

## Notes on the Bill

### General notes

#### 1. The background to the Bill

##### 1.1. The agreement on reform follow-up.

On 22 March 2000, a majority of the parties in the Folketing (Danish Parliament) entered an agreement concerning following up the reform in the area of energy. The agreement concerning the reform follow-up (cf. annex 1), lays down, inter alia, the framework and the principles for the implementation of the Directive of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas (The Gas Directive (cf. annex 2)).

##### 1.2. The objective of the Bill.

The objective of the Bill is to modernise and adjust the legislative framework for natural gas supply in connection with the implementation of the Gas Directive. The Bill is also to put into practice a number of provisions in the agreement that the State entered with Hovedstadsregionens Naturgas I/S (HNG) and Naturgas Midt-Nord I/S (NGMN) concerning the structure and state aid conditions in the gas sector, the “St. Hans Agreement” (cf. annex 3). The St. Hans Agreement states that Naturgas Sjælland I/S (NGSJ) and Naturgas Fyn I/S (NGF) can join in the agreement on the same terms as HNG and NGMN. The Agreement sets out the framework for the future organisation of trade in natural gas and future state subsidy to the natural gas sector.

The parties to the agreement on the reform follow-up agree that the regulation of the natural gas sector is to satisfy the following general considerations:

- A well-functioning natural gas system with a high degree of security of supply.
- A well-functioning market for transmission, distribution and supply and storage of natural gas, with continued encouragement for cost effectiveness.
- Access to the natural gas system on objective and non-discriminatory terms.
- The need for supporting the sector to be limited as far as possible.
- DONG Naturgas<sup>2</sup> should be in a position to fulfil its commitments to, inter alia, DUC in the take-or-pay contracts that have been entered.
- Consumer protection, free choice of supplier for some consumers and advice concerning energy savings.
- Economically and environmentally efficient interaction with the European natural gas system and with the remainder of the Danish energy sector.
- Maintenance of Denmark’s low gas prices for industry.

The Bill lays down the overall framework for a well-functioning natural gas supply system. As part of consumer protection and to fulfil the objectives of Danish energy and environmental policy, the natural gas sector is obliged to carry out tasks relating to security of supply and supply committed

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<sup>2</sup> DONG Naturgas was called DONG A/S from the time the company started up in 1972 until June 1983 when in connection with the Act on DONG A/S the undertaking was separated into Dansk Naturgas A/S (Dangas). When the DONG group took over Naturgas Syd I/S, Dansk Naturgas A/S changed its name to DONG Naturgas A/S.

activities and other public tasks. The gradual opening of the natural gas market, which means that some consumers will have a free choice of gas supplier, together with efficiency-promoting price regulation is to contribute to the realisation of the efficiency potential in the sector. The Bill creates the basis for continued efficient utilisation of the infrastructure that has already been established.

### **1.3. New framework conditions.**

In recent years the international framework conditions of the energy sector have undergone significant changes, necessitating the adjustment of national legislation. Efforts to establish an internal energy market in accordance with the principles of EU law on the free movement of goods, persons, services and capital were formally initiated when the Commission presented a White Paper in 1998.

The first phase of the liberalisation of the energy markets was implemented in 1990-91 with the Directives on the transit of electricity, (90/547/EEC, Official Journal of the European Communities 1990, no. L 313, p. 30), and natural gas (91/296/EEC, Official Journal of the European Communities 1991, no. L 147, p. 37), and the Directive concerning price transparency (90/377/EEC, Official Journal of the European Communities 1990, no. L 185, p. 16), and in 1994 the Directive on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons (94/22/EEC, Official Journal of the European Communities 1994, no. L 164, p. 3) was adopted. In 1992 the Commission presented proposals for common rules for the internal market in electricity and natural gas, respectively. The objective of the market directives for electricity and natural gas is to open and integrate the energy markets which have traditionally been characterised by a lack of competition in most EU Member States.

In December 1996, the Directive concerning common rules for the internal market in electricity (the Electricity Directive) (96/92/EEC, Official Journal of the European Communities 1997, no. L 27, p. 20) was adopted, and in June 1998 the Directive concerning common rules for the internal market in natural gas. Thus, a common framework has been established for gradual opening of the national electricity and natural gas markets. The Directives contain the possibility for making allowances for the way in which the energy sectors are organised in the different countries, in connection with their implementation. The Electricity Directive was implemented in Danish legislation by Act no. 375 of 2 June 1999 on Electricity Supply, as amended by Act no. 1110 of 29 December 1999. The Gas Directive is to be implemented in Danish legislation no later than 10 August 2000.

### **1.4. Differences between the gas and electricity sectors.**

In establishing a new framework for the gas sector, it is natural to take a point of departure in the regulation that has been adopted for the electricity sector. In areas where the basic preconditions for regulation of the gas and electricity sectors are the same, it is thus planned that the regulation in the gas and electricity areas should be the same, as far as possible. However, there are significant differences between the two sectors in central areas. The differences have, inter alia, found expression in the Electricity Directive and the Gas Directive, which do not make the same demands for regulation of the two sectors. In relation to the Danish energy sector, the differences make it necessary, for example, to regulate the electricity and gas sectors differently with respect to market opening.

During the negotiations on the Gas Directive, the Government emphasised the importance of ensuring the possibility of organising a gradual, balanced market opening. One important reason for this was the consideration for DONG Naturgas being in a position to fulfil its commitments in the long-term purchase contracts on take-or-pay conditions entered into with DUC, in particular. The contracts imply that DONG Naturgas is to pay for the natural gas even if the undertaking does not buy it. Another important reason was the consideration for the possibility of the regional natural gas undertakings to pay back the large debt incurred due to the very large-scale investments made within a short space of time.

