

**UNBUNDLING OF ELECTRICITY AND GAS TRANSMISSION AND
DISTRIBUTION SYSTEM OPERATORS**

ANNEXES

COUNTRY OVERVIEW

TABLE OF CONTENTS

GLOSSARY	6
1. AUSTRIA	7
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	7
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	10
C. Summary tables	12
2. BELGIUM	20
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	20
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	24
C. Summary tables	28
3. CZECH REPUBLIC	35
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	35
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	38
C. Summary tables	41
4. DENMARK	47
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	47
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	50
C. Summary tables	53
5. FINLAND	58
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	58
B. Summary tables	62

6. FRANCE	67
A. Electricity: overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	67
B. Gas: overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	71
C. Summary tables	74
7. GERMANY	82
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	82
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	87
C. Summary tables	92
8. HUNGARY	101
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	101
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	108
C. Summary tables	111
9. IRELAND	117
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	117
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	122
C. Summary tables	125
10. ITALY	132
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	132
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	138
C. Summary tables	142
11. POLAND	148
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	148

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	153
C. Summary tables	160
12. PORTUGAL	167
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	167
B. Summary tables	172
13. SLOVAK REPUBLIC	176
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	176
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	179
C. Summary tables	181
14. SLOVENIA	186
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	186
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	188
C. Summary tables	190
15. SPAIN	196
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	196
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	199
C. Summary tables	202
16. SWEDEN	208
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	208
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	212
C. Summary tables	214

17. THE NETHERLANDS	219
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	219
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	223
C. Summary tables	226
18. UK	233
A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive	233
B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive	238
C. Summary tables	241

GLOSSARY

- **LLC:** Limited Liability Company
- **Legal regime governing the relation between the TSO/ DSO and the related Group of companies:** legal regime may be based on company law, on contractual arrangements, or on other arrangements introducing further supervisory rights, such as codes of conduct.
- **N/A:** Not applicable
- **PLC:** Public Limited Company
- **Position company holds within the integrated undertaking:** Parent, subsidiary or division of a stand alone company active in both transmission/ distribution and generation/ supply.
- **Unbundling by companies finalised to comply with the unbundling rules of the Directives:** This aims to assess the general situation in the State regarding the practical implementation of unbundling. "Finalised" in this context refers to complying with the *current* obligations. Thus, in cases in which there is an exemption or a postponement until 2007, the process may nonetheless still be considered finalised
- **VIU:** Vertically Integrated Undertaking. An undertaking or a group of undertakings performing *at least one* of the functions of transmission or distribution *and at least one of* the functions of generation/production or supply.

1. AUSTRIA

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

The electricity industry was fully reorganised in 1998 in Austria under the electricity economy organisation law (Elektrizitätswirtschafts- und organisationsgesetz EIWOG). This law implemented the Electricity Directive 96/92/EC. The main purpose of this law was, *inter alia*, to provide the Austrian customers with high quality electricity for a reasonable price.

The EIWOG was amended several times, one of the major amendments took place in 2000. The amendments made in 2000 anticipated some of the provisions of the Electricity Directive 2003/54/EC ("Electricity Directive"). Therefore the Electricity Directive was not implemented word for word in the EIWOG, as only a few further changes were necessary in 2004.

The current version of the EIWOG is in force as from 21st June 2004 and does not reflect all provisions of the Electricity Directive as small additions were made in the Austrian law. However the provisions of the EIWOG with regard to unbundling are not directly applicable to the Austrian electricity companies. As a result of the Federal State Principle, the unbundling provisions in the EIWOG are only basic laws and the provinces have to pass their own enabling legislation. Only two of the nine Austrian provinces (i.e. Styria and Vienna) have passed the enabling laws and therefore, the major part of the unbundling provisions cannot be enforced for the time being.

Austria has endorsed the 100,000 customer exemption which applies to 122 of the 133 DSOs in Austria.

Reference must be made here to the so-called "Austrian electricity solution", which has been accepted by the European Commission. The "Austrian electricity solution", set up in 1999, means that Austria's largest electricity companies agreed to create a separate entity called EnergieAllianz which took over the business sphere of "electricity trading" from each participating company. By combining their efforts in EnergieAllianz, the participating companies have succeeded in setting up a new electricity company with profound local roots which is successfully trading on the international electricity market.

The Austrian TSOs have a different structure from other member states. The Austrian legislator has invented the term "control area managers" which – as far as the electricity market is concerned - are the 3 TSOs. The control area manager is defined in the Austrian EIWOG as "the entity responsible for controlling the power frequency in a certain regulatory zone (i.e. the smallest unit of the Verbund-grid which is equipped with and runs on a frequency-power control), a task that can also be carried out by a third-party company which has its company seat in another EU member state."

