

N O T A T

Regulators' Annual Report to the European Commission - 2005

Contribution for Denmark compiled by Danish Energy Regulatory Authority (DERA)

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1 Foreword

ENERGITILSYNET

The attached reporting on the supervisory duties of the DERA as well as the reporting on competition of the Danish Competition Authority (DCA) reflect the very rapid change of the Danish energy sector.

Of paramount importance in the structural development is the merger activity in production and distribution but also the merger of the two electricity TSOs and the gas TSO into one state owned TSO.

It is my expectation and hope that the new Danish TSO will be able to meet the challenge and take on the role as a proactive market designer and thus facilitate cross border trade.

Of course this rapid structural change of the sector affects the work to be done by DERA and I particularly would like to stress, that a political agreement in the spring of 2004 supported the framework of the regulation in different areas.

First of all the political agreement resulted in a legal solution to the case on equity in the electricity grid companies which had resulted in a regulatory stalemate between DERA and the sector. DERA was not in a position to approve the opening balances of the grid companies and this resulted in a barrier to structural development in the electricity sector.

Secondly the agreement introduced a transitional price cap regulation in 2004 and time out to revise the revenue regulation of the grid companies of 2000 into a more forceful regulation.

DERA has recently launched a forward looking quarterly price control of the supply obligated companies and ordered some of the companies to lower tariffs in the first three quarters of 2005. The supply obligated companies supply up to 3 million small and medium sized household customers on market terms. The decision has been appealed by the organisation of the electricity companies, "Dansk Energi".

The final opening of the gas market was introduced in 2004, which is reflected in structural changes and the introduction of a new regulatory set up in the form of income cap regulation.

Finn Dehlbæk
Deputy Director General

2 Summary \ Major Developments in the last year^[1]

Basic organisational structure of the regulatory agency

The primary task of the Danish Energy Regulatory Authority (DERA) is to monitor/regulate the monopoly companies in the Danish Energy sector, i.e. the electricity gas and heating network companies. DERA's primary focus in performing this statutory task is by regulating prices, but the authority also holds responsibilities in regulation of terms of delivery, grid access and to facilitate transparency.

The regulatory tasks of Directive 2003/54 and Regulation 1228/2003 are shared between DERA and the Danish Energy Authority (DEA), which is a directorate under the Ministry of Transport and Energy. For instance the responsibility of issuing and monitoring compliance with licences is held by the DEA. Three acts on electricity, gas and heat respectively form the legal basis. Pure competition issues are not dealt with in these legal acts and are monitored/regulated by the Danish Competition Authority (DCA).

The enforcement role of setting secondary legislation is held by the Minister of Transport and Energy or on his behalf by the DEA. However, DERA is entitled to set up rules/regulations regarding transparency facing the customers and data to be reported or notified.

DERA has been appointed by the Minister of Economy and Business Affairs for a 4 years period. Since then the responsibility for energy has been moved to the Minister of Transport and Energy and so has the competence to appoint. DERA comprises a chairman and 6 members of which one is designated as vice chairman. Furthermore 2 substitutes are appointed.. The law stipulates that the members shall be independent of the parties in the energy sector and they shall represent legal, economic, technological, environmental, business and consumers expertise

The costs of DERA are recovered by fees levied on the regulated companies.

The staff of the secretariat of DERA are seconded from the Danish Competition Authority. In addition staff from the DEA are seconded to the Danish Energy Regulatory Authority in order to support sharing of knowledge between the licensing and the purely regulatory institution.

Decisions taken by DERA or by its secretariat cannot be changed by the minister. However, such decisions can be taken to the "Energy Board of Appeal" (and subsequently to civil court). According to the Electricity Supply Act DERA has an obligation to inform the Minister about matters which in the opinion of the Board is consid-

^[1] In general, the report should seek to cover developments during the period from July 2004 to July 2005 and data should reflect this period as far as possible. Where data for the calendar year is requested, 2004 is the appropriate reference year.

ered of relevance to tasks in relation to licensing issues and to the legal framework governing the tasks of DERA.

Main developments in the gas and electricity markets and major issues dealt with by the regulator.

The most important development in the electricity sector was a political agreement of March 2004 among a broad majority of parties in Parliament, which among other issues settled a dispute on ownership of equity capital in the network-companies after a re-evaluation of assets in the year 2000 when incentive regulation was introduced. The agreement was accompanied by an agreement between the Minister of Economic and Business Affairs and the industry association of network and supply obligated companies, whereby the ownership of the TSOs – including network-assets – were transferred to the Danish state. Important aspects of the agreement did not come into effect until the end of 2004 or even during 2005. The political agreement was also accompanied by a reform of the former income cap regulation of network companies, where a price cap regulation was introduced in 2004.

The first mentioned element of the agreement did put an end to the distinction between equity of the owners of the grid companies and “tied up” equity (equity financed by tariffs under cost plus regulation regime and former “consumer” ownership).

DERA had worked with this issue for some years and its decision on how to split equity between consumers and the owners of the companies had been brought to the Energy Board of Appeal. As a consequence of this dispute DERA was not able to approve the notified opening balances of the grid companies and had drawn the attention of the Minister to the issue asking for a legal solution to this very important issue for the structural development in the sector.

The next very important aspect of the agreement and the issue on ownership of equity was that a new TSO, Energinet.dk, was established by a merger of the former two Danish electricity TSOs of Eltra and Elkraft Systems and the gas TSO of Gastra. Energinet.dk is owned by the Danish state and its tariffs, prices and conditions of offering electricity and gas transportation and system services will be regulated by DERA.

Finally the agreement implied that the regulation of the grid companies was changed from an income cap regulation with benchmarking into a price cap regulation in 2004. The change was partly due to a political decision, that network prices must not increase in real terms during the next years despite a gradual “normalisation” (increase) of allowed return on capital and partly due to a wish to improve the regulatory model including the benchmarking. A revised framework of regulation will come into effect in 2008.

The regulation of the pricing of electricity offered under obligation to supply terms have recently implied that DERA ordered a number of companies to pay back six-figure sums to the consumers. In some cases (but not all) this was caused by procuring

the electricity from an affiliate company resulting in prices, which in the opinion of DERA are not reflecting market conditions.

DERA's decision has been appealed.

The DEA has distributed its draft executive order on revenue caps and opening balances for gas distribution companies for comments in 2004 and a revenue cap framework for 2006-09 is almost worked out by now.

DERA started regulation of supply obligated gas companies in 2004. Regulation will be carried out in two stages. First, the pricing method and terms and conditions notified by the companies will be assessed. Then, once the companies' annual reports are available, there will be a retrospective adjustment of the profits realised by the companies.

3 Regulation and Performance of the Electricity Market

3.1 Regulatory Issues [Article 23(1) except "h"]

3.1.1 General

The Danish electricity market was fully liberalized in 2003.