The general provisions of the Gas Directive demand gradual market opening over a 10-year period following the adoption of the Directive. All gas-fired power generators, irrespective of consumption, and other consumers with annual consumption of more than 25 million m<sup>3</sup> per year are to be designated as “eligible customers”. In 2000 opening of the market is to correspond to at least 20% of total annual gas consumption, increasing to 28% and 33%, respectively, in 2003 and 2008. However, Member States have a possibility of limiting the market opening if the definition of eligible customers in the Directive leads to market opening of more than 30% in 2000. If this possibility is utilised, it follows from the Directive that the opening must constitute at least 30% of the total annual gas consumption of the national market in 2000, increasing to 38% and 43%, respectively, in 2003 and 2008.

Due to the special nature of the Danish natural gas market, with a very large share of electricity producers who use natural gas, application of the Directive’s definition of eligible customers would lead to a Danish market opening of 60%. For this reason, during the negotiations on the Directive Denmark attached crucial importance to a provision being inserted in the Directive that gave Member States the possibility of limiting the market opening.

The arguments for a gradual, balanced opening of the Danish market are still valid, and thus the Bill prepares the way for market opening to follow the minimum requirements of the Gas Directive. In this context, it is important that the Danish opening of the gas market is balanced by a corresponding genuine opening in our neighbouring countries so that any market losses in Denmark can be compensated for by sales on the European market.

The reason for market access for all customers being granted in the area of electricity is Denmark’s close connection with the Nordic electricity market, which is an open market already at present. Continued association with the Nordic electricity market and the advantages that this implies are conditional on a correspondingly open market in Denmark. An electricity exchange has been established in the area of electricity where market participants can freely purchase electricity. No corresponding market exists in the area of gas. At the same time, during the next few years, gas markets in Western Europe are expected to be dominated by a few large-scale suppliers, while it is a feature of the electricity area that there are many large and small-scale suppliers of electricity and by the possibility of relatively swift access to and withdrawal of electricity suppliers in step with market changes.

In the area of electricity there is a requirement concerning corporate unbundling of activities while only unbundling of accounts is required in the area of gas. This is, inter alia, because the undertakings in the natural gas sector are publicly owned and distribution and supply committed undertakings will be subject to a modified non-profit principle. Public ownership of the

infrastructure and the proposed price regulation will ensure that the assets that have been built up in the gas sector will continue to benefit consumers and society. It should be noted that Germany, Sweden and the Netherlands are also expected only to require corporate unbundling of activities.

### **1.5. The organisation of the gas sector and its distribution in Denmark.**

DONG Naturgas, which is a subsidiary of the 100% state-owned DONG A/S, has entered into purchase agreements with DUC, the Amerada-Hess Group and the Statoil Group concerning purchase of all the natural gas which hitherto has been for sale in the Danish section of the North Sea. On the Danish market, DONG Naturgas sells as sole supplier to the four municipally-owned regional distribution undertakings (HNG, NGMN, NGF and NGSJ), each of which carry out local supply tasks within their delimited geographical areas. DONG Naturgas also sells to customers in the City of Copenhagen and the Municipality of Frederiksberg and to the large power plants. Finally, DONG Naturgas conducts the distribution of natural gas in southern Jutland and North Schleswig.

The largest small-scale CHP plants are joint customers of DONG Naturgas and the regional natural gas undertaking in whose region the plant is situated. In addition, DONG Naturgas has considerable influence on the terms offered to the customers of the regional undertakings, because DONG Naturgas's contracts concerning sale of natural gas to the regional undertakings shall contain binding re-sale prices and consumer prices, and because the regional undertakings' sales to customers who consume more than 300,000 m<sup>3</sup> are to take place in accordance with uniform, nation-wide guidelines that have been agreed with DONG Naturgas. Further reference is made to the Notes on section 25.

The sale of natural gas has grown since its introduction at the beginning of the 1980's. In 1999 approximately 4.1 billion m<sup>3</sup> of natural gas was sold on the Danish market. The share of natural gas in total Danish energy consumption was 23%, but when the transport sector is excluded, where natural gas is not utilised, the share was approximately 30%.

At present there are more than 305,000 natural gas customers. Directly and indirectly (via natural-gas-based district heating), approximately 2 million Danes are being supplied with heating and hot water based on natural gas. About 1,000 industrial undertakings, CHP plants and district-heating plants are being supplied with natural gas. In 1999, industrial utilisation of natural gas, including for industrial CHP, rose by 5% in relation to 1998 and is now at more than 1.2 billion m<sup>3</sup>. Apart from sales of natural gas to the Danish market, since the middle of the 1980's DONG Naturgas has exported natural gas to Germany and Sweden. In 1999 exports of natural gas to Germany and Sweden comprised approximately 2.7 billion m<sup>3</sup>. DONG Naturgas's total exports of natural gas are expected to comprise approximately 3.3 billion m<sup>3</sup> per year in 2000, corresponding to approximately 45% of the undertaking's total sales of natural gas.

The rising sales of natural gas have necessitated the expansion of storage facilities for natural gas. This has taken place by expanding storage capacity at a natural gas storage facility in Ll. Torup north of Viborg and by starting use of another natural gas storage facility at Stenlille on Zealand in 1993. These storage facilities help to ensure that consumers have a high degree of security of supply at the same time as the facilities are used for seasonal adjustment. In connection with DONG Naturgas's purchase of natural gas from the South Arne field, a decision was taken concerning the

establishment of a new marine pipeline from the field to the DONG Naturgas processing plant in Nybro. When the marine pipeline was commissioned in 1999, total transportation capacity rose by approximately 50%. Simultaneously, DUC's installation at the Harald field was connected to the new marine pipeline to establish an interconnected network in the North Sea. This has considerably improved total security of supply.

