acceptable economic conditions and by making use of diversified and stable externally accessible sources.”¹⁵⁴ This concept includes physical security, economic security and continuity of supply. Market integration in itself will act as an instrument of security of supply as it will bring companies a market dimension they need for investment and increase the amount of energy sources accessible to Member States. The introduction of a Community framework for energy will facilitate the exploitation of the substantial potential of energy efficiency. The enhancement of energy market performance will reduce environmental impacts. Market integration as such thus seems to have a positive impact on the diverse policy objectives. The debate triggered by the 1995 Green Paper, resulted in the adoption of an Electricity Directive¹⁵⁵ and Gas Directive 1998 and 2003¹⁵⁶ respectively. More specifically, the gas directives are concerned with the common rules for the internal market of natural gas¹⁵⁷. The objectives of the Gas Directive 1998 are based on the gradual establishment of the internal market in natural gas, in order to enable the industry to adjust flexibly and to be able to take into account the different market structures in the Member States.

As well as liberalising markets, the EU is also concerned with the further expansion of existing infrastructures and energy networks, especially electricity and gas transmission systems, to promote competition and integration through a series of initiatives under the heading Trans-European Networks (TENs). The Council has adopted an Energy Framework

¹⁵⁴ European Commission, Green paper, *For a European Union energy policy*, COM(94) 659, 23.02.1995, p. 22.

¹⁵⁵ Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning the common rules for the internal market in electricity, OJ 1997 L 095, as amended by Directive 2003/54/EC of 26 June 2003 concerning common rules for the internal market in electricity, OJ 2003 L 176.

¹⁵⁶ Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning the common rules for the internal market in natural gas, 21.7.98, L 204/1; Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning the common rules for the internal market in natural gas and repealing Directive 98/30/EC, 15.07.2003, L 176/57.

¹⁵⁷ OJ L 204, 21.7.1998, p. 1 (corrigendum in OJ L 245, 4.9.1998, p. 43). Gas Directive 1998 has been replaced by Gas Directive 2003.

Programme covering the period 1998-2002¹⁵⁸, which was extended to the period 2003-2006¹⁵⁹ through the adoption of a new Energy Framework Programme. The goal of the Energy Framework Programme is to regroup existing programmes and actions in the context of energy policy, acknowledging the three main objectives of security and supply, competitiveness and the environment, while responding to the need to ensure greater transparency, co-ordination, simplification and efficiency of the actions taken in light of the Community energy policy.

¹⁵⁸ Council Decision of 14 December 1998, adopting a multiannual framework programme for actions in the energy sector (1998-2002) and connected measures, OJ 1999 L7/16.

¹⁵⁹ Decision No 1230/2003/EC of the European Parliament and of the Council of 26 June 2003, adopting a multiannual programme for action in the field of energy: "Intelligent Energy - Europe" (2003-2006), OJ 2003 L 176/29.

5 Energy market legislation

Cross-border trade is important to achieve an integrated single gas market. As such, the internal market in natural gas should favour the interconnection and interoperability of systems, indicating the need for coherent technical and commercial trading rules. The integration of the gas markets should enhance competition and consequently lead to lower prices. In addition, integration will generate efficiency in e.g. the security of supply and intra-Community trade. Due to integration, the security of supply, i.e. product availability and regulation, becomes a competitive parameter and contributes to the quality of both products and services offered by individual gas suppliers.

The enactment of Council Directive 91/296/EEC of 31 May 1991 on the transit of natural gas through grids¹⁶⁰ and the Council Directive 90/377/EEC of 29 June 1990 concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users¹⁶¹ constituted a first step towards the establishment of an internal market in natural gas. However, in order to fully establish an internal market in natural gas, further measures had to be taken. The initial proposals for opening up the markets for natural gas and electricity were based on Article 86(3) EC Treaty (ex Article 90(3) EC Treaty). This choice was in accordance with the Telecommunications Directives¹⁶², which were also based on Article 86(3) of the EC Treaty. In addition, the choice for Article 86(3) EC Treaty was strengthened by the recent ruling of the ECJ in Case 202/88¹⁶³, in which the ECJ stated that Member States do not have an exclusive competence in relation to the grant of legal monopolies (complete sovereignty). Two years later however, the Court acknowledged the right of Member States to grant monopoly rights, subject to certain conditions.¹⁶⁴

¹⁶⁰ OJ L 147, 12.6.1991, p. 37. Directive as last amended by Directive 95/49/EC (OJ L 233, 30.9.1995, p. 86).

¹⁶¹ OJ L 185, 17.7.1990, p. 16. Directive as last amended by the 1994 Act of Accession.

¹⁶² *Supra* n. 121.

¹⁶³ 202/88 [1991] ECR I-1223.

¹⁶⁴ Case 320/91 Corbeau [1993] ECR 2533; Case C-393/92 Gemeente Almelo et al v Energiebedrijf Ijsselmij NV [1994] ECR I-1477).

The first drafts of the gas and electricity directives received quite some critiques from within the industry. The proposals also encountered quite some resistance of the European legislative institutions; the European Parliament wanted to be involved in the legislative process. If the directives were to be based upon Article 95 EC Treaty, the final word was for Council, where resistance to any loosening of monopolies could be expected from Member States. The pressure led the subsequent proposals of the Commission were therefore based upon Article 95 EC Treaty (ex Article 100a EC Treaty), requiring Council approval by qualified majority voting. The choice of Article 95 EC Treaty indicated a major retreat for the Commission: whereas directives enacted on the basis of Article 86(3) EC Treaty can give immediate effect to the Commission's intentions, the use of Article 95 EC Treaty necessarily implies that such intentions can only become effective once the procedural requirements have been satisfied. Negotiating history shows how difficult it is to meet these requirements, as the new proposals once more encountered strong resistance.¹⁶⁵ Opponents feared that consumers might bear the costs of liberalisation. In 1993, the Commission submitted separate proposals for the liberalisation of the gas and electricity markets (based on Article 95 EC Treaty), instead of one directive aimed at liberalisation of both markets. The liberalisation of the electricity market finally became reality on 19 February 1997, with the entry into force of the Electricity Directive 96/92/EC.

Whilst the negotiations for a gas directive continued, the Commission's power to pursue liberalisation through the ECJ were being tested in a case against import-export monopolies for electricity and gas.¹⁶⁶ In its final ruling, the ECJ indicated a reluctance to allow the Commission to pursue Court driven market opening. In 1997 a compromise was finally reached,

¹⁶⁵ See amongst others Sitter, N. (2000), *The liberalisation of European Union Energy Markets: Common Policy and Plural Institutions*, Paper for the Political Studies Association – UK 50th annual conference 10-13 April 2000, London.

¹⁶⁶ Case 157/94 Commission of the European Community v The Netherlands, 23 October 1997, [1997] ECR p. I-05694; Case 158/94 Commission of the European Community v Italian Republic, 23 October 1997, [1997] ECR p. I-05789; Case 159/94 Commission of the European Community v French Republic, 23 October 1997, [1997] ECR p. I-05815.

and the European Parliament and the Council adopted Directive 98/30/EC of 22 June 1998 concerning the common rules for the internal market of natural gas¹⁶⁷ (“Gas Directive 1998”), which entered into force on 10 August 1998. The Gas Directive 1998 generally incorporates the same key principles as the Electricity Directive, but reflects the specific technical and commercial characteristics of the gas sector. The Commission expects that the gas industry should benefit from the experience gained over the liberalisation of electricity.¹⁶⁸

5.1 Gas Directive 1998

The objectives of the Gas Directive 1998 are based on the gradual establishment of the internal market in natural gas, in order to enable the industry to adjust flexibly and to be able to take into account the different market structures in the Member States. According to the Gas Directive 1998 the gas markets in the Member States should guarantee an absolute minimum of 33% market opening by 2008. The Gas Directive 1998 establishes the common rules for transmission, distribution, supply and storage of natural gas. The key features of the Gas Directive 1998 include the abolition of exclusive rights to import and export gas and operate gas facilities, and the possible designation of PSOs. Furthermore, the directive lays down the rules relating to market access, transparency and non-discrimination, unbundling, the designation of eligible customers, and the grant of authorisations for transmission, distribution, supply and storage of natural gas. The Member States must bring into force the laws, regulations and administrative provisions necessary to comply with the Directive before August 10th, 2000. The different features of the Gas Directive 1998 will be extensively discussed below.

¹⁶⁷ OJ L 204, 21.7.1998, p. 1 (corrigendum in OJ L 245, 4.9.1998, p. 43).

¹⁶⁸ XXIXth Report on Competition Policy 1999, p. 128.

5.1.1 Third Party Access (TPA)

One of the main issues for liberalisation is whether and under which terms, third parties will be able to gain access to the grid or pipeline.¹⁶⁹ The Gas Directive 1998 sets out two procedures which may be followed in order to organise access to the system: the systems of negotiated and regulated access. Member States are free to choose one of the two systems or a combination of both (Article 14 Gas Directive 1998). Negotiated access (Article 15 of the Gas Directive 1998) is based upon negotiations (in good faith) between natural gas undertakings and eligible customers so as to conclude supply contracts with each other on the basis of voluntary commercial agreements. The gas undertakings are required to publish their main commercial conditions for the use of the system. Within the system of regulated access (Article 16 Gas Directive 1998), parties (eligible customers and gas undertakings) have a right of access to the system on the basis of published tariffs and/or terms and obligations for use of the system. Both systems of access must operate in accordance with objective, transparent and non-discriminatory criteria. On both occasions (regulated and negotiated access), the system operator may refuse access based upon 1) a lack of capacity, 2) the fact that granting access would prevent it from carrying out the assigned PSOs or 3) financial difficulties concerning take-or-pay contracts (Article 17 Gas Directive 1998). Take-or-pay contracts refer to long-term contracts under which buyers guarantee to take and pay, but inevitably pay, for a large production of contract volume even if they cannot sell the gas. Liberalisation will have a downward effect on price, putting the companies with concluded take-or-pay contracts in a difficult position. The access denial will protect the market of such a supplier.

5.1.2 Non-discrimination and transparency

Articles 7-11 of the Gas Directive 1998 require transmission, storage, LNG and distribution undertakings to refrain from discriminating between

¹⁶⁹ Slot, P.J. (2000), Sectoral Analysis of the liberalisation policy of the European Union, Energy (Electricity and Natural gas) in Gérardin, D. (ed.) (2000), *The liberalisation of state monopolies in the European Union and Beyond*, The Hague: Kluwer Law International, p. 59.

different system users, in particular in favour of their related undertakings. Without prejudice to legal duties to disclose information, these undertakings shall also preserve the confidentiality of commercially sensitive information obtained in the course of carrying out their business. In this respect they shall not abuse commercially sensitive information that they have gained from third parties in the context of providing or negotiating access to the system. The prohibition on the flow of this type of information, when an undertaking is both active as a system operator and a supplier, is referred to as a “Chinese wall” and is aimed at preventing the distortion of competition through discrimination.

5.1.3 Eligible customers

Customer choice is the key to competition, and as from 10 August 2000 so-called ‘eligible customers’ will be free to choose their gas supplier. According to Article 18 of the Gas Directive 1998, eligible customers are those customers which (inside their territory) have the legal capacity to contract for, or to be sold, natural gas in accordance with Articles 15 and 16 of the Directive. According to paragraph 2 of Article 18, the eligible customers must include at least gas-fired power generators and other final customers consuming more than 25 million cubic metres of gas per year on a consumption site basis. The definition of eligible customers will result in market opening of at least 20% of the total annual gas consumption of the national gas markets. This percentage shall increase to 28 percent five years after entry into force of the directive and to 33% thereof in 10 years. In order to ensure that the opening of the market is increased over a period of 10 years, paragraph 6 of Article 18 states several thresholds. In addition, Article 20 of the Gas Directive 1998, states that Member States shall take measures to enable gas undertakings established within their territory to supply eligible customers through a direct line.

The fact that customers will be able to choose their supplier, will pressure the diverse undertakings along the gas chain to improve their customer

service, e.g. cut costs and reduce price. New entrants to the gas market will increase this pressure to the advantage of customers.