3.1.2 Management and Allocation of interconnection capacity and mechanisms to deal with congestion The extent of congestion should be assessed, both nationally and on cross border links:

Internal congestion:

This section is answered by the TSO Energinet.dk.

In Eastern Denmark (the price area DK2) there are practically no congestion problems as the transmission lines are sufficiently strong to transport the requested power.

In Western Denmark (DK1): Since Autumn 2004 when the reinforcement of the transmission line in the Northern part of Jutland was finished, there have been practically no internal congestion problems.

Congestion on cross border links:

The following table shows the amount of time with congestions for the period 2001 – 2005. The arrow shows the direction of the congestion, e.g. DK1 → N implies congestion in the flow direction from DK 1 (Western Denmark) to Norway.

**Table 1 Hours of congestion in cross border links 2001 – 2005
as a percentage of total hours**

	2001	2002	2003	2004	1.1 -30.6 2005
<i>DK1 -->N</i>	5.0 %	20.2 %	50.0 %	28.9 %	5.6 %
<i>N -->DK1</i>	74.7 %	62.6 %	9.0 %	12.2 %	36.8 %
<i>DK1 --> S</i>	11.6 %	29.8 %	44.8 %	14.6 %	10.7 %
<i>S --> DK1</i>	13.9 %	15.2 %	6.8 %	26.2 %	31.5 %
<i>DK2 --> S</i>	0.0 %	1.0 %	0.5 %	1.3 %	0.4 %
<i>S --> DK2</i>	5.4 %	8.4 %	1.4 %	4.8 %	13,6 %

Source: Energinet.dk

Almost all interconnector congestion from Sweden to East Denmark (*S → DK2*) are caused by the process of solving internal congestion within Sweden, as available trading capacity on the interconnectors is curtailed in order to reduce demand.

The requirements of the Cross Border Trade regulation is basically covered by the Danish Electricity Supply Act and secondary legislation:

- Charges for access to networks: Economic regulation and notification of methodologies as well as tariffs for network access by DERA
- Information on interconnection capacities as well as principles of congestions management are established by the TSO – partly coordinated with other Nordic TSOs within Nordel.
- Approval on new interconnectors is the task of DEA

Congestion is managed by market based instruments in line with the EU regulation on cross border trade, i.e. implicit auctions (market splitting) on the interconnectors to Norway and Sweden and explicit auctions on the interconnectors to Germany. The rules on interconnectors to Norway and Sweden are established as part of the agreement between the Nordic TSOs in the Nordel and the cooperation with the Nord Pool power exchange. The Nord Pool rules on market splitting means that the interconnectors are at the disposal of Nord Pool, hereby integrating fully energy-trade and utilization of the interconnector capacity. Below is given a detailed description of how the individual lines are treated.

Kontek DC interconnector between Zealand and Germany

Kontek is a 600 MW interconnector owned by Elkraft. The utilisation rights are shared between Elkraft (350 MW direction north), Vattenfall AB (200 MW in both directions) and Vattenfall Europe Transmission (350 MW direction south). The remaining 50 MW is reserved for system services. The capacity of Elkraft and the non-utilised capacity of Vattenfall AB are - at the moment - sold through an explicit auction. 175 MW in the northbound direction is sold on a monthly auction and the remaining is sold on a daily auction on an hourly basis. The principle of “use it or lose it” is applied to the monthly capacity and to the capacity of Vattenfall AB. The “lost”

capacity is resold on the daily auctions. On 5 October market splitting will be implemented on the interconnector.

Jutland – Germany interconnection

The connection between Jutland and Germany is owned by the TSOs E.ON Netz and Eltra and is an AC-link with a current available capacity of 1200 MW. Except for 400 MW of the capacity in direction north which is reserved for system service for Eltra, the full capacity is offered to the market. There is no reservation in southbound direction, which gives 1200 MW in direction south and 800 MW in direction north for the auctions. The available capacity is divided between annual, monthly and daily auctions. The daily capacity is sold on an hourly basis. Capacities sold on the annual and monthly auctions are sold as "use it or lose it". The "lost" capacity is resold on the daily auctions.

Interconnection between Denmark and the Nordic area.

Interconnection between Denmark and the Nordic countries consist of three interconnectors. Skagerak is a 1000 MW interconnector between Jutland and Norway, Kontiskan is a 740 MW interconnector between Jutland and Sweden and Øresund is a 1700 MW interconnection between Zealand and Sweden. On the Øresund-interconnector 400 MW in direction south is reserved for system services. The utilisation rights have been given to Nord Pool Spot, due to the principle of implicit auction is applied within the entire Nordic area. The extent of trading capacities (ATC) is calculated by each individual TSO and handed over to Nord Pool Spot, to be published every morning for the day-ahead.

The trading capacity is subsequently allocated to the market by implicit auctions. In contrast to explicit auctions this will secure the efficiency of the markets, due the simultaneous trading of energy and interconnector capacity. In the case of congestions on the interconnectors, market agents with the lowest willingness to supply electricity or the highest willingness to pay will be accepted to trade on the interconnectors.

The Nordic TSOs and Nord Pool Spot have signed an agreement on exchange of data and price sensitive information. According to this agreement, the Nordic TSOs are obliged to provide Nord Pool Spot (i.e. the market) with information in case of reduced trading capacity. In addition to the daily delivery of trading capacities to Nord Pool Spot, each TSO is obliged to notify Nord Pool Spot in case of disturbances and revision plans concerning more than 200 MW reductions in trading capacity. This agreement is also valid regarding the interconnectors between Denmark and Germany.

An assessment of the computation of transmission capacity by the TSOs

ATCs on interconnectors are calculated based of load flow calculations. Load flow scenarios include:

- *Planned outages of central coal fired combined heat and power plants (CHP)*
- *Expected production from wind turbines and decentralized CHP*
- *Power plants connected to the transmission grid, information given from the dispatch centers (not given priority instead of import/export)*

Calculations are made for 8 different scenarios (example for DK1):

- DK1 -> Sweden (no power exchange with Norway)
- DK1 <- Sweden (no power exchange with Norway)
- DK1 -> Norway (no power exchange with Sweden)
- DK1 <- Norway (no power exchange with Sweden)
- DK1 -> Norway+Sweden
- DK1 <- Norway+Sweden
- DK1 -> Germany (normally fixed values based on planned outages)
- DK1 <- Germany (normally fixed values based on planned outages)

In general all calculations are made taking the n-1 criteria into account. Given normal grid operation conditions expected production from wind turbines and decentralized combined heat and power plants will not cause congestions. Minimum three centralized coal fired units must be operated inside each control area (DK1 and DK2) due to system services, but are not given any priority relative to interconnectors.