#### **1.6. Current natural gas legislation.**

Act no. 294 of 7 June 1972 on Natural Gas Supply with subsequent amendments was adopted by the Folketing (Danish Parliament) on the basis of an inquiry the Philips Group directed to the Danish Government concerning the possibility of supplies of natural gas from the Norwegian Ekofisk field to Denmark, and the possibility of DUC being in a position to negotiate about the supply of natural gas. The main element in the Act is the possibility of granting the exclusive licence for import, sale, transport and storage of natural gas which, following the gas purchase agreement between DONG Naturgas and DUC on 18 June 1979, was granted to DONG Naturgas. In 1994, DONG Naturgas's exclusive right to import natural gas was revoked. It is proposed that the Act be revoked when this Bill enters into force and that DONG Naturgas' present exclusive licence be revoked in connection with the issuing of new licences pursuant to this Bill.

The Installation Act for Natural Gas Supply (Act no. 232 of 8 June 1979) was adopted by the Folketing with a view to authorising the Minister for Trade to expand the share capital in DONG in order to raise the necessary capital base for initiating DONG's installation activities and to approve the Gas Purchase Agreement of 9 March 1979 between DUC and DONG. The present Bill will have no consequences for the Installation Act.

The objective of Act no. 254 of 8 June 1983 concerning Dansk Olie og Naturgas A/S (DONG) is legislative regulation of DONG and its subsidiaries. The Act is based on various deliberations. DONG is to operate on a commercial basis, and the consideration for Parliamentary insight and control, which is ensured through rules laid down in the Act, shall be weighed against the consideration for the undertakings functioning in accordance with the requirements made of a business enterprise. The present Bill has no consequences for the Act on Dansk Olie & Naturgas A/S.

Pursuant to Act no. 382 of 13 June 1990 on Heat Supply, with subsequent amendments, it is the duty of the district council in cooperation with the supply undertakings and other parties involved to carry out planning of heat supply in the municipality. In this connection the district council is to ensure that projects are drawn up for public heat supply plants. The planning provisions of the Heat Supply Act comprise the principles for the distribution of natural gas for space heating, including for the utilisation of natural gas at district heating plants and small-scale CHP plants. Prices and other terms for the supply of natural gas have hitherto been covered by the price provisions of the Heat Supply Act. The Minister for Environment and Energy has, pursuant to the Heat Supply Act, issued a maximum price Executive Order (Executive Order no. 654 of 2 September 1998), in accordance with which the price made up according to heat value may not exceed the price of a corresponding amount of fuel gas oil, inclusive of taxes. While the maximum price provision applies to all customers, its primary aim is to provide small consumers, including household customers, with protection when transferring from oil firing to natural gas. This is to ensure that the natural gas undertakings cannot exploit their market position to raise the price of natural gas when

the customer has been connected to the natural gas network. The present Bill and L 240 (Bill to Amend the Heat Supply Act) taken together propose to transfer price regulation in the area of natural gas from the Heat Supply Act to the Natural Gas Supply Act.

In addition, the Heat Supply Act contains the possibility for the Minister for Environment and Energy, with results for the natural gas undertakings, to make decisions concerning the expansion of the natural gas network, supply commitment and management of the costs of the undertakings. This provision is revoked as it is covered by new provisions in the present Bill. Finally, pursuant to the Heat Supply Act, the Minister for Environment and Energy has issued an Executive Order concerning loan facilities for the regional undertakings (Executive Order no. 864 of 6 December 1998) with a view to limiting borrowing and ensuring debt repayment in the undertakings. This Executive Order is revoked with L 240 as the St. Hans Agreement lays down a long-term, sustainable framework for debt repayment by the undertakings.

Act no. 345 of 2 June 1999 concerning the transfer of natural gas distribution and supply activity to Dansk Naturgas forms the basis for the State being in a position to enter an agreement with Naturgas Syd and Dansk Naturgas A/S (now DONG Naturgas A/S) on taking over Naturgas Syd. The present Bill has no consequences for Act no. 345 of 2 June 1999.

### **1.7. The historical structure of the natural gas sector.**

Against the background of the oil supply crisis in 1973/74, it was a clear objective of energy policy to reduce dependence on oil imports to Denmark. Under the then exclusive licence of 8 July 1962, the licensee (A.P. Møller) and the partners in DUC had made finds of natural gas in the Danish part of the North Sea. When a number of extensive technical and economic studies had been completed, it was the estimation that Danish deposits of natural gas in a number of North Sea fields could justify the establishment of a Danish natural gas supply system. On the basis of the possibilities for natural gas production in the North Sea, in June 1978 actual gas purchase negotiations commenced between DUC and DONG Naturgas, which were completed on 9 March 1979 when an agreement was entered. As is customary in such agreements, DONG Naturgas made a commitment to purchase the natural gas on take-or-pay terms. This means that if DONG Naturgas does not fulfil its purchase commitments, the undertaking is still obliged to pay as if natural gas had been supplied in accordance with the purchase commitments.