5.1.4 Public Service Obligations (PSOs)

Article 3, paragraph 2 of the Gas Directive 1998, confers upon Member States the possibility to impose on natural gas undertakings, public service obligations in the general economic interest (these generally fall within the scope of Article 86(2) EC Treaty). The PSOs may relate to security, including the security of supply, regularity, quality and prices of suppliers and to environmental protection. The PSOs must be clearly defined, non-discriminatory and verifiable. The measures adopted to fulfil public service obligations should be reported to the Commission.

5.1.5 Authorisation for the operation or construction of new natural gas facilities

Article 4 of the Gas Directive 1998 provides for an authorisation system with respect to licensing the construction or operation of natural gas facilities. The system of authorisation must provide for objective and non-discriminatory criteria (that are made public), which shall be met by the undertaking applying for an authorisation. Objective and non-discriminatory reasons must be given when authorisation is refused.

5.1.6 Unbundling and transparency of accounts

Articles 12 and 13 of the Gas Directive 1998 relate to the unbundling and transparency of accounts. The designated authority must be able to access the accounts of natural gas undertakings¹⁷⁰, taking into account that they must preserve the confidentiality of this information (except if this obstructs them in the exercise of their function). In general, integrated undertakings must (in their internal accounting) keep separate accounts for their natural gas transmission, distribution and storage activities, and where appropriate,

¹⁷⁰ A natural gas undertaking is any natural or legal person carrying out at least one of the following functions: production, transmission, distribution, supply, purchase or storage of natural gas, including LNG, which is responsible for the commercial, technical and/or maintenance tasks related to those functions, but shall not include final customers (Article 2 Gas Directive 1998).

consolidated accounts for non-gas activities, with the view to avoid discrimination, cross-subsidisation and distortion of competition.

5.1.7 Designation of competent authority

Article 21 of the Gas Directive 1998 specifies that Member States must designate a competent authority, which is not related to the parties, to settle disputes. The authority is in particular concerned with disputes related to negotiations and refusal of access. In addition, Member States shall create appropriate measures and efficient mechanisms for regulation control and transparency (Article 22 Gas Directive 1998).

5.2 Gas Directive 2003

The entry into force of the Gas Directive 1998, has brought along positive effects of market opening. The Directive has ensured the free movement of electricity and gas within the Community.¹⁷¹ The degree of liberalisation however, still varies greatly between Member States. In order to complete the internal energy market and reap the full benefits of liberalisation, further measures are thus necessary. These measures concern the degree of market opening (quantitative proposals) and minimum obligations regarding access to the network, consumer protection, regulation and the unbundling of transmission and distribution functions in integrated gas and electricity companies (qualitative proposals).¹⁷² In Lisbon, in March 2000, the European Council summoned the Commission to revise the directives on gas and electricity in order to accelerate the liberalisation process.¹⁷³ On the basis of these recommendations, the Commission formulated a proposal to amend the Gas Directive 1998. The new “acceleration directive” contained two clear priorities: 1) an expedited process of market opening; and 2) ensuring fair and non-discriminatory TPA to the gas networks.¹⁷⁴ In addition, the Commission presented a proposal for a regulation setting out

¹⁷¹ Website www.eu.int, energy.

¹⁷² European Commission, Commission staff working paper (2001), *Completing the internal energy market*, SEC(2001) 438.

¹⁷³ Press release Lisbon (24 March 2000) - Nr: 100/00.

¹⁷⁴ Hardyman, D. (2003), Energy liberalisation - Reform of the electricity and gas directives: is the EU's internal energy market finally in view?, *Competition Law Insight* 10(13).

the principles and procedures regarding the conditions for access to the network for cross border exchanges of electricity. On the 4th of August 2004, the new Directive 2003/55/EC of the European Parliament and the Council of 26 June 2003 concerning the common rules for the internal market in natural gas entered into force (Gas Directive 2003), repealing Gas Directive 1998. Many of the provisions of the new gas directive are comparable with those of Gas Directive 1998. In the next few paragraphs, the changes will be discussed.

5.2.1 Third Party Access (TPA)

In contrast to Gas Directive 1998, which allowed Member States to choose between systems of negotiated or regulated access or a combination of both, Gas Directive 2003 stipulates regulated access with respect to the transmission and distribution system of gas and LNG facilities. Member States are thus obliged to ensure access based on the publication of tariffs, applicable to all eligible customers (including supply undertakings) and applied objectively and without discrimination between system users (Article 18 Gas Directive 2003). The provisions of the new directive do not prevent the conclusion of long-term contracts as long as they do not infringe Community competition rules.

Concerning the access to storage facilities and line pack, when technically and/or economically necessary in order to provide access to the supply system as well as for the organisation of access to ancillary services, Member States may still choose between negotiated or regulated access or a combination of both (Article 19 Gas Directive 2003). This choice however, shall not apply to ancillary services and temporary storage that are related to LNG facilities and are necessary for the re-gasification process and subsequent delivery to the transmission system (Article 19, paragraph 2).

Furthermore, Article 20 Gas Directive 2003 obliges Member States to take the necessary measures to ensure that parties are able to obtain access to upstream supply networks. The access should be provided in a manner

determined by the Member State and in accordance with relevant legal instruments (Article 20 Gas Directive 2003). The conditions on which refusal of access is allowed stated in Article 21 Gas Directive 2003 are in accordance with the conditions mentioned in Gas Directive 1998 (see also Article 27 Gas Directive 2003 specifically on the refusal to access in case of take-or-pay contracts). Article 22 provides that major new gas infrastructures, such as for example interconnectors between Member States, may be exempted from the application of Articles 18, 19, 20 and 25(2), (3) and (4) Gas Directive 2003, subject to certain conditions.

5.2.2 Designation of system operators

Gas Directive 1998, obliges transmission, storage, LNG and distribution undertakings to refrain from discriminating between different system users, and to preserve and refrain from abusing confidentiality of commercially sensitive information. Gas Directive 2003 also stipulates confidentiality for system operators (Articles 10 and 14 Gas Directive 2003), but in addition, goes much further than that and obliges Member States to designate transmission system and distribution system operators (Chapter III and IV of the Gas Directive 2003).

Article 7 states that Member States shall designate or shall require natural gas undertakings which own transmission, storage or LNG facilities to designate one or more system operators. The tasks of the transmission, storage and/or LNG operators incorporate: a) the operation, maintenance and development of secure, reliable and efficient transmission, storage and/or LNG facilities; b) non-discrimination between system users or classes of system users; c) provision of another operator with sufficient information to ensure that the transport and storage of natural gas is exercised in a secure and efficient way; d) provision of the information to system users which they need in order to access the system in an efficient way (Article 7, paragraph 1 Gas Directive 2003). The rules adopted by these operators must be objective, transparent and non-discriminatory. If the transmission system operator is part of a vertically integrated undertaking,

the transmission activities must be independent at least in terms of legal form, organisation and decision making from other non-transmission activities (Article 9, paragraph 1 Gas Directive 2003). Paragraph 2 of Article 9 stipulates certain minimum criteria which apply in order to ensure independence.

Article 11 of the Gas Directive 2003 provides for the designation of distribution system operators, in the same way as Article 7 stipulates Member States to designate transmission system operators. The tasks of the distribution system operator are comparable to the tasks of the transmission system operator. Article 13 Gas Directive 2003 stipulates the unbundling conditions for distribution system operators. These obligations are identical to the ones mentioned in Article 9 concerning the transmission system operator. However, with respect to distribution system operators, Member States may decide not to apply the legal and organisational unbundling obligations, when it concerns integrated natural gas undertakings serving less than 100.000 customers. Furthermore, Article 15 Gas Directive 2003, stipulates that the rules concerning unbundling of transmission and distribution system operators (more specifically, the obligations contained in Article 9(1) and 13(1)) shall not prevent the operation of a combined transmission, LNG, storage and distribution system operator, which is independent from other non-related activities in terms of its legal form, organisation and decision making. The combined operation must however meet certain requirements stipulated in points a-d of Article 15.

5.2.3 Eligible customers

The Gas Directive 2003 does not entail liberalisation of the market through a three stage process as the Gas Directive 1998 did. In fact, Gas Directive 2003 states that all non-household gas customers must be eligible from July 1st 2004 onward, and from July 1st 2007, all wholesale and final customers of natural gas must be free to choose their gas supplier (Article 23 Gas Directive 2003). In addition and in accordance with Gas Directive 1998, Member States shall ensure that natural gas undertakings established within

their territory supply eligible customers through a direct line (Article 24 Gas Directive 2003).

5.2.4 Public Service Obligations (PSOs)

In accordance with the Gas Directive 1998, the Gas Directive 2003 allows Member States, if they so wish, to impose, in the general economic interest, upon undertakings, public service obligations (Article 3 Gas directive 2003). As in the prior Gas Directive, these obligations may relate to security of supply, regularity, quality and price of supplies, and environmental protection. In the new directive however, environmental protection extends to include energy efficiency and climate protection. The obligations of course have to be clearly defined, transparent, non-discriminatory and verifiable. In addition, the new Directive stresses that PSOs have to guarantee equality of access for EU gas companies to national consumers. The new directive however specifically incorporates a paragraph 3 within Article 3 on consumer protection. The paragraph stipulates that Member States must adopt appropriate measure in order to ensure a high degree of consumer protection. In particular these measures should protect vulnerable consumers and help to avoid their disconnection. Furthermore, Member States should ensure that general contract terms and conditions are transparent, and that general information and dispute settlement mechanisms are available. The measures adopted to fulfil public service obligations should be reported to the Commission. Paragraph 4 of Article 3 Gas Directive 2003 emphasises that Member States shall implement appropriate measures to achieve the objectives of social and economic cohesion, environmental protection, and security of supply.

5.2.5 Authorisation for the operation or construction of new natural gas facilities

Article 4 of the Gas Directive 2003 is formulated in accordance with Article 4 of Gas Directive 1998.

5.2.6 Unbundling and transparency of accounts

The provisions of Gas Directive 2003 concerning the unbundling and transparency of accounts are comparable to the provisions in Gas Directive 1998. Article 17 Gas Directive 2003 additionally provides that gas undertakings shall keep accounts, for other gas activities not relating to transmission, distribution, LNG and storage. Until July 2007, the natural gas undertakings must keep separate accounts for supply activities for non-eligible customers.

5.2.7 Regulatory authorities

Whilst the Gas Directive 1998 merely provided for the designation of a dispute settlement authority, a new provision in Gas Directive 2003 concerns the appointment by the Member State of a regulatory authority, which is not related to the gas industry (Article 24 Gas Directive 2003). The regulatory authority is responsible (at least) for ensuring non-discrimination, effective competition and efficient functioning of the market. The regulatory authority monitors amongst others the unbundling of accounts, the allocation of capacity, the publication of information by the different operators, the access conditions and levels of transparency and competition (Article 25, points a-h). The regulatory authority is responsible for approving or/and fixing the methodologies used to calculate or establish connection and access to national networks and the provision of balancing services. Regulatory authorities may be appointed with the task of monitoring the security of supply (Article 5 Gas Directive 2003). In fact, the regulatory authorities must contribute to the development of the internal market and create a level playing field (Article 25, paragraph 12 Gas Directive 2003).

5.2.8 Derogations

Apart from several derogations already mentioned in the above paragraphs, the new Directive provides for some other derogations. Member States which have only one main external supplier (a supplier having a market share of more than 75%) and are not directly connected to the system of

other Member States, may derogate from the provisions of the Gas Directive 2003 concerning the construction and operation of natural gas facilities, market opening, unbundling and direct lines (Article 28, paragraph 1 Gas Directive 2003). When a Member State which can be qualified as an emergent market (a market where the first commercial supply under its first long-term natural gas supply contract was made less than 10 years previously) experiences difficulties related to the implementation of the Gas Directive 2003 (and not related to take-or-pay contracts), the Member States may derogate from the provisions concerning the construction and operation of natural gas facilities, the appointment and unbundling of system operators, the unbundling of accounts, TPA, market opening and direct lines (Article 28, paragraphs 2 and 3). This derogation is also applicable if in a Member State, the implementation of the directive produces substantial problems (specifically problems concerning the development of the transmission and major distribution infrastructure) in a geographically limited area (Article 28, paragraphs 4 and 5 Gas Directive 2003).