3.1.3 The regulation of the tasks of transmission and distribution companies

General comment

DERA is responsible for monitoring notified tariffs of one TSO (formerly two), around 10 operators of the regional transmissions networks and 120 distribution network companies. In addition prices of electricity sold on obligation to supply terms is notified and monitored.

Network Tariff

Tariffs as well as the methodology of the calculation of the tariffs have to be notified to the regulatory authority and made public. No normative rules of tariff setting are announced by the regulatory authority and costing methodologies do vary a lot.

Prior to the tariff-setting of each transmission- and distribution-company (except for the national TSO) DERA will inform about the revenue cap to be respected. From January 1, 2004 the regulation is a price-cap-regulation. Data for this regulation is delivered through an electronic reporting system of the DERA concerning costs, delivered quantities and information on investments.

Until January 1, 2008 no requirements of cutting back costs in the distribution and transmission companies will be announced. During this period, however, in order to gradually obtain a “normal” return on capital, companies will have to increase cost-efficiency, as the price-cap will basically not be increased. In order to understand this mechanism one must keep in mind that prior to 2004 part of the equity capital was allowed only a “sub-normal” return on capital, due to the regulatory set up. Also a new benchmarking model will be developed.

Up until now quality of service has not been taken into account in setting revenue-/price caps. This, however, will gradually become part of the regulatory model.

The economic regulation of the new national TSO Energinet.dk will be based on a cost-plus model. The secondary legislation defines the costs to be recovered.

Until recently information requirements towards market participants were not formalized. Recent secondary legislation formulates requirements on publication on web-sites in a way that allows comparison of prices and conditions of delivery. DERA is entitled to establish more elaborated requirements taking into account interests of both customers and electricity companies.

Estimated national average network charges:

Average payment to Danish transmission and distribution network companies based on notified tariffs – July 2005 (excl. payment to cover specific public service obligations)

<i>Household customer 19.0 øre/kWh</i>	<i>(0.0255 Euro/kWh)</i>
<i>Commercial customer 16.5 øre/kWh</i>	<i>(0.0221 Euro/kWh)</i>
<i>Industrial customer 12.5 øre/kWh</i>	<i>(0.0168 Euro/kWh)</i>

Balancing

Balancing comprises primary balancing, which consists of automatic fine-tuning of the physical balance of the system by automatic up- or down-regulation of generation. According to a Nordic agreement on balancing each Nordic country regulates the size of reserves that each country has to have for primary regulation.

Secondary balancing implies trading with generators and consumers on up or down regulation of generation or consumption. In the Nordic countries an agreement exists on secondary regulation.

- Balancing interval in minutes,

The balancing interval is (plus minus) 3 seconds for fast reserves and 4 hours for slow reserves.

- A description of the relevant balancing areas,

In Denmark two balancing areas exist: Eastern Denmark which is synchronously connected to the Nordic area regulated by the Nordic grid code of Nordel and Western Denmark which is synchronously connected with the Central European area, regulated by the UCTE rules of operation. (Union for the Coordination of Transmission of Electricity)

- Interaction between areas, whether bids from other areas or Member States can be accepted by TSOs and to what extent this occurs,

Interaction between the Nordic countries is governed by the Nordic agreement on balancing.

According to the Nordic agreement on balancing, pricing is not harmonized in DK. Pricing of an imbalance is set according to a “two price” system as in Sweden and Finland. In case of no congestion the price of imbalance is set by the hour in each Nord Pool price area according to the marginal price of the activated lowest bid on balancing in a common price list of balancing offers. In case of congestions special rules apply, where bids in the congested area are isolated.

In price area DK 1 (the Western part of Denmark) the price of imbalance in case of no congestions is the marginal offer accepted within DK 1.

Time for gate closure.

”Gate closure” is not defined for balancing offers. Offers can take place until half an hour after the hour of operation.

– Opportunities for intra-day trading and revision of nominations^{2[7]}
Only a possible solution in DK 2 (the Eastern part of Denmark)

– Typical prices charged to network users to resolve imbalances
Imbalance prices and volumes are currently available at: www.Nordpool.com

– The process and timetable for settlement of imbalances
The settlement of imbalances is done between the TSO and the balance responsible by the hour.

The costs of acquiring balancing services in the market are in principle covered by the generators and consumers giving rise to the imbalances. Any generator (except certain RES generators) and any electricity consumer thus, is economic responsible for differences between planned and actual generation /consumption. In practice the balance-responsibility is merged - on a voluntary basis – on a small number of balance-responsible actors contracting directly or indirectly with individual generators/consumers.

3.1.4 Effective unbundling

The high voltage transmission network of 400 kV, international interconnectors and system operation is operated by one national state owned company after a recent merger and transfer of ownership of two utility-owned electricity TSOs and one state owned gas TSO. The regional transmission and distribution companies operate mainly as limited companies or as co-operative companies. A number of limited net-

^{2[7]} This should cover whether products are offered in power exchanges on the same basis as the balancing interval (e.g. 15 minutes).

work companies are 100% municipally owned. A minor part of the distribution network companies are integrated in the municipal administration.

Generation/trading and grid operation have to be unbundled by company (“legal unbundling”).

The grid companies operate in the public domain as unbundled companies with various degrees of separate company name, logo and internet homepages, where prices, services, etc. are described.

The preparation of the regulation account has to be carried out according to government orders. The regulation account has to be notified to the DERA and made public on www.gaselva.dk.

The regulation account of the networks is made in such a way that the reported information of the accounts are comparable between the companies. The accounts of the companies contain only information on network operations (licenced) and none-core activities that may enter into the turnover by 5%. However this turnover must figure separately in the regulation accounts. The accounts are audited by independent accountants.

Compliance rules according to the Electricity Directive are being implemented according to recent secondary legislation and will be monitored by DERA.

The sanction possibilities are fines.

3.2 Competition Issues [Article 23(8) and 23(1)(h)]

3.2.1 Description of the wholesale market

Information on competition is given by the Danish Competition Authority.

”The number of companies estimated to have at least a 5 % share of installed available capacity”

Two companies have at least a 5 % share of installed available capacity: Elsam and Energi E2.

“The proportion of installed available capacity owned by the largest three companies”
Elsam has an installed available capacity of 3.645 MW, corresponding to 72 % of the total installed available capacity in West Denmark (5.091 MW).

Energi E2 has an installed available capacity of 4.000 MW, corresponding to 76 % of the total installed available capacity in East Denmark (5.206 MW).

The largest decentralized combined heat and power producer in West Denmark is Silkeborg Kraftvarmeværk with an installed available capacity of approximately 100 MW.

“A description of the market for ancillary services”

The market for ancillary services consists of a wide spread of services. e.g.