The nature of a Control Area Manager can be described as follows:

To be able to have technical control of the flow of energy in the international interconnected system, the transmission system is divided up into so-called control areas. The international interconnected system is therefore a conglomeration of different areas which basically will be run independently of each other.

Power meters are installed on the cables which cross the border of a control area and the readings are transferred online to the control center. The control area manager calculates in advance how much electricity

should flow over the boundaries of the control area, based on the supply contracts. The power stations within the control area are run in such a way that these schedules can be fulfilled. In a typical case, the particular power station will be responsible not only for a particular transfer of power to the boundaries of the control areas, but also makes sure the 50Hz frequency of the system is complied with (regulation of the frequency of power).

In Austria there are three control areas, which have grown up as a matter of historical fact. East Austria is one control area which is served by Verbund-APG. Tirol is its own control area which is served by TIWAG and Vorarlberg is in a German control area, although the VKW carries out the duties of the control area manager on Austrian soil.

In addition to the duties of the other system operators, the control area manager also carries out the handling of the transit of electricity; Verbund-APG, TIWAG and VKW also deal with running each control area, or being involved in the running of each control area, as well as calling on the power stations to provide energy at peak times.

Thus, the duties of the control area managers are, inter alia, the development of schedules with other control areas, calling for energy to deal with peak times and dealing with bottlenecks.

The Austrian regulators are the Energie-Control GmbH and the Energie-Control Commission which operate on the basis of the Austrian Energy Regulation Act (Energie-Regulierungsbehördengesetz E-RBG).

The E-RBG was enacted in 2000 and the regulator started its operation in 2001.

Chronology	Instruments of law
❖ <u>1998</u> : Electricity economy organisation law.	❖ Elektrizitätswirtschafts- und organisationsgesetz (EIWOG) 1998 as amended
❖ <u>1998</u> : Reorganisation of the electricity industry.	
❖ <u>2000</u> : Major amendment of electricity economy organisation law (part anticipation of the Second Electricity Directive).	❖ Energie-Regulierungsbehördengesetz (E-RBG) 2001.
❖ <u>2000</u> : Energy Regulator Act (this is for the regulator's Energie-Control GmbH and Energie-Control Commission)	
❖ <u>2004</u> : Further amendment to electricity economy organisation law (transposition of Second Electricity Directive)	

TRANSMISSION

There are three companies which operate TSOs. As stated above, the Austrian structure is somewhat different than in other member states as the Austrian legislator has invented the so-called "control area managers" which are defined in the Austrian EIWOG as the entity responsible for controlling the power frequency in a certain regulatory zone. The tasks of the control area managers for the electricity market are carried out by the 3 TSOs.

According to the Austrian Regulator E-Control, all Austrian TSOs for electricity have obviously anticipated the implementation of the Electricity Directive. Although they are not yet obliged to under the current Austrian laws, all Austrian TSOs are already fully unbundled both in functional and in legal terms. The Regulator has not informed us as of when the unbundling process is finalised.

The sample TSO which was reviewed in the study has set up a separate company for unbundling purposes. However, they still share common services with the supply/generation company, such as management services, telecom services or financing.

DISTRIBUTION

There are 133 DSOs, 122 of these have less than 100,000 customers and are therefore subject to the exemption rules.

The Regulator informed us that only few DSOs are legally unbundled. Most of the DSOs are vertically integrated undertakings. The larger DSOs are usually unbundled in functional terms, although the level of functional unbundling varies between the companies. Hardly any of the smaller DSOs are functionally unbundled.

As for the sample DSOs which were reviewed in the study, they either already set up a separate company for unbundling purposes or plan to do so in the near future. Some of them share common services with the supply/generation company, although not all of them.

There is no sufficient available information how many percent of the Austrian customers are concerned by the 100.000 customer exemption.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Austria had a leading role in the opening up of its gas market. The Gaswirtschaftsgesetz (GWG) which was decided in 2000 opened the gas sector much more than was required by the European Union back then.

The GWG 2000 was amended in 2002 by the implementation of the Gas Directive 98/30/EC. In the course of these amendments, the Austrian legislator has enacted several provisions which were only required under the Gas Directive 2003/55/EC (the “Gas Directive”). Austria has therefore once again kept its leading role on the opening of its gas market.

Although the Gas Directive has not yet been implemented in full under Austrian law, the GWG contains several provisions which should guarantee the independence of the enterprises from each other. The full implementation of the Gas Directive is expected shortly, however this further amendment of the GWG will not have major consequences on the current legal situation.