6 State of implementation in Member States: The Netherlands, Belgium and Germany

Various reports¹⁷⁵ have been drafted on the state of implementation in the different Member States. Most reports concern the period before the entry into force of the new Gas Directive 2003. In the following paragraphs, the structure of the gas market and consequences of the liberalisation process of both directives in three different Member States will be discussed: The Netherlands, Belgium and Germany.

6.1 The Netherlands

The Netherlands is one of the gas producing countries within the European Community. The natural gas is produced both offshore as well as onshore. Due to the fact that production of other hydrocarbons is limited, gas is the most important domestic energy source.¹⁷⁶ The largest gas field in The Netherlands is the Groningen field, which was discovered in 1959. Due to this field, The Netherlands has been a net exporter of gas since the 1960s.

6.1.1 The Dutch gas market before liberalisation

Up to the 1980s, the Dutch energy market was unregulated to a large extent. Public regulation was limited to the exploration and production of natural gas (upstream market) and the distribution of gas (downstream market). The supply of gas was governed by private law agreements without statutory legislation. The midstream activities, such as the storage of natural gas and

¹⁷⁵ See amongst others European Commission, Directorate General for Energy and Transport, *State of implementation of the EU Gas directive 98/30/EC: an overview, state of play by the end of May 2000*; European Commission, Directorate General Economic and Financial Affairs, *Report on the functioning of product and capital markets*, 07.12.2001, Working document by the services of Commissioners Bolkestein and Solbs; European Commission, *DG TREN Draft working paper: Third benchmarking report on the implementation of the internal electricity and gas market*, 01.03.2004; DRI-WEFA (2001), *Report for the European Commission Directorate General for Transport and Energy to determine changes after opening of the gas market in August 2000, Volume I: European overview*; DRI-WEFA (2001), *Report for the European Commission Directorate General for Transport and Energy to determine changes after opening of the Gas Market in August 2000, Volume II: Country Reports*, July 2001.

¹⁷⁶ Roggenkamp, M. (2001), Country Report: The Netherlands in Gérardin, D. (ed.) (2001), *The liberalisation of Electricity and natural gas market in the European Union*, London: Kluwer Law International.

the construction of upstream pipelines were governed by a regulatory regime which was limited to provisions on safety and environment.

Since 1962, the transmission of gas has been based upon a Policy Note issued by Minister De Pous. The Note pleaded (amongst others) for close coordination of the purchase and marketing/sales activities within the gas sector and the involvement of the Dutch State therein. The influence of the Dutch State was realised through the establishment of a partnership (“De Maatschap”), which was to take all decisions related to the off-take and the production of gas. The Dutch State held 40% of the shares through Energie Beheer Nederland (EBN), whilst the Nederlandse Aardolie Maatschappij (NAM) held 60%. NAM (50% Shell and 50% Exxon) had in return been granted the concession for the exploitation of the Groningen gas field. As such, coordination between purchase and sales activities was achieved as most of the aforementioned companies held a stake in the supply company NV Nederlandse Gasunie (25% Shell, 25% Exxon, 40% EBN, and 10% Dutch State). The main supplier of Gasunie is NAM. In addition, the Minister produced the “market-value” principle, on basis of which gas should be produced.¹⁷⁷ This meant that the price of gas sold to the different consumers was linked with the price of substitute alternative fuels such as oil. Accordingly customers would never pay more nor less for gas than alternative fuels. A precondition was that no alternative supplies of low priced gas could reach the market.

The Minister had several powers of approval within Gasunie on the basis of the afore mentioned private agreement. These rights concerned: “the right of approval of a Gas Marketing Plan forecasting Dutch medium and long term supply and demand; the right and approval of the conditions and tariffs of the delivery of gas in- and outside the Netherlands; the right of approval of gas purchasing contracts between Gasunie and suppliers and the right to approve plans for the laying of pipelines”.¹⁷⁸ The upstream market in The Netherlands was (in general) liberalised, as diverse companies held

¹⁷⁷ Correljé, A.F., *The re-regulation of the Dutch natural gas system*, working paper.

¹⁷⁸ *Supra* n. 170, p. 122.

concessions for the exploration and production of gas on- and offshore (e.g. NAM, Elf Petroland, BP/Amoco, Wintershall and Veba). Almost all concessions however, used to stipulate that the gas should be sold to Gasunie.¹⁷⁹ In the 1960s, Gasunie entered into exclusive contracts with the energy distribution sector through EnergieNed (an association of distribution companies). The contract guaranteed the supply of gas to the distributors and secured off-take for Gasunie. In addition, Gasunie held shares in two distribution companies.¹⁸⁰

Up to 1995 The Netherlands had been a strong opponent of liberalisation.¹⁸¹ But since the publishing of the Third Energy Note (Derde Energienota) around 1995/1996¹⁸², Dutch policy has been focused on a larger role for market forces and the maintenance of a reliable, affordable and environmentally friendly energy supply. Consequently, a shift has taken place from a regulated and supply based market to a market primarily geared towards demand. Starting point of the new policy are the wishes of consumers. Since 1997, the gas distribution in the Netherlands has been regulated based on the Energy Distribution Act of 14 December 1996, providing rules for the distribution of electricity, gas and heat (Dutch Gazette 642). The main tasks stipulated in the Act are providing reliable energy supply at low cost, the promotion of safety and the efficient and environmentally sound use of energy (Article 2). The Act does not contain any supply obligations. The Energy Distribution Act however had no direct impact on the gas supply contract between Gasunie and distribution companies. Initially the aim was to maintain the structure of the Dutch gas industry with a key role for Gasunie and De Maatschap/NAM in order to secure scale and organisational advantages and facilitate continued coordination of gas sales and purchase from Groningen.

¹⁷⁹ As result of the Hydrocarbons Licensing Directive this obligation has been deleted.

Supra n. 176, p. 211.

¹⁸⁰ *Ibid.*

¹⁸¹ *Supra* n. 177.

¹⁸² Derde Energienota, Kamerstukken II 1995/96, 24 525, nrs. 1 en 2.

6.1.2 The implementation of the EC Gas Directive 1998

The EC Gas Directive 1998 however, led to the draft of a Gas Bill, which was approved by the Second Chamber of Parliament on April 5th 2000. The bill was accepted by the First Chamber on 20 June 2000 and entered into force on the 10th of August 2000. The Gas Act aims at securing the regular supply of gas as well as competition. The Gas Act 2000 stipulates that all gas undertakings (transmission, storage, LNG) shall operate, maintain and develop under economic conditions, secure reliable and efficient facilities with due regard to environment. In accordance with the EC Directive, the Gas undertakings must provide other undertakings with sufficient information to ensure that the transport and storage of natural gas can take place in accordance with the secure and efficient operation of the interconnected grid. Gas undertakings must also refrain from discrimination.

The Gas Act 2000, is based upon a gradual market opening as stipulated by the EC Directive. However, directly eligible are only those customers which consume more than 10 million m³ of gas per year¹⁸³, as such 44% of the market will be directly liberalised as opposed to the 20% as stipulated by EC Gas Directive 1998. The second category of eligible customers consists of undertakings using more than 1 million m³ of gas per year, but less than 10 million m³. These customers will be eligible as from January 1st 2002. On January 1st 2004, all customers consuming less than 1 million m³ of gas per year will be eligible (Article 1 Gas Act). During the transition period (period till January 1st 2004), the customers not yet considered eligible are referred to as “protected customers”. These customers enjoy legislative protection as distribution companies have an obligation to supply these customers based on a tariff set by the Minister (Article 26 Gas Act 2000). Article 21 and 22 of the Gas Act require (during the transitional period) gas undertakings to apply for a license in order to supply natural gas to protected customers. The Gas Act also contains provisions which regulate the supply of gas to households after January 1st 2004: e.g. suppliers must take care of the supply of gas upon reasonable terms and conditions. In the

¹⁸³ Regels omtrent het transport en de levering van gas (Gaswet), Kamerstukken II 1998-1999, 26 463 nr. 3, p. 10.

transitional period in fact two markets exists: a liberalized gas market for large and medium sized consumers for which there are no licensing requirements, and a non-liberalized (regulated) market for protected consumers.¹⁸⁴

Gasunie acquires specific duties on basis of the Gas Act (public service obligations) (Articles 53-57 Gas Act): 1) the obligation to purchase gas from the Groningen field, 2) obligation to purchase gas at request of producers from other fields according to reasonable conditions and market-value prices 3) obligation to submit annually a forecast of Dutch supply and demand for the next 20 years. Gasunie can be exempt from these obligations if it would suffer financial or economic difficulties as a result of the task. The Minister can give Gasunie explicit instructions in order to carry out its specific task.

The EC directive merely requires the unbundling of accounts (Article 32). However, in line with the Dutch Electricity Act, the Gas Act requires gas undertakings to be split up into legally independent gas transmission companies (network managers) and supply companies (licence holders). As such, regional exploitation activities will be legally separated of supply activities (Articles 2-9 Gas Act). The local distribution companies were split up into gas suppliers and network operators providing regulatory access accordingly. The legal unbundling is aimed at guaranteeing objective and transparent access by third parties and the security of supply. Gasunie is exempted from this obligation. However Gasunie must unbundle its accounts for transmission, distribution and storage and non-gas activities. Accordingly, Gasunie has separated its high pressure transport and storage facilities from its trading activities, through the establishment of a Chinese wall. In addition as of January 1st 2002, Gasunie has, on its own initiative, committed to an organisational split-up of its sales and transport activities and is possibly aiming at a legal split-up. With this organisational split-up, Gasunie has gone beyond the obligations as stated in the EC Gas Directive

¹⁸⁴ *Supra* n. 176.

1998 and the Gas Act 2000. In accordance with EC Gas Directive 1998, the Gas Act requires natural gas undertakings to ascertain the confidentiality of information they receive. In addition, gas undertakings may not abuse the information obtained in transport negotiations.

The Gas Directive 1998 allows Member States to choose between the systems of regulated and negotiated access to the system (TPA). The Gas Act prescribes a combination of regulated access and negotiated access. Regulatory access will apply at the distribution level (for captive customers until 2004 and optional for consumers using less than 170.000 m³ of gas per year after 2004). Regulated access means that the access will be subject to regulatory control and based upon the publication of indicative tariffs and terms for transport and ancillary related activities. Negotiated access and the competition rules are applicable to upstream pipelines. The negotiated access has however, become increasingly regulated: indicative transportation tariffs (which must be reasonable and non-discriminatory) can only be set on the basis of guidelines issued by the Dienst Uitvoering en Toezicht Energie “DTe”. The DTe is a commission which resorts under the Dutch Minister of Economic Affairs, and is a chamber of the Netherlands Competition Authority (NMa). The rules on negotiated access also apply to the storage facilities, as long as the respective storage facility has a dominant position (Gasunie, NAM, Amoco). NAM and Amoco however, can be required to present indicative tariffs on the basis of which they can negotiate TPA with third parties, including Gasunie.

There is no obligations regarding the connection between pipelines. Dutch undertakings are able to freely construct and exploit competitive pipelines. The connection of production facilities to the grid (production pipelines) however, is dependent upon the capacity of the grid.

The Nederlandse Mededingingsautoriteit (Netherlands Competition Authority “NMa”) has been designated by the Gas Act as the competent dispute settlement authority, and is entitled to mediate disputes relating to the access and the refusal of access. The NMa has placed its supervisory and

enforcement activities under the Dte which accordingly has been charged with the supervision of the compliance of undertakings with the Gas Act 2000 (Article 59).

The Gas Act 2000 abolishes the monopolies of the transmission companies, but applies a less rigorous system to the distribution sector. In fact, the Gas Act gives Gasunie a legal basis for a monopoly position. It will hence be difficult to introduce competition, as the supply of gas is restricted: Dutch gas is generally contracted to Gasunie, whereas the supply of external gas sources are limited (Norway, Russia, Algeria). The gas sector is in need of a proactive regulator and regulated access to gas networks as shown by the US and UK.