On 30 May 1979, the Folketing (Danish Parliament) decided to establish the natural gas project with the adoption by the Folketing of the Installation Act for Natural Gas Supply. The agreement entered into between DUC and DONG Naturgas concerning supplies of natural gas from the Danish part of the North Sea formed the basis of this decision. Furthermore, on 20 February 1979 an agreement had been entered between DONG Naturgas and Ruhrgas on supplies of natural gas from Germany from 1982 to 1985 with a view to collecting experience before the Danish natural gas supplies could commence. In 1982 natural gas supply in southern Jutland and North Schleswig commenced, and supplies to Funen began in 1983. Concurrently with the decision concerning the natural gas project, on 30 May 1979 the Folketing adopted the Heat Supply Act. One of the objectives of the Act was, by means of nation-wide heat-supply planning, to ensure that the utilisation of natural gas and CHP from the large-scale power plants formed central elements in Danish energy supply. Thus nation-wide heat-supply planning has determined the establishment of

the market basis for the dissemination of natural gas for space heating in Denmark, including for the utilisation of natural gas in district heating plants and small-scale CHP plants in the country.

It was judged in 1979 that such large-scale reorganisation of the energy supply systems implied by the establishment of the natural gas project and the development of CHP could not be expected to take place quickly enough without general social planning and management. At the point at which the Folketing adopted the Installation Act for Natural Gas Supply, DONG had already been established for some years and the main lines of the framework for the activity of the undertaking were fixed. Against this background it was natural to allow the State's undertaking to establish and operate the transmission network. On the distribution side, in 1987 the municipalities had established five regional natural gas planning undertakings which were later converted into distribution undertakings proper (HNG, NGF, NGMN, NGS and NGSJ).

There were a number of Annexes to the Bill concerning the Installation Act for Natural Gas Supply, including a "Recommendation concerning the introduction of natural gas into Denmark", which had been drawn up by DONG. The recommendation contained calculations which showed project-economic yield from the natural gas project of 5.8% in real terms if oil prices remained actually unchanged during the project period 1978-2005. If the expected real price increases in oil were allowed for, yield from the project was estimated at 12%.

An important precondition for the economy of the project in the 1979 recommendation was the expectation of a price level of oil of \$12/barrel in 1978 price levels, corresponding to \$29/barrel in 1997 prices. However, since the middle of the 1980's oil prices have been on a considerably lower level.

Moreover, during the 1980's a number of preconditions for the economy of the project changed. The partner municipalities in the regional distribution undertakings choose only to invest 1-2% of the necessary capital requirement, which resulted in the investments mainly being financed by loans. The large oil price rises in the first half of the 1980's resulted, inter alia, in energy savings becoming larger than foreseen when the project started. Utilisation of surplus heat also became profitable to an increasing degree. This meant that the area delimitation that had been assumed between surplus heat and natural gas was not fully realised as CHP supply from the large-scale CHP plants became more widespread at the expense of natural gas. Similarly, the use of coal became more economically advantageous at the beginning of the 1980's, and some of the CHP plants that were assumed to be natural-gas fired in the 1979 recommendation were instead converted from oil-firing to coal firing. Furthermore, it proved to be the case that calculations of the investments and operating costs of the regional undertakings had been underestimated. This was, inter alia, a result of the undertakings being obliged to expand the network and to supply the central and northern area of Jutland because of declining unit heat consumption and competition from other supply systems.

In addition, the calculation assumptions for the natural gas project assumed that a connection obligation to the natural gas network be applied. The Heat Supply Act that had been adopted did not, however, contain any centrally laid down connection obligation but only the possibility that the municipalities could apply a connection obligation. While most municipalities introduced a connection obligation for new construction, only a few municipalities applied a connection obligation for existing buildings. Moreover, district heating plants and block heating units were connected later than expected.

In spring 1984, DONG Naturgas presented a re-evaluation of the budget economy of the natural gas project based, inter alia, on significantly reduced expectation with respect to market build-up. The re-evaluation showed a radically reduced economy together with a capital requirement of just under DKK 7 billion made up in current value. On this basis, in April 1984 the Government entered an agreement with the Social Democratic Party on the infusion of, inter alia, capital to DONG and on the sale of surplus gas to the electricity companies.

The considerable rise in the price of oil at the beginning of the 1980's did not have any significant, direct importance for sales of natural gas and the earnings of the gas undertakings before the price of oil again fell drastically in 1985/86. At that point the natural gas undertakings had already made the majority of the general investments in transmission pipelines, distribution pipelines, the general distribution network and other technical installations.

The decline in the price of oil and in energy prices in general in the middle of the 1980's placed the gas project and the other public heat supply systems in a difficult financial situation. The fall in the rate of exchange of the dollar and the price of crude oil which had taken place weakened the competitiveness of the public heat supply systems, with the prospect of a slow rate of connection to the supply systems if initiatives were not taken to counteract this.

In connection with tightening up finance policy, in 1985/86 the Government decided to raise energy taxes significantly with a view to equalising the fall in prices of oil products and coal. Natural gas was exempted from taxes, which made it possible for the natural gas undertakings to obtain a larger contribution margin - the "shadow tax" - corresponding to the difference in taxes. In this manner it was possible to maintain general energy policy at the same time as the revenue of the gas undertakings and other public heat supply installations was improved. Had the Government not favoured the natural gas undertakings by exempting natural gas from taxes, the regional natural gas undertakings could not have serviced and repaid the debt, which already was large and was growing.

In spite of the improved revenue of the gas undertakings, the development in the financial position of the natural gas project continued to be unsatisfactory. On this basis, the Government found it necessary that steps were taken to ensure the consolidation of the natural gas project simultaneously with a necessary reorganisation of the energy system in order to realise the objective of reducing energy consumption and its environmental impact. The 20 March Agreement between the Government and the Social Democratic Party concerning increased utilisation of CHP, natural gas and other environmentally friendly fuels and concerning development of electricity in the 90s created the political basis for improving the financial position of the natural gas project by the undertakings' sales possibilities being significantly improved with relatively modest extra investments in network development as a result. The main elements of the 20 March 1990 Agreement were formulated in an amendment to the Heat Supply Act in June 1990 and implied, inter alia, that most of Denmark's CHP plants and block heating units were converted to small-scale, natural-gas based CHP in the following years. In addition, natural gas was to be utilised in the large-scale power plants to an increased extent, which contributed to an improvement of the financial position of DONG Naturgas.