- *Frequency control reserve +/- 25 MW at +/- 0.1 Hz for 2-3 minutes*
- *Regulating power, upward and downward regulation on 150 MW minimum 2% per minute measured as an average over 15 minutes*
- *Instantaneous system disturbance reserve on 50 MW at 49.5 Hz/30 seconds*
- *Fast reserves 300 MW for 15 min.*
- *Fast reserves 60 MW for 1 hour.*
- *Fast reserves 240 MW for 1½ hour.*

Some of the services are very demanding for the supplier. The implication of this is that it is quite hard for anyone else than the dominant producer in each of the Danish price areas to supply a wide range of ancillary services.

However the TSO has initiated several projects with the purpose of enabling others than the dominant player to bid for ancillary services. E.g. the PUDDEL/Flex projects enable the local CHP plants to participate actively in the Western Danish regulating power market.

“The volume of electricity traded:

- on the basis of standardised power exchange products
- in bilateral OTC trading for products covering 1-5 years
- in longer term contracts between producers and suppliers”

In the assessment of the Elsam/Nesa merger the DCA examined how the electricity was traded. The investigation showed the following division between trading at the Nord Pool and trading via bilateral OTC:

Table 2 Trading at Nord Pool versus bilaterals/OTC in 2002 and 2003

	2002		2003	
	<i>Nord Pool</i>	<i>OTC</i>	<i>Nord Pool</i>	<i>OTC</i>
West Denmark	50 %	50 %	38 %	62 %
East Denmark	44 %	56 %	43 %	57 %

Source : DCA

It should be noted that according to the investigation no contracts between producers and suppliers were long term contracts (more than 3 years).

“Examine the degree of integration with neighbouring Member States, and assess the extent to which the market is national, subnational, or extending beyond national boundaries? Price correlation and trade volumes should be used as indicators”

In general there is a high degree of integration with the Nordic countries since the exchange Nord Pool is very well-functioning. Denmark is among the most open electricity markets in the world and in some hours of the day the wholesale market is most likely extending beyond national borders.

But the DCA finds that there are some very important issues which limit the relevant market to be subnational:

- *A lot of critical hours where Nord Pool price areas are segmented.*
- *At present West Denmark and East Denmark are not directly connected, and the Great Belt connection will not be opened before 2010.*
- *Cross border trade in the Danish-German interconnector functions poorly.*

These elements mean that the dominant players in West and East Denmark are not exposed to effective competition.

The DCA would like shortly to comment on the DGTREN’s suggestion for using price correlation as an indicator for whether a market should be considered national or not. The DCA finds that using price correlation may give incorrect conclusions – according to the theoretical concepts: “Spurious correlation” and “Cellophane Fallacy”.

The DCA finds that it is more correct to use trade volumes as indicators of the market size. In the table below, Import Capacity, Installed Capacity, Import and Consumption are shown for the years 2003 and 2004. Seen on an international scale, the figures in the table indicate a high degree of integration with neighbouring countries, in both the Western and Eastern part of Denmark.

Table 3 Import Capacity, Installed Capacity, Import and Consumption are shown for the years 2003 and 2004

	2003		2004	
	West Denmark	East Denmark	West Denmark	East Denmark
Import Capacity	1,755 MW	1,773 MW	2,024 MW	1,773 MW
Installed Capacity	7,432 MW	5,206 MW	7,481 MW	5,206 MW
Import	3,549 GWh	3,404 GWh	5,044 GWh	3,576 GWh
Consumption	20,647 GWh	14,170 GWh	20,861 GWh	14,263 GWh

Source: DCA

Note: Import Capacity is average available transfer capacity

The Import Capacity is around 25 – 33 % of the Installed Capacity, while the Import account for 17 – 25% of the total consumption.

“A summary about recent mergers and acquisitions in the sector and the assessment of its impact on competition”

The following mergers and acquisitions in the Danish electricity sector should be mentioned:

a) The Elsam/Nesa merger in 2003/04:

The DCA found that the merger would strengthen Elsam’s and Energi E2’s possibilities to act on the market independently of its competitors. The merger would strengthen Elsam’s and Energi E2’s dominant positions on the wholesale market. As a remedy Elsam would sell off decentralised CHP with 230 MW installed capacity and furthermore Elsam would sell 600 MW on a virtual power plant auction.

b) The forthcoming mergers into two groups between DONG, Elsam, Energi E2, Københavns Energi, Frederiksberg Forsyning and Vattenfall

The mergers are to be assessed by the DGCOMP this autumn. The DCA has in a note to the DGCOMP stated that the DCA finds that the mergers probably will have a negative effect on both the electricity and the natural gas markets.

3.2.2 Description of the retail market

The DCA has not yet made an investigation of the retail supply market to end users. Therefore the DCA finds itself incapable of estimating the market shares of the main players.

3.2.3 Measures to avoid abuses of dominance

On the Nordic power exchange Nord Pool all relevant information are given to the market. This includes information on plants broken down or for other reasons not able to produce. Nord Pool also publishes relevant prices for the following day.

It should be noted that Nord Pool publishes only the actual prices while information regarding the bidding process is never published. Hereby the individual bidder has a minimum of knowledge of the others behaviour.

Until recently the DCA has had an agreement with Elsam and Energi E2 regarding their bidding behaviour. In short, this agreement stated that on a monthly basis the prices in West and East Denmark should not differ from the highest price in the surrounding countries. The DCA has just given Elsam notice to end this agreement, because Elsam has not met the conditions in the agreement.

The DCA is currently preparing two cases for the Danish Competition Council. The DCA finds that Elsam is abusing its dominant position on the wholesale market. So far it has not been decided which injunctions the cases will lead to, but the DCA consider both injunctions regarding bidding behaviour and market surveillance.

As mentioned earlier, it was a remedy in the Elsam/Nesa merger that during 2006-08 Elsam would sell 600 MW on a virtual power plant auction. The DCA has followed the auction setup very closely, including selecting the auctioneer. Since the first auction will take place 1. January 2006 the DCA has not yet any concrete experiences with VPP auctions, but for further information on the auction please see www.elsamkraftvpp.dk.

“Any competition actions in either the wholesale or retail sectors”

In general the DCA is currently watching the wholesale markets in Denmark. The DCA is preparing – as mentioned above – two cases for the Danish Competition Authority concerning the fact that the DCA finds that Elsam is abusing its dominant position on the wholesale market through its bidding behaviour on Nord Pool.

On the retail market the DCA expects the mergers between DONG, Frederiksberg. Forsyning and Københavns Energi to have competition effects, but since it is the DGCOMP that will assess the merger, the DCA currently is not planning any competition policy actions on the retail market.

4 Regulation and Performance of the Natural Gas market

4.1 Regulatory Issues [Article 25(1)]

4.1.1 General

The Danish natural gas market was fully liberalized as of January 1, 2004

4.1.2 Management and allocation of interconnection capacity and mechanisms to deal with congestion

Currently, there are no congestions in the Danish transmission system, neither nationally, nor on cross border links. If, in the future, contractual congestions occur, Gastra will make the unused capacity available to the market on an interruptible basis.