6.1.3 The implementation of the EC Gas Directive 2003

The Dutch government is one of the first Member States to have amended its Gas Act 2000 in accordance with the new Gas Directive 2003. On the 9th of September 2004, the Gas Act 2004 was published in the Dutch Gazette.¹⁸⁵ As the Gas Act 2000 merely designated the natural gas undertakings to split up into independent transmission undertakings and supply undertakings, the Gas Act 2004 stipulates the designation of transmission system operators. These operators must be appointed by the owner of the transmission network. This transmission system operator must be independent of an undertaking which is concerned with the production, purchase or supply of gas (Articles 2-9 Gas Act 2004). The appointment of a system operator is subject to authorisation by the Minister of Economic Affairs. The transmission system operator must fulfil certain conditions specified in the Act. Duties of the operator include the security of quality, reliability and capacity of supply. According to Article 5a Gas Act 2004, the Minister may impose PSOs on the transmission system operator. Article 9a of the Gas Act 2004 stipulates that the owner of a gas storage installation

¹⁸⁵ Staatsblad van het Koninkrijk der Nederlanden, Jaargang 2004, nr. 444, Beschikking van de minister van Justitie van 2 september 2004, houdende plaatsing in het Staatsblad van de tekst van de Gaswet, zoals deze luidt met ingang van 14 juli 2004.

must also appoint an operator of the respective storage facilities. The duties are similar in scope to the duties of the transmission system operator.

TPA is based upon regulated access, unless refusal of access is allowed due to particular conditions (Article 15-16 Gas Act 2004, such as absence of capacity etc, see Gas Directive 2003), transmission operators must grant access to the network and related services (Article 14). Article 12 Gas Act 2004 stipulates that tariffs will be set by Ministerial decree. The director of the Dte (after negotiations with the system operators) will authorise the tariff and conditions, which must be objective, transparent and non-discriminatory. An exemption to apply the tariffs and conditions may be granted by the director of the Dte. The storage of gas is still in the hands of incumbent monopolists. However, the storage undertaking must negotiate storage facilities with another company if it so requests (Article 18c).

As stipulated in the former Gas act, Gas Act 2004 obliges the unbundling of accounts of transport, storage, and related activities.

Articles 34-37 concern the fact that gas undertakings must provide the Dte and other competent authorities with information if they so wish. System operators must guarantee the confidentiality of commercially sensitive information and refrain from discrimination between users.

Article 43 stipulates that natural gas undertakings supplying gas to final users who consume less than 170.000 m³ of gas per year are subject to a license which will be issued by the Minister of Economic Affairs (Article 43 Gas Act 2004). Gasunie remains subject to certain PSOs (Articles 53-57).

Articles 52b Gas Act 2004 specifically concern consumer protection. As such it is prohibited to apply unfair and misleading sales methods for supply and transmission of gas. Conditions in the transmission, and supply agreement must be clear, transparent and known beforehand. Customers must at all times be able to access the transparent information concerning tariffs and conditions.

Surveillance as regards the implementation and enforcement of the Gas Act 2004 is divided between the Director General of the NMa and the director of the Dte (Articles 59-60b Gas Act 2004).

6.1.4 Changes and welfare effects on the Dutch gas market

Dutch liberalisation had a slow start however, it is currently one of the first Member States to have transposed the new EC Directive 2003 into national legislation.

Whilst Gasunie remains the incumbent transmission undertaking, Essent (originally an electricity producer and supplier) has a built pipeline in cooperation with Delta (a local distribution company) for its own gas needs and to supply eligible and non-eligible customers. As such, Essent competes directly with the Gasunie transmission division. Gas Transport Services (GTS), which is related to Gasunie, has been appointed as transmission system operator.

Mid 2000, new entrants argued that TPA prices were much higher than transport prices for customers supplied exclusively by Gasunie's commercial branch, which leads to a distortion of competition. In order to be competitive an entrant had to have a very low gas price whilst it can only buy gas abroad as the existent national fields are nearly fully contracted for. The complaints were based upon the fact that Gasunie applies a Commodity Service System (CSS) which distinguishes between two classes of customers: 1) Gasunie offers a single supplier off-take contract to those customers supplied exclusively by Gasunie's commercial branch and 2) a multiple supplier off-take contract is offered to customers choosing to buy gas from other suppliers (either a mixed off-take from Gasunie and a third party or an exclusive third party). In 2001, complaints from within the gas sector led the NMa to start an investigation into the CSS. On 4 April 2002, the NMa concluded that parts of the CSS allowed Gasunie to abuse her dominant position on the market for natural gas transmission. Gasunie has

in accordance replaced the CSS by a system of negotiated access based on indicative tariffs and conditions.

According to the Gas Act 2000, natural gas undertakings operating storage facilities (NAM, BP Amoco, Gasunie) are required to give new parties access to these facilities. However, the capacity of BP Amoco and NAM is currently tied up in long-term contracts with Gasunie. Gasunie does offer storage arrangements, however third parties cannot evaluate if these agreements are truly cost reflective.

Despite the numerous complaints, the presence of new suppliers on the Dutch market is amongst the highest in the Member States. Fifteen new shippers (trading companies) have entered the market, which offer 70/75 different shipper contracts to supply eligible clients. TPA amounted to 22% in 2000. Of the gas transported through the grid, 8% was carried by TPA after August 2000, and this amounted to 17% in March 2001. With the TPA tariffs published, 50 end-users had switched to new suppliers by the end of the year 2000. In the Netherlands, a modest price reduction has taken place due to actual switching and the threat of switching. Gradually, Dte has published conditions for market parties.

In 2001, the Dutch market did not yet resemble a true European level playing field, however, large gas customers were in general satisfied with the supply of gas and the provision of service by natural gas undertakings.

The new EC Gas Directive 2003 and consequently the new Dutch Gas Act 2004, competitiveness of the market will be enhanced. On first day of full market opening (1 January 2004) 9000 households had switched already switched, one month later, 36000 gas customers or 0,5 percent of the residential market had switched.¹⁸⁶ In addition, the DTe has published new 2005 Guidelines concerning the Transport of Gas. In these guidelines the DTe takes several measures: 1) the transportation-costs of gas will

¹⁸⁶ Griffin, J. (2004), No rush for the Dutch, *Power Economics*.

incorporate part of the quality-conversion costs. As such all parties will contribute to these costs and a level playing field will be created; 2) GTS will have to introduce a new balancing system in 2006, in order to allow an efficient use of the Dutch transmission system; 3) GTS will have to publish and make information available to third parties regarding (available) import capacities. In this manner parties will know whether capacity is available.

According to a recent press-statement of the DTe (21.12.2004), the total transport costs for consumers concerning electricity and gas will fall with Euro 82 million in 2005. For a household with an average gas use of 1815 m³ and electricity use of 3375 KWh per year, this means a reduction in energy costs of 4,3%. More specifically, the transport tariffs for domestic gas use will fall with 8,6 %. This decrease in costs is due to the reduction schemes which DTe prescribes and the fact that GTS has lowered all transport related tariffs with an average of 5% over 2003 and 2004. It seems that liberalisation has begun to have appreciable effects for domestic users.

6.2 Belgium

Due to the Federal structure in Belgium, the implementation of the EC Gas Directives on the internal market in natural gas require action by the Federal and each of the three regional authorities: Flanders, Wallonia and Brussels.¹⁸⁷ With regard to the gas sector, each government is responsible for matters falling within their substantive (and geographic) jurisdiction. Federal law, however does not *per se* prevail over regional law in areas which are regulated by Federal law.¹⁸⁸ With respect to the gas sector, the regional authorities are concerned with the public gas distribution, i.e. supply of natural gas via the distribution systems. The jurisdiction of the Federal state extends to areas which have to be assessed on a national level due to the technical and economic integration required by these matters.

¹⁸⁷ Each of the regions has its own parliamentary assembly which has legislative powers and an executive authority (regional government), see Vandermeersch, D. (2001), Country Report: Belgium in Gérardin, D. (ed.) (2001), *The liberalisation of Electricity and natural gas market in the European Union*, London: Kluwer Law International.

¹⁸⁸ Vandermeersch, D. (2001), Country Report: Belgium in Gérardin, D. (ed.) (2001), *The liberalisation of Electricity and natural gas market in the European Union*, London: Kluwer Law International., p. 109.

Federal jurisdiction of the gas sector extends to matters concerning the transport and production of energy, and the regulation of prices.

6.2.1 Belgium gas market before liberalisation

In contrast to the Netherlands, which is one of the producers of natural gas, Belgium is an importer of natural gas. In 2000 for example, 646.460 terra joule of natural gas was imported from Algeria (26,8%), the Netherlands (33,3%), Norway (33,3%), Germany (2%) and other European countries (4,6%).¹⁸⁹ Belgium imports natural gas, which is then stored in underground facilities. Liberalisation will entail a radical change from the way the Belgian gas market was structured in the past. In 1965 the Federal Gas Law entered into force, subjecting the Belgian gas sector to statutory legislation. The market remained however, characterised by monopolies. Before the liberalisation process was inflicted upon the sector, the gas market for transport and underground storage was dominated by an incumbent monopolist¹⁹⁰ “Distrigas” (controlled by the French Suez group).¹⁹¹ The distribution of gas was carried out by municipalities. Whilst there was no statutory provision which granted the municipalities a distribution monopoly, such monopoly automatically derived from the fact that the municipalities were assigned with the exclusive right to regulate.¹⁹² The municipalities exercised their distribution duties through associations of municipalities. An important role was also played by the Control Committee for Electricity and Gas (CCEG). The CCEG was composed of representatives of the social partners¹⁹³ (the federal and regional government were not a member), as such, the CCEG assumed the role of a controlling entity: delivering binding recommendations to the gas and electricity sector. Maximum price recommendations for example, were adopted in ministerial decrees pursuant to general price control legislation. The liberalisation of the gas markets induced by the Gas Directives has required the competences

¹⁸⁹ See Mels, K., Liberalisering van de stroom- en gasmarkt in Vlaanderen, *Arbeid & Milieu*.

¹⁹⁰ This was a statutory monopoly.

¹⁹¹ Until 1983, Distrigas also enjoyed a monopoly over the importation of natural gas in Belgium (*Supra* n. 188).

¹⁹² *Supra* n. 188.

¹⁹³ National employers' federation and the three national trade unions.

of the CCEG to be reduced to the non-liberalised sectors of the gas market. As a matter of fact, from July 1st 2003 onwards, the responsibilities of the CCEG have been entirely taken over by the Commission for Regulation of Electricity and Gas (CREG)¹⁹⁴, which is independent of the government and social partners.

6.2.2 Implementation of EC Gas Directive 1998

In accordance with the liberalisation goals of EC Gas Directive 1998, the Federal Gas Law of April 29th 1999¹⁹⁵ has been adopted which implements the Gas Directive 1998. The Federal Gas Law concerns those areas of the directive, which fall within federal jurisdiction: the operation and construction of gas transmission facilities, the supply of gas, access to the transmission system and third party access. The Federal Gas Law is executed by implementing decrees that further specify the regulatory framework, in order to correctly apply the law. Only a limited number of provisions of law had entered into effect on June 15th 1999¹⁹⁶ however, gradually other provisions entered into force by Royal Decree.¹⁹⁷ The Federal Gas Law of 1999 was amended by the of 26 July 2001¹⁹⁸, which had

¹⁹⁴ Belgian Gazette 15.06.1999, published on 03.05.1999.

¹⁹⁵ Wet van 29 April 1999, Belgian Gazette 11.05.1999, N. 99-1338. This law replaces the Federal Gas Law of 12 April 1965.

¹⁹⁶ Royal decree of May 3rd 1999 putting into effect a number of the provisions of the 1999 Federal Gas Law, Belgian Gazette 15.06.1999: the eligibility of power producers as of October 24th 2000; a ten year plan surveying the overall supply of the Belgian market drafted by CREG; the powers of CREG to apply mediation and arbitration services, and the enactment of the power of the Chamber of Appeal relating to TPA matters.