To ensure better cost management of the undertakings, an order was, moreover, issued to limit the access of the regional undertakings to take loans in the form of a loan framework for the individual undertaking. The aim of loan frameworks was, first and foremost, to establish a firm, durable

management framework for the economy of the undertakings that set clear limits to the continued financing by the undertakings of current deficits with new loans.

### **1.8. Agreement terms between DONG Naturgas and the regional natural gas undertakings.**

In 1981, DONG Naturgas and NGS entered the “Framework Agreement”, which meant, inter alia, that DONG Naturgas carried the risk for an economic deficit in NGS’s part of the project.

In 1982 DONG Naturgas and HNG, NGSJ and NGF entered the “Joint Agreement”. An important element in the agreement was that the economies of the undertakings were mutually linked as revenues and costs in the individual undertakings would be equalised by means of the purchase prices of the regional undertakings from DONG Naturgas so that all undertakings would be clear of debt at the same time and at the same pace. The economic structure of the Joint Agreement was based on the wish of the undertakings jointly to carry the economic risk during the period when the natural gas project was being built up when insecurity was most acute. But NGS maintained the Framework Agreement and only joined the Joint Agreement in 1984. However, DONG Naturgas continued to carry the risk for economic deficit in the NGS networks that had been established under the terms of the Framework Agreement.

The April 1984 agreement between the Government and the Social Democratic Party concerning support of the natural gas project presupposed negotiations between the natural gas undertakings on the way in which the regional undertakings could contribute to supporting the natural gas project. In continuation of this, the undertakings were requested to negotiate a new basis for agreement that could ensure clear unbundling of the economy of the undertakings so as to achieve better cohesion between the powers of the individual undertaking and its economic responsibility.

These negotiations resulted in the 4 June 1987 Agreement between DONG Naturgas and the regional undertakings (the 4 June Agreement). The Agreement led to unbundling of the economies of the undertakings so that in future each undertaking would carry economic responsibility for its former and future transactions, including development in sales, costs and network expansion, with the exception of the parts of NGS’s network, which were established under the terms of the Framework Agreement. The terms of the Agreement are that DONG Naturgas is to carry the bulk of the risk involved in large-scale fluctuations in consumer energy prices as a result of external factors such as the oil price and the rate of exchange for the dollar and changes in taxes.

The 4 June Agreement means that DONG Naturgas has a supply commitment in relation to the individual regional undertakings which consists of the total annual amount of the orders placed by the regional undertakings, but which may not exceed the maximum annual amounts quoted in the Agreement of a total of approximately 2.6 billion m<sup>3</sup>. In its purchase agreements with DUC, DONG Naturgas has undertaken a take-or-pay commitment, i.e. a commitment to either purchase or else pay for a specified amount of gas. In the terms of the 4 June Agreement, however, the regional undertakings are not under a take-or-pay commitment. This was not considered necessary as, pursuant to the exclusive licence, DONG Naturgas has the exclusive right to deal in natural gas in Denmark. The 4 June Agreement lays down, furthermore, the price conditions for gas supplies from DONG Naturgas to the regional undertakings and contains provisions concerning the conditions for resale by the regional undertakings to the end users. This ensures, inter alia, that sales take place according to uniform, nation-wide guidelines.

When the Folketing adopted an increase of the energy tax on natural gas from DKK 0.1/m<sup>3</sup> to DKK 1.23/m<sup>3</sup> combined with a tax free basic allowance at the latest up to and including 2000 of 2.6 billion m<sup>3</sup> for the regional natural gas undertakings (the Basic Allowance Act) in June 1997 (cf. section 1.10), DONG Naturgas and the regional undertakings in October 1997 entered a three-year agreement of principle as an addendum to the 4 June Agreement. The Agreement concerns the amounts that exceed the amounts in the 4 June Agreement up to total deliveries of 3.7 billion m<sup>3</sup> annually in the period up to market opening, but no longer than up to and including 2000. In autumn 1998 the agreement of principle was enshrined in a supplementary agreement proper to the 4 June Agreement (The Supplementary Agreement), which makes allowance for new taxes on natural gas.

### **1.9. Contracts between DONG Naturgas and DUC etc.**

Relations between DONG Naturgas and DUC are regulated in the gas purchase agreements of 1979, 1990 and 1993, respectively. The first agreement, from 1979, concerns a total agreed amount of 55 billion m<sup>3</sup> to be delivered between 1984 and 2009. In step with the rising number of contracts on the Danish market and the possibilities for further sales of natural gas on the Danish market and export to Germany and Sweden, in 1987 DONG Naturgas commenced negotiations with DUC concerning purchase of further natural gas deliveries. In March 1989 agreement was reached on an agreement of principle for further deliveries of natural gas from DUC's North Sea fields of 38 billion m<sup>3</sup>. This brought the total amount of natural gas for the Danish market and for export to Sweden and Germany to 93 billion m<sup>3</sup>.

In 1993 DONG Naturgas and DUC entered a new agreement which increased total annual deliveries from the North Sea to 7.5 billion m<sup>3</sup> per year. The new agreement does not operate with a fixed total amount as the volume of total deliveries depends on the length of time that DUC can maintain production. Concurrently with this agreement, DONG Naturgas entered an agreement with Ruhrgas AG and BEB to increase export to Germany to 2.5 billion m<sup>3</sup> a year.