With respect to utilization of capacity the TSO Gastra publishes both data and information on its website. This information and data includes aggregate hourly and daily flows and aggregate booked capacity on each entry and each exit point. Also total available capacity is published, as are information regarding planned investments and maintenance.

Gastra is ownership unbundled and thus totally independent of any gas supplier including DONG. Gastra offers capacity contracts to the incumbent DONG as well as to all other shippers on non-discriminatory and regulated terms. The regulated tariffs are available from Gastra’s website. The tariffs consist of a capacity and a commodity element. The split between these are 75% / 25% respectively. Gastra facilitates trad-

ing of capacity between shippers (a secondary market) through the Capacity Transfer Facility (CTF). Rules for use-it-or-lose-it lose are included in the Danish Network Code. But as mentioned above, there are currently no congestions in the Danish system implying that the rules have yet not been applied.

Only one “transit” contract exists. Most of the booked capacity in this contract expires October 2005. A smaller part of the contract prevails for a few more years.

Since Gastra is ownership unbundled and totally independent, Gastra has no intentions of assessing less technical capacity than actually possible. Thus, Gastra’s methodology for assessing maximum technical capacity is robust, and based on calculations, experience, actual flows, pressure measures, expectations of future flows etc.

4.1.3 The regulation of the tasks of transmission and distribution companies

There are four distribution companies and one national transmission system operator.

Network tariffs

The distribution companies have been regulated by an income-cap regulation since 1 January 2005. The income-caps have in general a duration of 4-years. In 2005 which is the start-up year for the new regulation the duration is only one year. It is part of the regulation that the companies are benchmarked against each others. The benchmarking model is of a net volume type. In continuation of the benchmarking DERA will impose efficiency demands on the least effective companies in income-caps.

DERA is not actively involved in the setting of the tariff structure. According to the law DERA is assessing if the tariffs and tariff structure are reasonable. Apart from that, DERA approves the methodologies used by the companies in their tariff setting. This approval has been done for the first time in 2004 for DSOs and Gastra..

The distribution companies have nearly the same tariffs. The differences which do exist is mainly due to the fact that the companies have chosen different length of the debt repayment period which makes it possible for the companies to adapt tariffs. The companies have different level of debt.

According to the law, DERA assesses whether the tariffs of Gastra A/S are reasonable. DERA made its latest assessment in April 2005 and found that the level of tariffs which Gastra A/S charged during the period 2001-2004 were not unreasonable. As for the DSOs DERA does not set tariffs for Gastra A/S. As mentioned above DERA has last year approved the tariffication methodology.

Table 4 shows network charges, excluding a VAT of 25 %, for 2005. In general no end-users are directly transmission users and due to the fact that there can be a pool-

ing effect which reduces the average transmission tariff it is has not been possible to identify a concrete charge. As an approximation the transmission charge is calculated by taking the TSOs total income and divide it by total transported volume in 2004.

Table4. Network charges, excluding VAT of 25 %, Euro per MWh

	Distribution charge	Transmission charge -estimated ⁴	Total network charges
116300 MWh load factor 250 days, 4000 hours	2.68	1.00	3.68
116.3 MWh no load factor	11.61	1.00	12.61
23260 kWh no load factor	11.61	1.00	12.61

Source: Energinet.dk and distribution companies' websites

Balancing

- how are balancing charges defined?

For "short" imbalances exceeding the tolerance level (see below), shippers are charged the gas price plus a premium of 50 %.

For "long" imbalances exceeding the tolerance level, shippers are paid 50 % of the gas price.

- do tolerance levels exist?^{5[16]} If so, which?

In summer the tolerance level is equal to 15 % of the daily maximum capacity (corresponding to 360 % of the maximum hourly capacity).

In winter the tolerance level is equal to 5 % of the daily maximum capacity (corresponding to 120 % of the maximum hourly capacity).

- How do TSO/DSO procure the energy they need in order to carry out their tasks and at which costs (free market or bought at which terms and conditions from whom?) [Balancing is a regulated business pursuant to Art 25(2) of the 2nd IGM Directive]

⁴ In 2004 Gasstras A/S' revenues from transportation were 633 mio. DKK (85 mio. Euro) while 7.7 mia. m3 (84.7 mio. MWh) were transported. This gives an average charge of 1.00 Euro/MWh. In addition Gasstras users pay an security of supply charge of 0.43 Euro/MWh on average. Because this charge is a special Danish cost element it is – for reasons of international comparisons - not included in the stated charges.

^{5[16]} i.e. a quantity of imbalance that network users can maintain without being the subject of charges

Gastra uses line pack and gas in storage.

- How do TSO/DSOs define their genuine system needs and what are the resources available to TSO/DSO in that respect?

Gastra uses several tools to ensure system balance. These include the use of line pack and the use of both of the two Danish Storages. The system needs reflects the seasonal fluctuations in consumption (due to the temperature differences between summer and winter).

- What are the incentives set by TSO/DSO for system users to balance their input and off-take of gas?

System users are given incentives from the above mentioned balancing charges.

- balancing interval (e.g. hourly, daily etc)

Daily balancing – no hourly restrictions or constraints apply.

- a description of the relevant balancing areas, if they do not correspond to the respective transmission or distribution system

The balancing area corresponds to Gastras transmission system.

- interaction between areas, whether bids from other areas or Member States can be accepted by TSOs and to what extent this occurs,
- the extent to which suppliers can group imbalances under individual network use contracts, i.e. pooling of imbalances, ex ante and ex post

The shipper can pool imbalances of his portfolio. It is possible to trade imbalances between individual network users/shippers via the Gas Transfer Facility.

- the process and timetable for settlement of imbalances

The gas day begins and ends at 6.00 a.m. Imbalances are settled hereafter, and shippers are informed of their gas balance at 11.00 a.m. at the latest.

What information must be provided to market participants by the TSOs regarding the balancing mechanism.

Gastra has to publish the methodology of the terms and conditions regarding balancing.

4.1.4 Access to Storage, Line pack and other ancillary services⁶⁽¹⁷⁾

There are two gas storage facilities in Denmark. The storage in Stenlille (from 1994) is an aquifer – that is an upturned swelling of porous water filled sandstone – while the storage in Lille Thorup (from 1987) contains 7 cavities protected by salt. Stenlille has a total capacity of 1,300 million Nm³. Approximately 400 million Nm³ of these can be withdrawn with a maximum capacity of 450,000 Nm³/h. The maximum injection capacity is 100,000 Nm³/h. Lille Thorup has a total capacity of 750 million Nm³. Approximately 415 million Nm³ of these can be withdrawn with a maximum capacity of 500,000 Nm³/h. The maximum injection capacity is 150,000 Nm³/h.