¹⁹⁷ See amongst others: Royal Decree of December 5th 2000, concerning the special rights attached to the golden share held by the Belgian State in Distrigas and the Société Nationale de Transport par Canalisations, Belgian Gazette 20.12.2000; the Royal Decree of January 23rd 2001 on the modalities applicable for the definition of the eligible customers, Belgian Gazette 19.02.2001; the Royal Decree of June 12th 2001 stipulating the criteria and procedures for the award, review and withdrawal of gas supply licences, Belgian Gazette 05.07.2001; Royal Decree of October 23rd 2002 concerning the public service obligations in the natural gas sector, Belgian Gazette 06.11.2002; Royal Decree of May 14th 2002 concerning the transmission licence for gaseous products, Belgian Gazette 05.06.2002; Royal Decree of April 15th 2002 concerning the tariff structures and basic principles and procedures of tariffs and accounts of the natural gas transmission companies established in Belgium, Belgian Gazette 23.04.2002.

¹⁹⁸ Wet houdende de wijziging van de wet van 29 april 1999 betreffende de vervoer van gasachtige producten en andere door middel van leidingen en tot bekrachtiging van het koninklijk besluit van 18 januari 2001 betreffende het voorlopige systeem tot dekking van de werkingskosten van de Commissie voor de Regulering van de Elektriciteit en het Gas (CREG), 16 July 2001, published 20-07-2001, dossiernr 2001-07-16/30.

two main effects: the pace of opening was accelerated and negotiated TPA was replaced by regulated TPA.

The Federal Gas Law subjects the construction and operation of gas transmission facilities to the issuance of a permit by the Federal energy minister. Such a permit is only necessary if the facilities are intended for certain forms of supply (Article 2 Federal Gas Act): (amongst others) the supply of gas distribution companies; supply of final customers consuming on a permanent basis at least 1 million m³ of gas per year; the transit through Belgium of gas.¹⁹⁹ The other forms of gas transport hence fall within the scope of distribution (generally defined as the supply of gas via local pipeline networks to customers established in the territory of one or more municipalities²⁰⁰) and are subject to the regional legislation. The transmission companies must maintain and develop facilities under economically acceptable conditions with due regard to the environment. In accordance with the EC Gas Directive 1998, transmission undertaking must refrain from discriminating between different classes of system users.

The Federal Gas Law designates the following eligible customers: - producers of electricity for the quantities of gas needed for electricity generation; final customers connected to transmission system and consuming at least 25 million m³ of natural gas per year (total market opening of 47%). This threshold is to be reduced to 15 million m³ of gas per year on 10 August 2003 (49% market opening) and to 5 million m³ of gas per year on 1 October 2006 (66% market opening). The distribution companies shall be eligible for the quantities of natural gas used by customers designated by the regional authorities as eligible within the distribution network. Irrespective of this threshold, as of October 2006 the distribution companies shall be eligible for 33% of the balance of their requirements. On 10 October 2010 all customers and distributors will be eligible. The Federal Act in 2001 had speeded up market opening and on

¹⁹⁹ The criteria governing supply permits are not applicable to supplies made by distribution companies within own networks.

²⁰⁰ *Supra* n. 188.

31st December 2003 all final customers connected to the transmission network and consuming 5 million m³ of gas per year were eligible, whilst all final customers connected to the gas network will be eligible on 1 October 2006. A Royal Decree of 3 December 2003²⁰¹ abolishes the obligation imposed upon final customers wishing to become eligible in the natural gas transmission network to submit an application for eligibility to the Minister. Final customers who consume more than 5 million m³ of gas per year, automatically become eligible as soon as they have reached this level of consumption.

Initially, the Belgian authorities opted for a system of negotiated access for transmission. However, the amendment to the Federal Gas Law 1999 has introduced regulated third party access, based upon recommendation of the CREG (rapport 2000). According to CREG regulated TPA entails increased transparency and non-discrimination of access. The application of regulated tariffs will ensure competition before and after transmission. In this light, the transmission companies are obliged to publish annually their main commercial conditions concerning the use of the network. These main commercial conditions shall be approved by the CREG. In accordance with the EC Gas Directive 1998, transmission undertakings can refuse access in the case of insufficient capacity, if access prevents the proper performance of PSOs or when access causes economic and financial difficulties due to take-or-pay contracts concluded prior to 1 January 1998. Refusal however, must be justified and refusal of access based upon take-or-pay contract is subject to authorisation of the CREG till 1 October 2006. In addition, a code of conduct regulating the access to the network is issued by Royal Decree.²⁰² The code of conduct outlines amongst others, the details regarding access procedures, requirements for the exchange of information (i.e. the information network users must make available to transmission

²⁰¹ Royal Decree of 3 December 2003 repealing Royal Decree of 23 January 2001, Belgian Gazette 23 December 2003.

²⁰² The first proposal for a code of conduct dates from 19 October 2000. With the amendment of the Federal Gas Law of 16 July 2001, it was necessary to amend this proposal. The final Royal Decree on the code of conduct was published on 2 May 2003 (Royal Decree of 4 April 2003 on the code of conduct on access to the natural gas transmission network, Belgian Gazette, 2 May 2003).

companies), the measures transmission companies must take in order to preserve confidentiality and prevent discrimination, and the period within which natural gas undertakings are obliged to respond to access requests. Natural gas undertakings must unbundle their accounts as regards transmission, distribution and storage activities as well as non-gas activities. As such, the Belgian authorities do not seem to go beyond the minimum requirements of unbundling. However, on 30 November 2001 Distrigas, Belgium's main incumbent, split its activities (legal unbundling) which are incorporated into two distinct companies. Fluxys NV will act as transmission system operator, whilst Distrigas is concerned with the trading and import activities. The legal unbundling was formerly advised by CREG (rapport 2000) in order to allow for increased cost transparency and prevent discriminatory treatment of third parties and the abuse of a dominant position.

The Federal government may impose PSOs by way of Royal Decree upon holders of transmission permits as regards investments made for the benefit of ineligible customers and on the holders of supply permits as regards the regulatory, security and quality of supply, in order to protect the supply of the non-eligible customers.

The system of price controls (maximum price recommendations) as formerly issued by the CCEG and since the liberalisation taken over by the CREG, remains applicable to non-eligible customers. The Federal Minister may declare the system of price controls applicable to eligible customers, but is not obliged to do so. The setting of maximum prices is aimed at preventing cross-subsidisation and to ensure that a fair share of the benefits of liberalisation accrue to both private and professional end-users by way of price reductions. This seems to comply with allocative efficiency aims and correspondingly with the goal of consumer welfare.

As already mentioned in the above paragraphs, the CREG is the competent authority designated by the Belgian government, with an advisory, monitoring and controlling role. In addition to the publication of binding

price recommendations, approval of main commercial conditions and control of the application of rules regarding refusal to access, the CREG in general monitors the compliance with the Federal Gas Law. Furthermore, the CREG advises the Federal government on matters regarding the operation and organisation of markets. Besides this Federal authority, the regional authorities have set up their own agencies modelled upon the CREG, to regulate and supervise activities within their own regions. There are two regional authorities: De Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt (VREG), which is responsible for the regulation and control of electricity and gas in Flanders, and De Waalse Energiecommissie (CWAPE), which is responsible for the regulation and control of gas in the Walloon region.

The Flemish regional authorities were the first to adopt a decree in order to implement the EC Gas Directive 1998. The Flemish Natural Gas Decree was passed by the Flemish authorities on 6 July 2001.²⁰³ The decree stipulates that the on January 1st 2003 those customers whose consumption exceeds 1 million m³ of gas per year will become eligible and on 1 July 2003 all other customers connected to the distribution network in Flanders will be declared eligible. The Flemish decree stipulates that VREG will designate an independent distribution system operator (Articles 4-7 Gas decree). The independent system operator must take care to maintain, develop and exploit the distribution network (Article 8 Gas decree). In accordance with EC Directives, the distribution system operator must refrain from discrimination and maintain confidentiality of commercially sensitive information received from its customers. The designation of an independent distribution system operator (and thus the legal unbundling between the operation and distribution network on the one hand and the sale of natural gas to eligible end users on the other hand) predeceases EC Gas Directive 2003. The VREG will establish a technical regulation concerning the control and access of the distribution network and the conditions as

²⁰³ Belgian Gazette 03.10.2001. Article 58 was amended by the Royal Decree of July 5th 2002, Belgian Gazette 19.09.2002; Articles 3., 9, 15, 26, 52, 53 were amended by the Royal Decree of April 30th 2004, Belgian Gazette 27.05.2004.

regards the construction of direct lines (Article 9 Gas decree). In addition, the VREG issues a code of conduct similar to the one issued by the CREG. Access to the distribution network occurs on a basis of regulated access and the system operator will publish the corresponding access tariffs and tariffs for related services (Article 12 Gas decree). Access may however be denied subject conditions which are in accordance with EC legislation. Supply is subject to a permit, which is issued by VREG. In accordance with the Federal Gas Law, the VREG may impose PSOs. The Flemish decree incorporates a provisions on environmentally friendly and efficient energy use.

The decree of the Wallonia region was adopted on 19 December 2002²⁰⁴. Since then the decree has been amended by a new decree of 18 December 2003²⁰⁵ and a ruling of the Belgium Court of arbitration which annulled Article 10, paragraph 3 of the decree.²⁰⁶ The Walloon decree also designates an independent distribution system operator, which can be a commune. However, 51% of the shares of the operator must be owned by the municipality or the Provincial authorities. As in the Flemish decree, the system operator must take care to exploit, maintain and develop the distribution network. In exercising its duties, the system operator must maintain confidentiality of commercially sensitive information gained during negotiations. The regulatory authority, CWAPE, will issue a technical regulation concerning the control of the distribution network and access to the corresponding network. Access to the network is governed by regulated access and the distribution system operator must publish its access tariffs as well as the tariffs for corresponding services. Access to the network may be denied subject to conditions which are in accordance with the EC Gas Directives. The decree stipulates that final customers consuming more than 20 GWh of gas per year (+/- 1 million m³ of gas per year) will become eligible as of 4 January 2004. The supply of gas is subject to a

²⁰⁴ Royal Decree concerning “de organisatie van de gewestelijke gasmarkt”, Waalse Gewest, 19 December 2002, published 11.02.2003, dossiernr 2002-12-19/81.

²⁰⁵ Belgian Gazette 06.02.2004. which amended Articles 14, 32, 36BIS, 39, 42, 46, 48, 50 and Article 73.

²⁰⁶ Case nr. 147/2004 of 15.09.2004, Belgian Gazette 05.10.2004, p. 70303.

licence to be issued by the government upon advise of the CWAPE. In addition, the government may impose PSOs upon advise of the CWAPE.

No legislation has yet entered into force for the Brussels-Capital Region.

6.2.3 Implementation of EC Directive 2003

The Federal government has not yet amended the Federal Gas Law in accordance with the EC Gas Directive 2003. On 17 November 2004, the CREG published an advice containing recommendations with respect to the compliance of Belgium law with the new EC Gas Directive 2003. The adjustments will be implemented through the adoption of two different proposals of law in which the Belgium government hopes to balance the Belgium obligations with regard to implementation of the new EC Gas Directive and the measures which are necessary to enhance competition in the Belgium market.

In general, the CREG concludes that not many adjustments have to be made, as the Belgium legislation concerning liberalisation of the gas sector already largely complies with the new EC Directive 2003, for example with respect to legal unbundling, regulated access, and the designation of regulatory authorities. Some of the recommendations made by the CREG are the following: 1) the presently maintained tariffs must be reviewed with an eye on long term tariffs; 2) the competences of the CREG must be enlarged in order to allow responsibility for non-discrimination and actual competition; 3) the timeframe within which decisions concerning the approval procedure for pipeline access are adopted, has to be extended; 4) the different types of calculation methods for tariffs must not be mixed; the cost-plus system guarantees an efficient use of the network.

6.2.4 Changes and welfare effects on the Belgium gas market

Liberalisation of the Belgian gas market was slow to start up in relation to other Member States. In 2000, less than 50% of the Belgian gas market was liberalised, compared with 100% liberalisation in Germany and 45%

liberalisation in The Netherlands (with anticipated liberalisation of 100% in 2004)²⁰⁷. According to Federal law, all final customers connected to the transmission network will become eligible on 1 October 2006. On July 1st 2003, all customers in the Flemish region have become eligible, and on 1 January 2004, all final customers connected to a distribution network consuming over 1 million m³ of gas per year will become eligible within the Walloon region. The earlier Belgian act was absent of real Chinese walls between trading and transport activities, access was based upon negotiated access and tariffs were inflexible as they were point-to-point based. In addition, demand was largely covered by take-or-pay contracts. The diverse amendments however, have put current Belgium legislation concerning the gas market, ahead of European legislation. In fact, in many aspects, the current Federal Belgium Gas Act and the corresponding regional legislation, already fulfil the obligations recently formulated in the new EC Gas Directive 2003. The liberalisation process has substantially modified the Belgian gas market structure and operations.