DONG Naturgas's agreements with DUC cover total annual deliveries of up to 7.5 billion m<sup>3</sup> of natural gas. DONG Naturgas covered part of the future demands for further amounts by means of an agreement with the Amerada Hess group concerning purchase of natural gas from the South Arne field. This is expected to contain approximately 3-5 billion m<sup>3</sup>. DONG Naturgas has, likewise, entered an agreement concerning purchase of natural gas from the Statoil concern's part of the Lulita field. This is primarily an oil field but is expected to contain 0.3 billion m<sup>3</sup> of natural gas.

Thus, DONG Naturgas has contracted all the amounts of natural gas that have been for sale in the Danish part of the North Sea. Consideration for flexible, appropriate organisation of Danish oil and natural gas production and the possibility for the development of new, small fields means that it is important that there is a high degree of security for Danish natural gas being able to be sold via the Danish natural gas network also in the years to come. The contracts entered between DUC and DONG Naturgas contain a high degree of flexibility as the size of the total deliveries is dependent on the length of time that DUC can maintain production. This is of great economic significance for DUC's organisation of oil and gas production in the North Sea.

## **1.10. The State's negotiations with the regional undertakings concerning the structure of the gas sector.**

As mentioned in section 1.7, the natural gas project has been supported since the middle of the 1980's by means of preferential tax treatment of natural gas in relation to oil. The value of this preferential treatment has risen in step with rising sales of natural gas and in 1999 comprised a total of approximately DKK 2.4 billion. At the end of 1999 total preferential tax treatment granted to the natural gas project is estimated at DKK 45 billion made up in current value - 1999 price level. In April 1994, Denmark made a decision to discontinue DONG Naturgas's exclusive right to import as the European Commission had commenced treaty violation cases against Denmark and a number of other Member States in 1991. In this connection the Government made a decision of principle that adjustments would have to be carried out in the Danish natural gas sector, including re-structuring of support to the natural gas sector. Therefore, DONG Naturgas and the regional undertakings were requested to commence negotiations concerning a new basis for an agreement to replace the 4 June Agreement. However, DONG Naturgas and the regional undertakings were unable to agree on the terms of a new agreement basis. In addition, for many years the Government conducted negotiations with the regional undertakings concerning re-structuring the support without agreement being reached concerning the level of the total future support to the regional undertakings.

After several years of fruitless negotiations, the Government choose to legislate. On 8 April 1997 the Government presented a Bill to amend the tax on natural gas and town gas – the Basic Allowance Act – with a view to limiting the rise in future support to the gas undertakings. The Act was adopted by the Folketing on 17 May 1997 but only entered into force on 1 September 1998 following approval by the European Commission pursuant to the state aid regulations of the EU Treaty. The Act meant an energy tax rate corresponding to approximately 80% of the tax level on oil products. As, pursuant to the tax shielding in the 4 June Agreement, the regional undertakings may pass tax increases on to DONG Naturgas, the regional undertakings were allowed a basic allowance in tax payments for natural gas corresponding to the 2.6 billion m<sup>3</sup> of natural gas annually that is contained in the 4 June Agreement. Therefore, in practice the tax changes only apply to the amounts of natural gas that exceed the provisions of the 4 June Agreement. With the commencement of the Act, annual support to the regional undertakings was limited by approximately DKK 600 million. This was the first step towards adapting the Danish natural gas sector to the coming internal market in energy.

In autumn 1998, N M Rothschild & Sons Ltd., an English firm of consultants, were asked to conduct an evaluation of the structure of the Danish natural gas sector. The evaluation revealed that a more appropriate structure would provide considerable potential for efficiencies in the natural gas sector.

On the basis of this evaluation, in December 1998 the State/DONG offered to buy the regional undertakings with a view to establishing a more efficient and appropriate organisation of the natural gas sector prior to the coming liberalisation of the sector. NGS's owner municipalities accepted the State's offer while the owner municipalities in NGF, NGSJ, NGMN and HNG did not wish to sell the undertakings. Against this background on 26 May 1999 the Folketing adopted the Act concerning the Transfer of Natural Gas Distribution and Supply Activity to Dansk Naturgas A/S. This Act forms the basis for DONG Naturgas taking over NGS on 1 July 1999. To ensure the necessary capital base in DONG Naturgas when NGS was taken over, the State invested DKK 1.4

billion in DONG per 1 July 1999 as subordinate loan capital which is to be paid back over three years from 2006.

Naturgas Syd was the most indebted of the regional natural gas undertakings. For this reason DONG Naturgas' purchase of Naturgas Syd has meant that a considerable debt problem for the natural gas sector has been solved. The four other natural gas undertakings were unable to reach agreement on a joint basis for negotiations with the Government on carrying out tasks and on support terms in the sector. On this basis negotiations were initiated between the State, HNG and NGMN that resulted in the St. Hans Agreement of 23 June 1999. The Agreement means that municipal engagement in the gas sector has been retained and that the two undertakings are to remain distribution undertakings and supply undertakings with a supply commitment which only sell gas on fixed tariffs and terms. Customers demanding individual discounts or terms are to go over to DONG Naturgas. It is a clear objective in the Agreement, that the regional undertakings as a whole before the beginning of 2014 are to have paid off their historical debt by means of revenue from their distribution and supply activities. In this connection the undertakings have committed themselves to carrying out significant rationalisations, inter alia by means of increased cooperation. The Agreement means, moreover, that the two undertakings are to enter a new agreement with DONG Naturgas to replace the 4 June Agreement and the Supplementary Agreement concerning the transfer of customers from the undertakings to DONG Naturgas, the division of tasks between the undertakings and DONG Naturgas, prices for transportation in the distribution network, and prices and terms for gas deliveries to customers on fixed terms. NGF and NGSJ have the possibility of acceding to the St. Hans Agreement on the same terms as HNG and NGMN. The St. Hans Agreement is formulated in the agreement of principle of 29 January 2000 between HNG, NGMN and DONG Naturgas. The agreement of principle is expected to be formulated in a final agreement before 1 July 2000.