Both storage facilities are owned by DONG Storage A/S. DONG Storage is a 100% owned subsidiary to DONG A/S which is 100% owned by the Danish state. DONG A/S is an all round energy company. However, DONG Storage is a separate entity legally unbundled from DONG's other business activities such as trading and production.

The gas storages have three major purposes. Firstly, the gas storages are used for emergency supplies. DONG Storage is under an obligation to provide storage capacity to the transmission company Gastra (now part of Energinet.dk). Secondly, the gas storages allow gas suppliers to comply with the seasonal variation in the use of natural gas. The exploration of natural gas in the North Sea takes place continuously, while the end usage is highly dependent on seasonal fluctuations. Thirdly, access to gas storage is necessary to gas suppliers since storage capacity allows a supplier to buy large quantities of gas when the gas price is favourable.

The total storage capacity for withdrawable gas is approximately 815 million Nm³. 200 million Nm³ of these are sold to the transmission company Gastra for emergency supplies. According to the regulation DONG Storage is able to turn down a request for storage if there is no available capacity. DONG Storage has, however, in 2003 given as a remedy⁷ that minimum 50 million Nm³ of storage capacity would on a yearly basis always be available for alternative suppliers. Currently the companies Shell, Statoil, Elsam and Energi E2 combined buy approximately 100 million Nm³.

Access to storage facilities is obtained by negotiated TPA. However, DONG Storage has published tariffs for two standard storage packages with respectively low and high injection and withdrawal capacities. By purchasing package 1 (low flexibility) the storage customer can respectively inject and withdraw the reserved storage volume in min. 200 and 100 days. By purchasing package 2 (high flexibility) the storage customer can respectively inject and withdraw the reserved storage volume in min. 40 and 20 days. In addition to the capacity payment for the storage package the customer pays a variable payment for the gas volume that is injected into the storage.

⁶⁽¹⁷⁾ The Commission has asked regulators to check compliance of access regime to storage facilities with the GGPSO and report back to the next Madrid Forum. This will also be used for the purpose of the 2005 report.

⁷ In a decision made by the Danish Competition Council 28th of February 2001 concerning DONG Naturgas' taking over Naturgas Sjælland.

From May 1st 2005 it is possible to buy standard storage packages without restrictions on amount of gas in storage during winter (filling restrictions).

The following tariffs apply to a one-year Standard Storage Agreement (SSA) from 1st of May 2005:

Table 5 Tariffs, one-year Standard Storage Agreement (SSA) from 1st of May 2005:

	Volume capacity	Hourly withdrawal capacity	Hourly injection capacity	Tariff with filling restrictions	Tariff without filling restrictions
		% of volume	% of volume	øre/kWh Euro/kWh	øre/kWh Euro/kWh
Capacity payment:					
Package 1	1	0.042	0.021	3.03	3.44
Low flexibility				0.0041	0.0046
Package 2	1	0.209	0.104	6.55	6.96
High flexibility				0.0088	0.0093
Variable payment:					
Actual injection	1			0.123	0.123
				0.0002	0.0002

Source: Energinet.dk

By combining the two standard storage packages it is possible to meet most customers' storage needs.

If a customer's storage needs cannot be met by the two standard storage packages, the customer has the option to negotiate a contract on non-standard terms. The customers can among other things negotiate concerning:

- Contract period and/or the length of the contract*
- Relation between volume, injection, and withdrawal capacity*
- Restrictions on amount of gas in storage during winter*
- Withdrawal restrictions*

As a starting point the price for a negotiated contract is higher than the SSA, since deviations from the terms in the SSA usually will impair an efficient use of the storages.

- Contract Period

If the requested contract period is shorter than 1 year - e.g. 6 months - and/or the requested contract period deviates from the starting and/or termination date of the SSA - e.g. 1st November to 1st November - the negotiated storage contract will be more expensive than a SSA, all things equal. The reason for the higher price is that deviations from the standard period of the SSA can result in a degraded use of the storages.

Concerning the pricing of negotiated storage contracts DONG Storage's main principle is that it will be more expensive to obtain a negotiated storage contract, which e.g. contains a compressed injection period compared to a storage contract, where the same amount of gas can be injected, but where the injection is spread out over the full injection period from 1st May.

The pricing of a negotiated storage contract of another duration than the period of the SSA will, among other things, depend on the months involved.

- Injection and withdrawal

All things equal, the price of the negotiated storage contract will increase (compared to a SSA) with increased injection and withdrawal capacities. The reasons for this are the physical limits of the injection and withdrawal capacities of the storages. Injection and withdrawal capacities in another relation than offered by the SSA will usually result in a less efficient use of the storages.

If the customer wishes to inject respectively withdraw in a period where the gas flow usually has the opposite direction (withdrawal respectively injection), the customer can obtain a discount.

- Restrictions on amount of gas in storage during winter

Customers are required to have a certain percentage of gas in storage during the winter months due to security of supply. Reductions in this requirement will result in a higher price, because DONG Storage will have to make sure that the "lacking" gas will be available in case of an emergency situation.

4.1.5 Effective Unbundling

There are four Distribution System Operators (DSOs) and one national Transmission System Operator (TSO).

DSOs

The DSOs are Naturgas Fyn A/S, DONG Distribution A/S, Naturgas Midt-Nord I/S (HNG/MN) and Hovedstadsregionens Naturgas I/S (HNG I/S).

While DONG Distribution A/S is an integrated part of DONG Naturgas A/S which is the biggest player in the Danish gas market the other distribution companies are

owned by municipalities. All distribution companies have been legally unbundled since 1 January 2003.

All DSOs prepare and publish annual accounts for all their legally unbundled entities.

As a general rule the distribution companies are located together with their affiliates. They use the same logo and use the same websites. The only exception is the supply company partly owned by Naturgas Fyn I/S named Statoil Gazelle A/S which has its own location, logo and website.

TSO

The TSO Gastra A/S has since 1 January 2005 been part of Energinet.dk which is the new national system operator for electricity and gas. Energinet.dk is fully owned by the Ministry of Transport and Energy.

Gastra A/S is legally unbundled from the other activities in Energinet.dk. The company prepares and publishes annual accounts.

It is planned that Gastra A/S will be located together with the other entities in Energinet.dk in the future. The company has its own logo and website.

Compliance rules according to the Gas Market Directive are being implemented according to recent secondary legislation and will be monitored by DERA.

4.2 Competition Issues [Article 25(1)(h)]

4.2.1 Description of the wholesale market^{8[18]}

”The number of companies estimated to have at least a 5 % share of gas available in the market concerned”

Three companies have at least 5% share of gas available: DONG, HNG/MN and Statoil Gazelle.