In 2002 only two companies imported gas: Distrigas (98,5%) and GdF. In 2003, 14 permits concerning the distribution of gas to big customers had been demanded under Federal authority, and 11 have been given.²⁰⁸ Furthermore, the Federal Minister granted seven supply authorisations in 2003, and fourteen holders of an authorisation are now entitled to access the natural gas transmission network.²⁰⁹ Separation has been introduced by Distrigas between the transport activities on the one hand and natural gas trade on the other hand. As a result, Fluxys is presently responsible for the Belgian gas transmission. Third party access tariffs and conditions are made available on the corresponding websites. The CREG has published a code of conduct which regulates the behaviour of the natural gas undertakings. The Belgian government states that the monopoly position of Fluxys concerning the transmission of gas allows considerable investments, and is thus preferred over competition at the moment. Due to the legal unbundling and

²⁰⁷CREG, Advies A 2000/06-D betreffende de versnelling van de liberalisering van de gasmarkt, 4 May 2000.

²⁰⁸ Figaz, Annual Report 2003.

²⁰⁹ CREG, Annual Report 2003, p. 32.

introduction of competition, Distrigas has lost volume since the beginning of the liberalisation process. Most eligible buyers in Belgium, some with short term supply contracts, were able to break the monopoly of the Belgium gas market. Eligible clients recognize the change in the incumbents behaviour: “Distrigas’s transport system is very open, has a very liberalized mind [...] strict and conservative behaviour of traditional supplier turned more and more customer friendly in recent years, increased flexibility in applying some contractual agreements such as pricing, capacity nomination and peak management.”²¹⁰ TPA has switched from negotiated to regulated access, and as a result Fluxys reduced its access costs to the network by plus minus 7% in 2002 and plus minus 6% in 2003. These tariffs are amongst the lowest in the EU. The effective implementation of regulated TPA, the access to storage facilities for all players, the price reductions, and the shortening of contract lengths, has led to a substantial reduction of entry barriers and as a result to increased competition.

In 2002, 58% of the Belgian demand for natural gas could be satisfied by the free choice of supplier.²¹¹ On January 2003 this became 65%, taking into account the eligibility of final users (whose consumption exceeds 1 million m³ of gas per year) connected to the distribution network in Flanders. This rate rose to 83% on 1 July 2003, when all other customers connected to the distribution network in Flanders were declared eligible.

The Belgian gas prices are amongst the lowest in Europe, and a constant fall in prices has been noted since the second quarter of 2003.²¹² The gas prices in Belgium may thus be characterised as favourable and reductions in the price recommendations made by the former CCEG have increased competitiveness. The networks have been extended with a total of 2,100 km of distribution pipelines laid in 2003. In 2003, 280 million of Euro had been invested in transport, storage and gas distribution infrastructure. Publiclear

²¹⁰ DRI-WEFA (2001), *Report for the European Commission Directorate General for Transport and Energy to determine changes after opening of the gas market in August 2000, Volume I: European overview*, p. 22.

²¹¹ CREG, Annual Report 2002, Part II, point 3.2.

²¹² Figaz, Facts and Trends 2003.

has been established, which is a clearing house in order to enable free exchange of data necessary in liberalised markets. Furthermore, in order to ensure the confidentiality of metering information, the combined Managers of the natural gas distribution network (GRDs) have set up a metering company “INEXIS” which is responsible for collecting, processing and sending metering information to the parties in the market who are entitled to it. The PSOs imposed upon natural gas undertakings have led to a financial contribution of 3 million Euro per year to provide for the funds in order to execute their tasks concerning the help to customers in difficulties. The total fees make up charges in excess of 25 million Euro a year, which could create a distortion of competition specifically in relation to the market for petrol products, which is not subject to such financial contributions.

It seems that liberalisation of the gas market in Belgium has the desired effects. Prices have fallen and transparency and non-discrimination concerning access to the network are realised. The legal unbundling of Distrigas has led to increased competition in the areas of storage and distribution. However the Belgian government should be careful as to the fees which Belgian gas undertakings must pay with regard to their PSOs, these fees could have a negative effect on the liberalisation process and inter-state trade. In addition, the fact that the characterisation of eligible customers in the diverse region are divergent may impede liberalisation and the switching of suppliers from different regions. In the Walloon region communal and provincial authorities still hold a great stake in supply undertakings, which might distort fair chances for private companies.

The real effects of total liberalisation in accordance with EC Directive 2004 will only become apparent during the next few years.

6.3 Germany

Germany supplies 19% of its natural gas from its own gas field in Raum. The other gas supplies are imported from Russia (31%), The Netherlands

(17%), Norway (26%) and Great Britain, Denmark and others (7%).²¹³ Due to the size of the German economy within the Community, the German energy markets represent a substantial and important part of the EU energy sector.

6.3.1 German gas market before liberalisation induced by the EC²¹⁴

Before entry into force of the EC directives concerning liberalisation, the German markets were in general not subject to regulation. Limited sector-specific regulation did nevertheless apply to distribution systems of the gas and electricity markets. This limited regulation has been induced by the characteristics of these network markets, namely the fact that they are characterised by natural monopolies. The partial regulation was based upon the Energy Business Act²¹⁵ which was aimed at the provision of cheap and safe energy. The goals of this act (amongst others) entailed the prevention of harmful competition and correspondingly the introduction of a regulatory system which is able to take into account the network structure of the respective industries. As competition was deemed harmful for certain parts of the energy markets, closed territories of exclusive supply were permitted. However, in order to refrain incumbent monopolists from demanding excessive prices and decreasing consumer welfare, prices were administered by public authorities.²¹⁶ These regulated cost-based prices also prevented below-cost pricing, which would jeopardize security of supply. As part of the sector was regulated, the energy markets were partially exempt from the

²¹³ Bundesverband der Deutschen Gas und Wasserwirtschaft (BGW), *Das Magazin*, Annual Report 2003.

²¹⁴ Information is based upon the article by Börner, A-R. (2001), Country Report: Germany in Gérardin, D. (ed.) (2001), *The liberalisation of Electricity and natural gas market in the European Union*, London: Kluwer Law International.

²¹⁵ Gesetz zur Förderung der Energiewirtschaft (Energiewirtschaftsgesetz) of 13 December 1935, Reichsgesetzblatt 1935, Part I, 1451, in the version of 19 December 1977, Bundesgesetzblatt 1977, Part I 2750; see also the Energiesicherungsgesetz (Energy Safeguard Act) of 21 December 1974, Bundesgesetzblatt 1974, Part I, 3681, in the version of 29 December 1979, Bundesgesetzblatt 1979, Part I, 2305. Durchführungsverordnung (Second Implementing Decree of The Energy safeguard Act, which is about technical safety) of 14 January 1987, Bundesgesetzblatt 1987, Part I, 146.

²¹⁶ Verordnung über Allgemeine Bedingungen für die Gasversorgung von Tarifkunden (AVBGasV – Regulation on the general terms and conditions of gas supply to tariff customers) of 21 June 1979, Bundesgesetzblatt 1979, Part I, 676 as amended on 25 September 1990, Bundesgesetzblatt 1990, Part I, 2106; Bundestarifordnung Gas (BTOGas – Federal Tariff Order on gas) of 26 November 1959, Bundesgesetzblatt 1959, Part I, 46, in the version of 21 June 1979, Bundesgesetzblatt 1979, Part I, 676.

general competition rules.²¹⁷ The German antitrust act allowed for a system of concession contracts. The concession indicates that the right to conclude sales contracts with final customers does not need to be conferred by public authorities, the latter do not even have an exclusive property right which they could transfer. Municipalities however, own the municipal roads and are able to grant easement for the construction and operation of gas pipelines for example. As a compensation for the easement, the municipalities receive a payment which is related to the intensity of the disturbance caused. In addition, they may ask for a participation fee, the law thus allows regular payments related to the off-take of energy units by final users.²¹⁸ This payment in particular is regarded as a compensation for the easement and is referred to as “concession”. The Antitrust Act also allowed restrictive agreements to be concluded. However, strict merger control did apply to the gas market, especially regards transactions between monopoly players.

The above regime secured the supply of gas in Germany for more than fifty years and provided support for about 700 companies, seventeen gas-trading companies and about 680 local distributors.

6.3.2 Implementation of EC Gas Directive 1998

The EC Gas Directive 1998 however, needed to be implemented and rendered German authorities critical of the existing system, specifically in the light of consumer welfare. As a result, the Energy Industry Act of 29 April 1998²¹⁹ and amendments of the GWB (Article 19.4.4 of GWB) implemented large parts of the Gas Directive. As restrictions were completely abolished, the German legislator at once fully liberalised the gas and electricity markets. From a legal point of view, all barriers to

²¹⁷ Article 103 ff. of the Gesetz gegen Wettbewerbsbeschränkungen (GWB – Act against restrictions of competition) exempted the energy markets from several of its other provisions.

²¹⁸ Verordnung über Konzessionsabgaben für Strom und Gas (KAV – Regulation on Concession fees for Electricity and gas) of 9 January 1992, Bundesgesetzblatt 1992, Part I, 12, 407 in the version of 22 July 1999, Bundesgesetzblatt 1999, Part I, 1669.

²¹⁹ Gesetz zur Neuregelung des Energiewirtschaftsrechts of 24 April 1998, BGBl. I S. 730, changed by Article 2 of the Erstes Gesetz zur Änderung des Gesetzes zur Neuregelung des Energiewirtschaftsrechts of 20 May 2003, BGBl. I S. 686.

competition were repealed; the gas market is thus fully open to competition and remains subject only to the competition rules as applicable in Germany. The concession agreements as mentioned above, were held to guarantee the supply of services of general interest and fell within the scope of Article 86(2) EC Treaty. With the liberalisation of the energy markets, the Bundeskartellamt (Federal Cartel Office)²²⁰ took the lead in defining markets and concepts of market dominance. On the basis of the provisions concerning the abuse of a dominant position, the Federal Cartel Office aims to ensure TPA.

The main supplier of natural gas on the German market is the Russian Gazprom, which has the policy of selling exclusively to larger German companies. In August 2000, five undertakings dominated the transmission market: Ruhrgas, is the largest of these undertakings and owns a large share of the high pressure transmission system; Wingas (65% of the shares are owned by Wintershall and 35% by Gazprom) controls a parallel network of pipelines which transmit imported gas from east to west Germany (Wingas supplies a high proportion of Germany); VNG is active in the former east German states (the largest shareholder is Ruhrgas); BEB (owned 50% by Shell and 50% by Esso) is a major national producer; RWE/Thyssengas (REW is one of the two very large electricity companies and has a controlling interest of 75% in Thyssengas). It becomes apparent that many links exist between the diverse undertakings (these links are however, closely watched by the Federal Cartel Office). These companies sell a large share of their gas to regional or communal distributors, and additionally directly to final consumers. Thirty companies dominate the market for regional transport and Germany has 700 Stadtwerke or local distributors. Many links also exist between the large importing/purchasing companies and the Stadtwerke. The gas market is characterised by long term supply agreements which usually extend beyond 2025.

²²⁰ The Bundeskartellamt was established in 1957.

The German access system is based upon negotiated TPA. The negotiated access is based upon main commercial conditions, which in 2000 were being negotiated by the associations (Verbändevereinbarung). A draft set of main principles for a future Association Agreement was signed on 17 March 2000. The definitive Association Agreement was signed in June 2000 (Verbändevereinbarung zum Netzzugang bei Erdgas or “VV”).²²¹ The VV has been amended several times since then.²²² In May 2002 the VV II Plus was signed, to be applied till 30 September 2003. The fees for transport will be calculated on a point-to-point basis. A flat fee will apply for three transport zones at the regional distribution level and for transport by each local network. The fee will incorporate the costs of system services and limited road flexibility. Services for storage facilities will however be charged separately. However, since the concerned associations have not been able to agree on the access system and negotiations for VV Natural Gas III have broken down, the “Bundesministerium für Wirtschaft und Arbeit” has started formulating access conditions, which will enter into force on 1 July 2004.