The economic preconditions for the Agreement imply that all four regional undertakings as a whole could have paid off their historical debt in 2014 under more specific assumptions concerning future revenue from distribution and supply activities, the development of interest, operational efficiencies and support terms. It is a basis for the Agreement that basic allowances in tax payments for natural gas cease as per 1 January 2000, but that the tax on natural gas of approximately 80% of the oil tax level will be kept in operation. With the Agreement, already from 1 January 2000 the support to the natural gas sector will be considerably reduced. The most recent rises in the energy tax on natural gas mean that today the rate of tax corresponds to approximately 85% of the oil tax level.

## **2. The content of the Bill.**

The objective of the Bill is to ensure that the natural gas supply of the country is organised and implemented in accordance with consideration for security of supply, the national economy, the environment and consumer protection. Within the terms of this objective, the Bill is to ensure consumers access to inexpensive natural gas by means of the gradual introduction of competition into the market for trade in natural gas and efficiency-promoting price regulation.

### **a) The position of natural gas consumers.**

The position of natural gas consumers is clarified in Part 2 of the Act. The three most important elements in the Bill are: the right to deliveries of natural gas for all consumers in areas designated for natural gas supply pursuant to the Heat Supply Act and others who are or will be connected to the natural gas supply network by means of a supply offer from a supply-committed undertaking; the right of certain consumers to freely select their natural gas supplier at specific points in time; and the consumers' obligations to contribute to paying for the general, public commitments which the natural gas undertakings are ordered to comply with in the Act.

Market opening with negotiated access to transmission networks, storage and any LNG facilities and regulated access to the distribution network are proposed. It is, furthermore, proposed that the Minister for Environment and Energy be authorised to lay down rules concerning access to upstream pipelines. The Bill authorises the Minister for Environment and Energy to issue rules concerning which natural gas consumers have the right to select a supplier. The rules are to lead to a 30% market opening of total domestic natural gas consumption from the commencement of the Act, rising to 38% and 43% from 1 August 2003 and 1 August 2008, respectively.

An important element in the Bill is that all domestic consumers must on equal terms carry a proportionate share of the costs of the public commitments imposed on the natural gas undertakings and which benefit all consumers. These comprise: expenditure on research and development, safeguarding security of supply, ensuring the quality of natural gas, net balancing, gas security, energy saving activities and marketing activities with a view to reducing the environmental impact of consumers' energy consumption.

#### **b) Transmission, distribution, storage and LNG activity.**

The Bill distinguishes between, on the one hand, network, storage and LNG activity and, on the other hand, supply activity. By network, storage and LNG activity is meant handling the natural gas infrastructure, including transport of natural gas through the network, while supply activity means purchase of natural gas with a view to re-sale. The Bill operates with four types of undertakings: transmission, distribution, storage and LNG undertakings. However, it will be possible formally to gather the activities in one undertaking. The Bill only requires that the accounting of the activities should be unbundled, cf. section 1.4 and the Notes on section 47.

A transmission undertaking handles the transport of natural gas through the transmission network with a view to delivering it to the distribution network and some big customers. Since the natural gas project started up, transmission activity in Denmark has been handled by DONG Naturgas.

The distribution undertakings handle the physical connection from the transmission network to the final users at distribution level. Distribution activity in Denmark is geographically spread over five undertakings, cf. section 1.5.

Storage undertakings handle the storage of natural gas, inter alia for purposes of emergency supply, maintaining the physical balance in the transmission and distribution networks, and seasonal levelling. Like transmission activity, since the natural gas project was started up storage activity has been handled by DONG Naturgas.

LNG undertakings handle the operation of facilities utilised for reception, gasification or storage of LNG and liquefaction of natural gas. There are no LNG undertakings in Denmark at present.

Pursuant to the Bill, transmission, storage and distribution undertakings must, inter alia, ensure that the transportation and storage of natural gas is adequate and efficient, including maintenance, restructuring and expansion of the network, ensure the physical balance in the network, connect consumers, place transportation and storage capacity at disposal and ensure that delivery and purchase are measured.

Unlike the Electricity Supply Act, this Bill does not contain provisions concerning system-responsible activity. Instead, the Bill lays down that transmission, storage and distribution undertakings should cooperate to draw up rules for gas transport, inter alia with a view to securing security of supply and efficient operation of the interconnected system.

Transmission, storage and distribution activity can only be carried out on licence. It is thus ensured by requirements in the licences that the undertakings, among other things, fulfil a number of public commitments concerning, for example, security of supply, research and development, and energy consultancy. In contrast to transmission and storage activity, distribution activity has not previously been covered by a licence system.

The operation of LNG facilities is not covered by a licence system. However, the installation of LNG facilities will require the permission of the Minister for Environment and Energy pursuant to the Natural Gas Supply Act. The establishment of transmission networks and direct pipelines will also require the permission of the Minister for Environment and Energy pursuant to the Natural Gas Supply Act. Under normal circumstances, permission will only be granted if there is not sufficient capacity in the natural gas supply system.

#### **c) Supply activity.**

It is proposed that natural gas supply to consumers without market access may only be carried out on licence. Two types of supply licences are introduced: a licence for supply on fixed terms and a licence for supply on individual terms, (which will typically be supply of large-scale district-heating plants, block units and business enterprises). A licence is not required for supplying customers who may freely select a supplier.