“The proportion of gas held by the largest three companies”

The three companies DONG, HNG/MN and Statoil Gazelle together have access to minimum 95 % of the total amount of gas available.

“The proportion of production and import capacity allocated to the largest three companies”

Production:

Natural gas supplies are explored and produced in the Danish part of the North Sea. The DUC consortium (AP Møller - Mærsk, Shell and Texaco) covers 90 percent of the

^{8[18]} Defined as any transaction of gas between market participants other than final end use customers.

Danish production. The gas is produced on the basis of a concession, which is assigned for each production field.

The DUC consortium sells most of the gas to DONG Naturgas in accordance with several long term take-or-pay agreements from 1979, 1990 and 1993.

The Syd Arne consortium (Amerada Hess, DONG and others) covers the remaining 10 percent of the Danish gas production. This consortium sells the gas exclusively to DONG on a depletion type of contract.

Import capacity:

Importing gas to the Danish market is possible through the DEUDAN onshore border connection between Germany and Denmark (at Ellund). This connection is partly owned by DONG (49 percent) and E.ON/BEB (51 percent).

The onshore border connection at Ellund has a capacity in the northbound direction of 1 billion Nm³ while the capacity in the southbound direction is 2 billion m³. At present DONG is using the German/Danish border connection to export 2 billion Nm³ a year. Thus, the total potential for importing gas through the border connection is 3 billion Nm³ (back haul).

Therefore, it is possible for a gas supplier to bring gas into Denmark. However, DCA finds that it is still a problem for a supplier to get access to gas at an adequate cheap price at Ellund. This is mainly due to the “pan-caking”-problem and because DONG in the opinion of the DCA has no incentive to enter into a “gas swap” agreement.

“The number of foreign companies (EU and non-EU) active on the market and their estimated market share”

To the knowledge of the DCA, currently three companies partly owned by foreign companies are active on the market in Denmark:

- *Statoil Gazelle (Statoil) has a market share of more than 5 %*
- *Dansk Shell (Shell) has a market share of less than 5 %*
- *Sydkraft Gas (E.ON/Statkraft) has a market share of less than 5 %*

“How are foreign companies active on the relevant national market (joint ventures)”
Statoil Gazelle is a joint venture, from which Statoil owns 30 % and the Danish DSO Naturgas Fyn owns the remaining 70 %.

Sydkraft Gas is a Swedish energy supplier, owned partly by E.ON (55 percent) and Statkraft (45 percent). Sydkraft Gas’ natural gas activities on the Danish market are currently very limited with only a few large industrial customers.

Dansk Shell is a Danish energy supplier, owned partly by Royal Dutch Petroleum Company (60 percent) and Shell Transport and Trading Company p.l.c. (40 percent).

Dansk Shell's natural gas activities on the Danish market are currently very limited with only a few large industrial customers.

“The volume of gas traded:

- on the basis of standardised gas exchange products
- in bilateral OTC trading
- in long term contracts between producers/importers and suppliers”

In Denmark no gas is traded on the basis of standardised gas exchange products.

An amount of gas corresponding to 9% of domestic consumption is traded bilaterally (OTC) via Energinet.dk's Gas Transfer Facility (GTF). Six shippers are currently transferring gas via the GTF.

Both the contract between DONG and the DUC consortium and the contract between DONG and the Syd Arne consortium are long term contracts.

The contract between DONG and HNG/MN is a long term contract. The duration of the contract is 7 years.

“Experiences with gas release”

The DCA has no experiences with gas release.

4.2.2 Description of the retail market

The consumer can switch supplier with minimum 1 month/maximum 2 month's delay, the customer only has to make an agreement with a new supplier.

The natural gas market has been liberalized since January 1st.2004, and during the first year 20 % of the volume has switched. Switching is free of charge.

Ad 4.2.2 The DCA has no exact knowledge of the above mentioned market shares, but table 6 identifies below best interval estimates.. The estimates are partly based on a market investigation made by the DCA in May 2005, where 35 companies (supply companies, medium and large end users) returned a questionnaire regarding their current supplier contract.

Table 6 Market shares, best interval estimates

Estimates of the DCA	DONG	HNG/MN	Statoil Gazelle	Others
Power plants	[80-100] %	0 %	0 %	[0-20] %
Households	[25-35] %	[50-60] %	[15-25] %	0 %
Medium sized industrial customers	[50-60] %	[15-25] %	[20-30] %	[5-15] %
Large industrial customers				
Total				

Source: DCA

“The number of active companies with a market share of above 5 %”

DONG, HNG/MN and Statoil Gazelle each has a market share of above 5 %.

“Number of suppliers without any affiliate connection to either TSOs or DSOs in Denmark that have entered the market since introduction of competition”

Dansk Shell and Sydkraft Gas have no connection to either TSOs or DSOs in Denmark.

“The extent of integration between gas producers and importers and suppliers in the market”

As mentioned earlier, the DUC consortium sells most of its gas to DONG on long term take-or-pay agreements. DONG has no ownership in the DUC consortium.

However, DONG owns a part in the Syd Arne consortium, which represents approximately 10 % of the Danish production of gas.

“Estimates of the extent to which the retail market is foreclosed by long-term contracts”

The DCA estimates that only a small part of the Danish retail market is foreclosed by long-term contracts. The majority of the end users are requesting supplier contracts with short duration (1-3 years), and it seems like the competitive suppliers are willing to enter into such contracts.

However, the power plant end users are an exception to this tendency. Both the central and the decentralised combined heat and power plants have generally much longer duration in their contracts than other end users.

“Evidence of anti-competitive bundling”

The DCA has no evidence on anti-competitive bundling.

However, an investigation of the gas market in Denmark concluded that DONG’s ownership of the Danish storage facilities gives DONG a competitive advantage.

Among the competitors and customers there seemed to be a general opinion that access to storage is one of the main access barriers for foreign suppliers to establish themselves in Denmark, as it gives DONG a cost advantage.

According to DONG's competitors in Denmark this cost advantage gives DONG a large competitive advantage when the suppliers battle for large end users with low load factors (such as power producers). In supplying an end user with a low load factor the cost of storage becomes the primary competition parameter. The result is that DONG has a very high market share of end users with a low load factor.

The DCA finds that a new structure for the ownership of the gas storages should be considered. The DCA recommends that the ownership of the gas storages in Denmark is delegated to the "Energinet.dk". This also makes sense when storage is considered as an essential facility in the same way as access to the transmission network.