With respect to the unbundling of accounts, the German legislator does not seem to go beyond the minimum requirements of the EC Gas Directive 1998: the unbundling of accounts is prescribed. Articles 21 and 22 of the Gas Directive 1998 prescribe the designation of a competent authority. In Germany, this task is taken on by the Bundeskartellamt, which will function as the dispute settlement authority. Access issues can be referred to the Federal Cartel Office, but only in so far as the competition law is effected. Other supervisory bodies for gas in Germany exist: the VV foresees in a dispute settlement procedure run by signing parties, and the Länder are equipped with supervisory bodies which are responsible for the supervision

²²¹ The VV was originally due to run till 30 September 2001, but the Associations agreed to use it as a basis for further debate till it was superseded by a new agreement. The VV is a voluntary framework and has no legal effect, but is based on German Energy law. As the agreement has been presented and authorised by the Ministry of Economics and the Bundeskartellamt, the VV has a *de facto* binding effect.

²²² 1st Amendment on the 15th of March 2001, the following topics were agreed upon: more transparent and easier access to the networks, commercial access to storage, and balancing and congestion management. On 3 May 2002 the VV II Plus was signed by the Associations, this agreement will be applied till 30 September 2003.

of the companies. However, at the moment no gas regulator exists as is common in many of the other Member States. The Energy Industry Act 1998 does not foresee in PSOs. With regard to access to its up-stream pipelines, Germany applies Article 23 (which states the conditions for access) of the Gas Directive 1998. In Germany everyone may build and sell storage capacity and this has led to the existence of a storage market. Access to storage is very limited and is only allowed when capacity is available or when such access is technically necessary for an efficient access to the system.

On 14 February 2003, the European Commission lodged an application at the ECJ concerning the failure of Germany to fulfil its obligations according to Directive 98/30/EC on common rules for the market of natural gas.²²³ Germany had failed to transpose into national law provisions of the Directive and had only partially transposed other provisions of the Directive before the implementation deadline on 10 August 2000. On the date of the judgement of the ECJ, 1 April 2004, Germany had already published the provisions necessary to ensure full implementation of the Directive (the corresponding provisions had been published on 23 May 2003). However, the ECJ stated that it was settled case-law that “the question whether a Member State has failed to fulfil its obligations must be determined by reference to the situation prevailing in the Member State at the end of the period laid down in the reasoned opinion and that the Court cannot take account of any subsequent changes (see, inter alia, Case C-63/02 Commission v United Kingdom [2003] ECR I-821, paragraph 11.” In its judgement, the ECJ thus merely established that Germany had failed to fulfil its obligations, but the judgement had no further consequences for Germany.

6.3.3 Implementation of EC Gas Directive 2003

The lack of full legal unbundling between transportation and supply within undertakings is often one of the main obstacles to non-discriminatory

²²³ Case 64/03 Commission v Federal Republic of Germany, 1 April 2004,[2004] ECR.

network and a source for abuse of dominant positions. In the absence of full unbundling and structural changes, a regulatory regime will need to provide strong conduct regulation in order to ensure non-discrimination. The access to storage and associated flexibility services is essential for an efficient, non-discriminatory and cost-effective access to the network, and for ensuring a level-playing field. The German legislative structure did not provide for such unbundling or regulatory authorities. With the entry into force of the Gas Directive 2003, the German government has had to develop a new proposal for a Gas law, which would take into account the obligations incorporated in the new European Directive 2003. As such, the Bundeskabinett has drafted the “Entwurf eines Zweiten Gesetzes zur Neuregelung des Energiewirtschaftsrechts” (28.07.2004). This new proposal will implement EC Gas Directive 2003. The main provisions of the new law are the provisions on legal unbundling of the system operators. The new law defines clear unbundling conditions which will ensure that cross-subsidisation cannot occur. Accordingly, distribution companies with more than 100.000 customers will have to legally unbundle as from 1 July 2007. Distribution system operators with less than 100.000 customers are exempt of the legal and organisational unbundling. The new act contains a new possibility for complaints. Furthermore, a new regulatory authority will be established. The Regulierungsbehörde für Telekommunikation und Post (RegTP – Federal regulatory authority for telecommunications and postal services) will take on the task of surveillance as to the liberalisation of the gas market in accordance with the EC Gas Directive 2003. The RegTP will be renamed: “Bundesregulierungsbehörde für Elektrizität, Gas, Telekommunikation und Post” (Federal Regulatory authority for electricity, gas, telecommunications and postal services). The new regulatory authority will guarantee non-discriminatory and efficient access to the network, such that Germany will be able to compete with other European markets, where prices have been much lower.

6.3.4 Changes and welfare effects on the German gas market

In Germany, access to the grid and access to storage facilities has been a major obstacle. The handling of access requests is a rigid and bureaucratic process and the requests are often not processed on time. Clear information about bottlenecks and the availability of capacity is lacking. With respect to transmission tariffs, the network access procedure and payment system is much too sophisticated, and dependent upon the distance travelled and the diameter of the pipeline. Furthermore the charges are very high. Liberalisation is hindered by the lack of rules on TPA charges, just basic guidelines exist, with no enforcement mechanism or clear rules of application. In these uncertain conditions, the strong bargaining powers of incumbents like Ruhrgas and RWE relative to new entrants in transmission and supply of natural gas has to be called into question. It seems as if Germany's largest supplier will not open the grids for TPA before 2007, raising barriers to entry. Due to the financial and supply links which many gas undertakings have with the larger transmission companies such as Ruhrgas, numerous undertakings are reluctant to supply directly or indirectly in the regions supplied by these larger companies. In addition, the absence of a regulatory body which can advise potential entrant on procedural matters and assist in the resolution of companies, hinders entrance.

Prices reductions due to actual switching and the threat of switching have been very modest.²²⁴ The links between producers and gas buyers / importers are common in Germany. However, some state-owned Scandinavian (HEW, Wesertal Ems) and French companies (enBW and GASAG) have been able to enter the German gas market through acquisitions, e.g. buying into power companies, distributors and other large gas companies. Eligible customers expect lower prices, and in February

²²⁴ DRI-WEFA (2001), *Report for the European Commission Directorate General for Transport and Energy to determine changes after opening of the gas market in August 2000, Volume I: European overview*; and DRI-WEFA (2001), *Report for the European Commission Directorate General for Transport and Energy to determine changes after opening of the Gas Market in August 2000, Volume II: Country Reports*.

2001 the main operator (Ruhrgas) finally reduced prices for major customers by 10%.

In a recent press release of 22 December 2004, the German Federal Cartel Authority has stated that it will initiate proceedings against five large German gas suppliers as they seem to abuse their dominant position by charging excessive gas prices. It concerns the RWE, MVV Energie (Stadtwerke Mannheim), SWU (Stadtwerke Ulm), Thüga (E.On, Allgäu-Oberschwaben) and EnBW Ostbadenwürttemberg. The Federal Cartel Authority does not exclude the possibility of further investigations into the abuse of their positions. The Federal Cartel Authority has already initiated proceedings against 16 other gas supply undertakings, under which E.ON/Ruhrgas, RWE, Wingas and VNG. These undertakings seem to have divided the market through the conclusion of long term supply agreements with one of the few gas importing companies. As such, entrance to the market is substantially restricted.

Despite legal liberalisation, the German gas market *de facto* impedes competition. The publication of tariffs and clear rules on TPA, in addition to the establishment of a regulatory authority may be the first steps towards a real competitive market.

7 The overall effects of market liberalisation in the respective Member States

Following the entry into force of the first EC Directive on common rules for an internal gas market in 1998, The Netherlands (September 1999) and Belgium (April 1999) had fully transposed the respective directive (with Belgium awaiting the implementing decrees) into national legislation by 10 August 2000. Germany (Gas Act 1998, not based upon the EC Gas Directive 1998) lacked a national legal status of the directive. The Gas Directive 1998 required market opening to amount to 20% as from 10 August 2000 and 33% by 2008. The Member States could opt to limit market opening by initially 30% and the increase this to 43% in 2004. On average 79% of total EU gas demand was eligible by 10 August 2000, and expected to increase to 92% by 2008. In 2000 Germany already had a market opening of 100%, Belgium followed with 47%, and The Netherlands with 45%.²²⁵ In 2002, The Netherlands had an market open amounting to 60% and Belgium to 58%. The estimated percentage of market opening at that time for 2004 was 100% in The Netherlands and 83% in Belgium, with 100% of the Belgium market becoming fully open to competition in 2006.²²⁶ In 2004, 61% of customers has indicated to be aware of the opening of markets to competition. However, a large part of the customers fear that the quality and choice of services might suffer from the changes. In addition, customers would like to see full transparency of conditions and prices and supervision of the sector by a regulatory body.²²⁷

Liberalisation is based upon the thought that the introduction of competition will lead to enhance social welfare, more specifically direct benefits will accrue to consumers as the existent monopolies are inefficient or yield monopoly gains to the detriment of the former. The main parameter through which the increase in consumer welfare can be measured is price. In

²²⁵ European Commission, Commission staff working paper (2001), *Completing the internal energy market*, SEC(2001) 438.

²²⁶ European Commission, Directorate General for Transport and Energy (2002), *Completing the internal energy market*, power point presentation.

²²⁷ European Commission, DG TREN Draft working paper: *Third benchmarking report on the implementation of the internal electricity and gas market*, 01.03.2004, p. 1-44.

addition important parameters are the quality of the service, the publication of conditions, consumer willingness to pay and consumer surplus. If the price decrease is indeed caused by direct efficiency gains is however difficult to measure, as diverse other factors exert an influence on the price level of gas.²²⁸ First of all, the international gas price, such as charged by producers, is established on the international market. Secondly, the gas price is correlated to the oil (predominantly) and dollar price. Furthermore, the gas price charged to final customers is dependent upon transport and other related services offered by the respective natural gas undertakings. However, in afore mentioned areas one may expect better service and a price decrease as a result of the liberalisation process; increased competition will lead to cost efficiency and pressure the profit margins. In some Member States, environmental taxes may also influence the prices of natural gas. In the following paragraphs however, an attempt will be made to measure the increased welfare (amongst others) by the change in the price levels of gas.

Statistics from 1997 clearly demonstrate that the average natural gas price in Continental Europe exceeds the average natural gas price in liberalised countries such as the US and UK. As mentioned in the aforementioned paragraphs, the price difference is partly due to the low US tax regime and the country specific factors, such as the larger amount of smaller producers, and the lower development and transport costs in the US.²²⁹ However, one may conclude that since the markets in the US and UK have been liberalised, the gas price has adjusted correspondingly. The overall price differences with respect to the smaller consumers appear larger when comparing liberalised with non-liberalised countries. If we compare the natural gas prices for industry customers of the Member States of January 1998, with the gas prices of July 2000. the prices seem to have increased (instead of the expected decrease) after liberalisation has been initiated. The gas price in Belgium in July 2000 (VAT and energy taxes excluded) amounts to an estimated 4,5 Eurocents per Gigajoule (GJ), in Germany to

²²⁸ *Regels omtrent het transport en de levering van gas (Gaswet)*, Kamerstukken II 1998-1999, 26 463 nr. 3.

²²⁹ Evaluatie Elektriciteitswet 1998 and Gaswet, Kamerstukken II 2001-2002, 28 254 nr. 1.