As a part of consumer protection, the establishment of supply-committed undertakings is proposed. Supply commitment is imposed on undertakings with a licence to supply on fixed terms. These undertakings are to ensure that all potential consumers in areas which are designated for natural gas under the terms of the Heat Supply Act, and others who are or will be connected to the natural gas supply network, are offered deliveries of natural gas in accordance with a fixed price structure and on fixed terms. The supply of customers on fixed terms shall be unbundled in the accounts from the other activities in the undertaking.

#### **d) Transfer.**

A new element is the proposal to insert rules in the Natural Gas Act concerning pre-emptive rights for the State when a distribution network is to be sold and concerning the reduction of a municipality's general state subsidy when municipally-owned natural gas undertakings are sold.

**e) Prices and terms for natural gas, including network access.**

In general, the prices and terms for deliveries of and terms for natural gas are under the control of the Energy Regulatory Authority. Price control covers both the overall price of natural gas and the individual elements in the price of natural gas.

As in the current Heat Supply Act, regulation of the overall natural gas price is mainly aimed at small consumers where the changeover to alternative fuels would imply relatively high costs, and at consumers who are obliged to utilise natural gas pursuant to the Heat Supply Act, but the latter only to the extent that they do not have market access. The price is assessed on the basis of the price of natural gas on markets where the gas is sold in competition with alternative fuels. In addition, the present maximum provision of the Heat Supply Act is maintained.

As a point of departure, the overall price of natural gas for large-scale consumers who have the possibility of utilising alternative fuels and for consumers with market access has not been regulated as it is presupposed that the natural gas will be sold in genuine competition with alternative fuels and/or natural gas from other suppliers. However, the Energy Regulatory Authority can intervene if there is an indication that the gas supplier is not offering a consumer reasonable prices and terms.

When the overall natural gas price is being assessed, consideration must be shown for the economy of the natural gas undertakings as they should have the possibility of absorbing the difference between the energy tax on natural gas and oil, the so-called shadow tax, when selling natural gas for purposes of space heating.

Activities under a distribution licence and a licence to supply customers on fixed term is to be subject to a modified "non-profit" principle. The necessary costs of services when operations are efficient can be included in the prices of services provided under these licences. The necessary costs will form the basis for the revenue framework for the undertakings. To the extent that the undertakings can realise savings in relation to the costs that form the basis of the revenue frameworks, the undertakings will make a profit which can be partially or fully utilised to reduce prices, set aside for future investments or for payment of interest on investment capital.

When an assessment is made of the activities covered by the licences for distribution and supply of customers on fixed terms, the St. Hans Agreement must be taken into account. The prices that are set should thus ensure that the total historical debt in the undertakings that are parties to the Agreement can be paid off before the end of 2014 on the prior condition that sales and interest do not significantly deviate from the preconditions that formed the basis of the Agreement and that the costs do not exceed the costs that form the basis of the revenue frameworks.

Regulated access to the distribution network is a logical consequence of the modified "non-profit" principle. That is to say that third parties gain access to the distribution network on the basis of published tariffs and terms. The distribution tariffs must be set in such a way that the costs of the network are distributed independently of transport distance and the tariffs must truly reflect costs in

relation to the individual user of the distribution network, in the sense that the individual user of the distribution network, as a minimum, bears the costs that can directly be attributed to the user.

Prices and terms for third-party access to the transmission network, storage and LNG facilities are to be established by negotiation. In principle the prices are determined by the market, but as the undertakings can have a monopoly-like position the Energy Regulatory Authority is to monitor that there is no discrimination between users of the transmission network, the storage facility or the LNG facility, including that a supply undertaking which is not associated with one of the above-mentioned undertakings, is not placed in a more favourable position than other users.

The activities carried out under licence for supply of customers without market access on individual terms, including gas deliveries to the regional natural gas undertakings and supply of customers with market access, are regarded as purely commercial activities and are subject to control by the Energy Regulatory Authority.

The Energy Regulatory Authority is also to monitor that cross-subsidisation does not take place between the activities subject to licence and between activities subject to licence and coordinate activity.

#### **f) The Energy Regulatory Authority.**

The Electricity Supply Act means that a supervisory authority has been appointed – the Energy Regulatory Authority – to replace the Electricity Price Committee and the Gas and Heat Price Committee.

The objective of the sector-specific regulation implied by the new Natural Gas Supply Act is to monitor and regulate the tasks not subject to competition which are still carried out on monopoly or monopoly-like terms. Regulation is necessary to ensure equal terms for all users of the natural gas supply system and consumers who do not have market access. Price regulation and economic supervision are to prevent the natural gas undertakings from reaping the benefits of a monopoly-like status resulting in increased costs and inefficiency. The object of supervision is to create cost-effectiveness and encouragement to efficiency measures.

The guidelines for the duties and competence of the Energy Regulatory Authority are contained in the Bill or in general rules which are laid down by the Minister for Environment and Energy.

#### **g) The Energy Complaints Board.**

It is proposed that the decisions of the Energy Regulatory Authority can be appealed to the Energy Complaints Board, which is to be the general complaints authority in the field of energy. It is likewise proposed that in general the Energy Complaints Board should function as the complaints authority in relation to decisions made by the Minister for Environment and Energy.

#### **h) Parliamentary insight.**

It is proposed that the existing provision that the Minister for Environment and Energy is to keep a Committee appointed by the Folketing informed about all important matters concerning Denmark's natural gas supply should be maintained.

### **3. Evaluation of the consequences of the Bill**

### **4. Hearing**

### **5. Monitoring of legislation**

### **Notes on the individual provisions of the Bill**

### **Annexes**