5 Security of Supply

5.1 Electricity [Article 4]^{9[22]}

A general description of the ongoing supply-demand situation with the following indicators included, reference should be made to TSO projections where available ^{10[23]}:

- Current levels of electricity peak demand (MW) and expectations for the next three years (i.e. 2006-08)

2004: 6.5 GW

2005: 6.6 GW

2006: 6.7 GW

2007: 6.8 GW

2008: 6.9 GW

- Currently available generation capacity

Total generation capacity

2003: 12.8 GWof which windturbines 3.1GW

2004: 12.6 GW.... of which windturbines 3.1GW

- Investment for the next three years:

Two off shore wind farms each of 200 MW will be tendered.

Apart from the planned investments in wind farms no further major generation investments are envisaged.

^{9[22]} This section may make reference to supply demand forecasts compiled by TSOs where appropriate
^{10[23]} For example the ETSO/UCTE report on generation adequacy 2007-15

Concerning closing down of existing generation facilities a net-decommissioning of 250 MW took place during 2004.

– Current generation fuel mix

Production by category 2004:

<i>Wind turbines:</i>	6,600	GWh
<i>Hydro Power:</i>	27	GWh
<i>Other Renewable energy</i>	2,300	GWh
<i>Natural gas</i>	9,915	GWh
<i>Oil</i>	1,327	GWh
<i>Coal</i>	17,238	GWh

Fuels 2004:

<i>Coal</i>	173,423	TJ
<i>Oil</i>	16,961	TJ
<i>Natural gas</i>	101,709	TJ
<i>Straw, wood etc.</i>	25,776	TJ
<i>Waste</i>	28.999	TJ

New electricity generation capacity must be approved by the Danish Energy Authority (DEA). The approval is based on a number of criteria contained in secondary legislation. The criteria mostly refer to environmental requirements and requirements on thermal efficiency.

Infrastructure projects

The TSO processes for planning new network build should be described, and how they are integrated with congestion management and the functioning of wholesale markets

Following the black-out in Eastern Denmark and southern Sweden September 23, 2003 the Danish government decided to prepare an energy infrastructure plan. The scope of the plan was to provide an overview of the necessary investments in new major transmission network in order to ensure security of supply, incorporation of renewable energy, and efficient electricity market function.

The TSOs in Eastern and Western Denmark have contributed to the infrastructure plan. The plan was made public by the Danish transport and energy minister June 17, 2005.

As a part of the infrastructure plan the construction of a Great Belt interconnector spanning the Eastern and the Western part of Denmark is presently under consideration. Upgrading of an existing 400 kV transmission line to double capacity between Vejen and Kassø in the southern part of Jutland is also under consideration.

5.2 Gas [Article 5]

Danish gas consumption has the last three years ranged about 4.2 billion m³, and was in 2004 4.19 billion m³. The Danish gas market is well developed and there is no anticipation for main changes in the consumption for the coming three years. Therefore, it is expected that gas consumption will be about 4.2 billion m³ for the next three years (i.e. 2005-08). However, yearly gas consumption varies especially according to the number of degree days during the heating season.

In 2004 the Danish gas production from the fields in the North Sea was 10.93 billion Nm³, which is an increase from 2003 on 0.72 billion Nm³. The produced gas is used for reinjection, utilized to operate production facilities offshore, flared for technical reasons and for sale.

Natural gas sales soared to an unprecedented 8.26 billion Nm³ in 2004 from 6.90 Nm³ in 2003. The increase in gas sales is attributable to a new pipeline for gas export, connecting the Tyra West field to the F/3 platform on the Dutch NOGAT pipeline. The pipeline was commissioned on 18 July 2004 and has a capacity of 15 million Nm³ per day. In 2004, about 10 per cent of all gas sold was exported through the NOGAT pipeline.

Less than half the capacity of the new pipeline was utilized in 2004. The production of gas for sale requires that contracts have been concluded. Based on the ongoing contracts it is expected that sale of gas will be about 8.5 billion Nm³ for the next three years (i.e. 2005-08).

The forecast includes natural gas production resulting from new contracts for the export of gas through the pipeline from Tyra West via the NOGAT pipeline to the Netherlands.

According to the Subsoil Act, the Minister for Transport and Energy in May 2005 announced invitation to apply for the exploration and production of Hydrocarbons in an area of the North Sea.

The Baltic Gas Interconnector (BGI) is under approval by the Danish Energy Authority. The transmission pipeline is planned from the German coast across the Baltic Sea to Sweden and Denmark. However, no investment decision has been taken by the companies.

Import capacity from Germany is 200.000 Nm³ per hour through the border station at Ellund.

According to the Natural Gas Supply Act the TSO, Gastra, is responsible for security of supply. In this connection Gastra is responsible to ensure that there is sufficient gas in storage together with other measures to handle an emergency situation. Gas suppliers are required to have a certain percentage of gas in storage during the winter months due to security of supply.

6 Public Service Issues [Article 3(9) electricity and 3(6) gas]

Parts of Annex A of the European Electricity and Gas market Directives are implemented in general Danish Consumer Law – itself implementing EU Directives on Consumer Protection - and therefore are not contained in the statutory orders. This applies for instance to the provision of littera d that the consumers should be protected against unfair and misleading selling methods, and that terms and conditions shall be fair and transparent.

According to the statutory orders, for any agreement between a consumer and a supplier there shall be a contract specifying the information and conditions mentioned in Annex A, littera a.

The supplier shall give an adequate notice if he intends to modify contractual conditions, and the consumer has a right to withdraw from the contract, if he cannot accept the new conditions. The supplier shall notify the consumer directly of any increase in tariffs compared to the previous metering period. The notice shall be given at the time of the next metering at the latest. In case of a substantial increase, the notice shall be given at the next invoice.

According to the orders, the supplier is not allowed to charge the consumer for his changing supplier.

Complaints about violation of the orders are attended to by DERA.

Disputes between a supplier and a consumer according to civil law, for instance involving compensation, cf. Annex A, littera f, will be settled by The Energy Supplies Complaints Board, which is a private board, approved by the Minister for Family and Consumer Affairs.

Provision of littera g) that customers have a right to be informed about their right to be supplied with gas and electricity of a specified quality and to a reasonable price is implemented through the obligation, according to the Electricity Supply Act and the Natural Gas Supply Act, of distribution companies to inform customers in the necessary way. Customers may complain about violation of the information obligation to the DERA. According to the Electricity Supply Act, distribution companies are, moreover, specifically directed to inform customers about their right to be supplied.

Requirements on labelling/disclosure are in process of being established. A piece of secondary legislation will soon be finalized.

Treatment of vulnerable customers.

In Denmark, customers are protected by general consumer law, which contains provisions regulating incidents of non fulfilment, for instance in case of non payment.

Moreover, the companies' procedures for disconnection are reported to DERA according to the Electricity Supply Act and the Natural Gas Supply Act. DERA can prescribe that the procedures be amended if they are not in accordance with the law.

The present practice is that consumers have a right to be supplied even in case of non payment, provided they put up a guarantee for their payment of future consumption.