5,1 Eurocents per GJ and in the Netherlands only 2,9 Eurocents per GJ. The average industry gas price is estimated to be 4,4 Eurocents per GJ. The only country which shows a price decrease is the Netherlands, which is a gas producing country. The price increase is however, largely due to a strong increase in the oil price.²³⁰ Account however, must be taken of the UK, which is a liberalised market and shows no fluctuation at all in price. It does become clear from the graph, that a large disparity still exists between the gas prices of the different Member States, irrespective of the gradual market opening. In 2002, prices seem to have risen even further, with the average industry gas price amounting to an estimated 5 Eurocents per GJ. The industry purchase price of gas in Belgium is estimated at 4,9 Eurocents per GJ, in Germany 6,8 Eurocents per GJ (no industry price indication is available for the Netherlands). The prices charged for domestic (gas prices charged to smaller customers and thus mainly households) gas are significantly higher than the prices charged to the industries. The average domestic gas price amounts to +/- 9,2 Eurocents per GJ. The domestic gas price in January 2002 for Belgium is 10 Eurocents per GJ, the German domestic gas price is 10,5 Eurocents per GJ and the Dutch domestic gas price is 8,5 Eurocents per GJ (no other domestic gas prices in Eurocents per GJ were available for comparison). In general, the gas prices for industrial users seem to have risen. However the actual effect is difficult to assess due to the increasing oil price for which the data actually has to be corrected, but this lies beyond the scope of this paper. Another indicator of the positive effects of liberalisation with respect to prices, is the price disparity between Member States. When the disparities become smaller, this may be due to the establishment of a level playing field and increased cross-border trade and competition. When assessing the natural gas prices charged to industrial users, it becomes apparent that the large discrepancies in the prices between the Member States have indeed decreased. In January 1998, the price discrepancy amounted to an estimated 3,8 Eurocents per GJ (Luxembourg: 5,9 Eurocents per GJ and Denmark: 2,1 Eurocents per GJ), in January 2000 this had been reduced to a difference of 2 Eurocents per GJ (Luxembourg:

²³⁰ European Commission, Directorate General for Transport and Energy (2001), *Completing the internal energy market*, power point presentation.

4,9 Eurocents per GJ and The Netherlands: 2,9 Eurocents per GJ) and in January 2002 the difference was only 1,7 Eurocents per GJ (Denmark: 4 Eurocents per GJ and Germany: 5,7 Eurocents per GJ). On average, since July 2000, the price levels for industrial users in Belgium have been medium and falling, and in Germany stable and high. The price levels for small commercial users have been medium and falling in Belgium, and medium and stable in Germany. Prices for households have been stable and high in Belgium, medium and stable in Germany and medium and rising in the Netherlands. Prices to large users have fallen in almost all countries since 2000.²³¹ This is partly due to a reduction in the oil, but may also be due to increasing gas to gas competition in this end of the market. One may conclude that the natural gas prices do indicated positive effects of liberalisation. The DG TREN working paper of 1 March 2004²³² reports that improved tariff structures have been recorded when the prices are adjusted for the swings in the crude oil price. Due to changing prices, 5% of the large eligible industrial users switched supplier in Germany in 2002 and 15% switched in The Netherlands. The switch made by small commercial and domestic customers was less than 2% in Belgium and The Netherlands. Neither Belgium and Germany nor The Netherlands apply end user price controls and have no special tariffs for vulnerable customers.²³³

An important factor which measures the degree of successful liberalisation is the extend to which the liberalisation measures which have been issued, have actually been implemented. In this light the degree of TPA, which will increase competition on the network and hence pressure the incumbents and market prices, is important. Significant is also the overall amount of new entrants into the market in the different Member States. In August 2000, the increase in the gas carried by third parties as a percentage of the total gas carried on the network amounted to 1,5% in Germany, 2,5% in Belgium and 8% in The Netherlands (highest of the Member States).²³⁴ In March 2001

²³¹ European Commission, DG TREN Draft working paper: Third benchmarking report on the implementation of the internal electricity and gas market, 01.03.2004

²³² *Ibid.*

²³³ *Ibid.*

²³⁴ *Supra* n. 230.

TPA in the Netherlands amounted to 17%, in Belgium to 2,5% and in Germany to 2%.²³⁵ Since August 2000 the number of new entrants on the Dutch market amount to 4, in Belgium 1 and in Germany 7. However, in 2000 a large percent of buyers in both Belgium and The Netherlands (75%) feel that there is too little competition. In Germany this is slightly less with 50% of the buyers dissatisfied with the amount of competition on the market.²³⁶ The main obstacles to competition in 2000 are the inadequate or ineffective unbundling, the high level of transportation and packaging costs, the daily balancing, the degree of access to the local grids, the lack of direct availability of storage, the high amount of medium and long-term contracts into which clients are locked, the poor disclosure of logistic information and the lack of new sources of gas. In addition, access to the market is blocked partially by the extensive amount of vertical integration linking on the one hand production interests (Belgium: Shell holds a minority stake in Distrigas; Germany: Shell and Esso hold shares in BEB, Ruhrgas and Thyssengas respectively; The Netherlands: Shell and Esso hold stakes in NAM and Gasunie) and on the other hand incumbents (predominantly transmission undertakings) and distributors (Belgium: the ultimate shareholder of Distrigas, Suez Lyonnaise des Eaux, has strong interests in distributors; Germany: Ruhrgas has minority interests in regional companies and distributors, RWE+GAS and E.On even cover the whole chain, including small productions interest).²³⁷ In 2002, restrictions to competition remained. Major problems to the functioning of cross border trade were the lack of harmonisation with respect to the tariff structures and the correspondingly high tariffs, the non-transparent methods for allocation of capacity, which is in general not based upon the market mechanisms. Furthermore the lack of interconnection and the existence of dominant market players restrains competitive activity.²³⁸

In 2004, the number of active licensed suppliers in The Netherlands amounted to 24, and to 770 in Germany. The number of suppliers which

²³⁵ *Ibid.*

²³⁶ *Ibid.*

²³⁷ *Ibid.*

²³⁸ *Supra* n. 230.

operated independently of the distribution system operator amounted to 12 in Germany, and to 5 in Belgium. The number of suppliers with a market share larger than 5% in the respective markets amount to 5 in Belgium, 1 in Germany and 4 in The Netherlands, The top suppliers have an overall market share of 39% in Belgium, and 6% in Germany. The market share of the top three suppliers in Germany is less than 15%, in Belgium 54% and in the Netherlands 75%.²³⁹ This indicates a large amount of market concentration. In 2004, the competition within the European gas sector still tags behind the liberalisation effects which are visible in the electricity market. There is a need for greater consistency for transactions between different transmission system operators. Some improvements have been made concerning transparency as regards the availability of infrastructure capacity, as most transmission system operators presently publish this information. However, the publication of available capacity at the most relevant entry and exit points still needs to be accomplished in many Member States. Non-discriminatory and transparent TPA and access to storage thus remain problematic as provisions regulating these issues have not been correctly implemented in all Member States. A harmonised methodology to calculate and compare available capacities is also missing. Even though capacity reservation procedures are more flexible and responsive to clients for TPA and balancing regimes have been improved, effective harmonization is still lacking. In most Member States unbundling of transmission system operators has occurred by 2004 (Germany and Netherlands: management and Belgium: legal), as well as the unbundling of distribution system operators (Germany: accounts, Belgium: legal and The Netherlands: legal). In Belgium and The Netherlands network access conditions have been published by the regulatory authority, whilst in Germany network access conditions remain unregulated (this must change in accordance with the new EC Gas Directive 2004). In both Belgium and The Netherlands information powers are strong.²⁴⁰ However, the competition is still obstructed through the continuing dominance of incumbent companies in some Member States. A better management of the

²³⁹ *Supra* n. 230.

²⁴⁰ *Ibid.*

EU network might reduce problems the of the concentration of gas production and import and permit more competition. However, in order to achieve this, harmonised solutions on cross border issues must be applied.²⁴¹

According to Eurobarometer Reports for Consumers (domestic users of the gas system, e.g. households), in September 2000,²⁴² 74% of the consumers replied that access to services of general interest within the EU was easily obtained, whilst 11,5% had no access to such services. 70% of the surveyed group indicated that they were satisfied with the provision of gas and 54,8% indicated to be satisfied with the price of gas, and 86,4% was satisfied with the quality of services relating to the gas sector. More specifically, 65% was happy with the information they received and 61% was satisfied with the contracts concluded with the providers of gas. In new surveys conducted in both August and October of 2003²⁴³, access to gas supply services was experienced as easy (ease of access means seeing a connection at the moment that this becomes technically feasible), at least by customers who lived in the area served by the gas network. The price of gas is considered as fair by the majority of the customers in the Member States, except Italy. This is partly due to the fact that the image of gas as a relatively low priced energy source is widespread. The information supplied by the gas supplier is generally rated as clear, however this information is limited to bills and price conditions. The terms and conditions of the contract remain vague in the eyes of many customers and are rarely understood. Customer service is rated as fairly good. However, the interest in having the choice of supplier seems less important in the gas sector than in the electricity sector. Again this may be related to the fact that gas is perceived as a cheap energy source, whilst the possibility to achieve savings on electricity are perceived to be higher.

²⁴¹ *Ibid.*

²⁴² European Commission, Eurobarometer (September 2000), *European consumers and services of general interest: qualitative study in the 15 Member States.*

²⁴³ European Commission, Eurobarometer (October and August 2003), *European consumers and services of general interest: qualitative study in the 15 Member States and the 10 countries acceding to the European Union in 2004.*

8 Conclusion

The goal of liberalisation is to eliminate market imperfections, introduce competition and correspondingly lower prices. Whilst gas markets were historically regulated due to their network characteristics, technological change has induced competition in parts of these markets, specifically in the areas of distribution and supply.

At the time of writing, December 2004, the Community has come a long way with respect to the liberalisation of the gas markets. From the first steps towards a common Community Energy Policy in 1951 with the establishment of the ECSC, to the entry into force of EC Gas Directive 1998 and 2003, till the recent proposal for a Regulation on the conditions for access to the gas transmission networks.²⁴⁴ It can be stated without doubt that liberalisation has made its entry at last into the gas sector. Whilst the transmission, supply and distribution of gas was formerly the exclusive domain of vertically integrated natural gas companies undertaken with the objective of securing the market, liberalisation measures have opened the market up to new entrants. Problems of course remain, and measures will have to be constantly improved, as has already been shown by the entry into force of a revised Gas Directive. Coherent technical and commercial trading rules for the operation of gas networks, TPA, legal unbundling, transparent and non-discriminatory tariffs, as well as the interoperability of gas network systems remain important. The Commission will continue to direct its focus on the gas markets.

Has liberalisation had the desired increase on consumer welfare? This remains difficult to assess. Welfare effects are important for both industrial customers and domestic end-users, which in the light of the gas market may both be characterised as consumers. Most of the data which is presently available relates to the period 2000-2002/2003, when the Gas Directive 2003 was not yet implemented. In addition, most data refers to

²⁴⁴ Proposal for a Regulation of the European Parliament and of the Council on conditions for access to the gas transmission networks, 10.12.2003, COM(2003).

industrial users. It is not strange that the welfare effects for domestic customers are difficult to assess, as these have just become eligible in Member States, with full market opening obliged in all Member States as of 1 July 2004. Correspondingly, households have only begun to reap the benefits of liberalisation.

The parameters which might indicate an increase in consumer welfare are prices, TPA, and the introduction of a larger choice of suppliers, in addition to transparent tariffs and conditions of supply. The gas prices on the market for natural gas do not indicate a significant decrease since liberalisation. This is however, partly due to the rising oil prices. The price discrepancies between Member States have seemed to decrease, which may indicate a positive effect on liberalisation, and an increase in welfare, as prices will continue to adjust and balance each other out. The fact that numerous suppliers have been able to enter the markets, pressures incumbent monopolists to reduce their prices and operate in a cost efficient way. The increase in suppliers in the market also means that customers have a larger choice in choosing their gas suppliers. With regard to TPA, access conditions remain difficult in some Member States. The obliged designation of a regulatory authority as prescribed by the new Gas Directive 2003 aids in securing TPA.

Regardless of the opinions polled by the Eurobarometer, consumers regard supplier contracts to be unclear. Member States must aim to increase the quality of these contracts. Gas Directive 2003 incorporates provision (Article 3) on consumer protection. Accordingly The Netherlands have already, implemented this obligation by incorporating in the new Gas Act 2004 a special provision on consumer protection which aims to ensure that fair and reliable contracts are concluded between consumers and the suppliers of gas.

With full liberalisation finally achieved on 1 July 2004, further development of the gas markets and the effects on welfare are expected. Markets are continually changing and I am anxious to see as to whether in the coming

years, we will be comparing gas prices of suppliers in order to conclude a contract with the supplier offering the best conditions and tariffs.

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