Unlike the legal situation on the electricity market, the provisions set out in the GWG are directly applicable on the Austrian gas companies. It is not necessary for the Austrian provinces to pass enabling laws as far as the gas market is concerned.

Austria has provided for an exemption of the unbundling rules for companies which have less than 50.000 customers. The reduced exemption rate can be explained by the situation on the Austrian gas market as there are many small gas companies which have hardly more than 50.000 customers.

The tasks of the “control area managers” (the entity responsible for carrying out managing duties which are, in other Member States, handled by TSOs) on the gas market are not carried out by the TSOs in Austria. There are separate companies which act as control area managers. They carry out the management tasks of a TSO, but do not always operate grids.

There are 2 TSOs and 19 DSOs. 16 DSOs have less than 50,000 customers and are therefore subject to the exemption rules with regard to unbundling.

The gas sector is subject to the regulator than the electricity sector. Therefore, the regulators are also here the Energie-Control GmbH and the Energie-Control Commission which were both formed on the basis of the Energy Regulation Act (Energie- Regulierungsbehördengesetz).

<i>Chronology</i>	<i>Instruments of law</i>
❖ <u>2000</u> : Gaswirtschaftsgesetz.	❖ Gaswirtschaftsgesetz 2000
❖ <u>2000</u> : Opening up of the gas market.	❖ Energie-Regulierungsbehördengesetz (E-RBG) 2001.
❖ <u>2000</u> : Energy Regulator Act (this is for the regulator’s Energie-Control GmbH and Energie-Control Commission)	
❖ <u>2002</u> : Amendment to Gaswirtschaftsgesetz	

TRANSMISSION

There are two TSOs. As stated before, the structure with regard to TSOs is different in Austria than in other member states. The companies which operate the two largest grids do not carry out any management functions. For the management purposes, the Austrian legislator has invented the so-called “control area managers” (the entity responsible for carrying out managing duties which are, in other Member States, handled by TSOs). There are 3 control area managers.

It should be noted that both the TSOs and the control area managers are subject to the unbundling provisions under Austrian law which have come in force in September 2003. Both the TSOs and the control area managers are functionally and legally unbundled.

The sample Control Area Manager which was reviewed in the study has set up a separate company for unbundling purposes. They obtain some services from the holding company but do not share any common services with the related supply/generation company.

DISTRIBUTION

There are 19 DSOs. 16 of these have less than 50.000 customers and therefore fall under the exemption rules under the GWG.

This leaves 3 DSOs which need to be unbundled which are all unbundled in functional terms. Two of them are also unbundled in legal terms.

3 further DSOs are also unbundled on functional and legal terms as they also operate transmission systems.

The 4 sample DSOs which were reviewed in the study have either set up a separate company for unbundling purposes or plan to do so in the very near future. Only one of them shares common services with the supply/generation company, such as billing, IT, finances & accounting, human resources and insurances.

It has not been possible to obtain sufficient information so as to provide a percentage of customers which are concerned by the 50.000 customer exemption.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Austria	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Federal legislator: Yes Provincial legislator: No (apart from Styria and Vienna)	63/2004 as amended 21.06.2004 Styria: 16/2005 since 17.08.2005	Partly	GWG 2002
Number of TSOs	3	Homepage Energie-Control GmbH	2	Homepage Energie-Control GmbH
Number of DSOs	133	Information provided by Energie-Control GmbH	19	Information provided by Energie-Control GmbH
How many of these DSOs have less than 100.000 customers?	122	Information provided by Energie-Control GmbH	less than 50.000: 16	Information provided by Energie-Control GmbH
TSO Unbundling regime	Legal, functional and accounting	§ 22 EIWOG as amended 21.6.2004	Legal, functional and accounting	§ 7 GWG as of 30.9.2003
DSO unbundling regime	Legal, functional and accounting	§ 26 EIWOG as of 21.6.2004 § 8 EIWOG as of 1.12.1998	Legal, functional and accounting	§ 7 GWG as of 30.9.2003
Postponement until 1 July	No	N/A	No	N/A

2007 of legal unbundling for larger DSOs?				
100.000 customer exemption [y/n]	Yes	§ 26 EIWOG as of 21.06.2004	Yes – reduced to 50.000	§ 7 (4) GWG, in effect since 30.09.2003
How many DSOs are excluded [number]	122	Information provided by Energie-Control GmbH	16 (however, 3 of these are also under the duty to unbundled as they are operating transmission systems)	Information provided by Energie-Control GmbH
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	Not available		Not available	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	No	N/A	No	N/A
The Regulator [name]	Energie-Control GmbH and the Energie-Control Commission	§ 4 E-RBG as amended 02.12.2000	Energie-Control GmbH and the Energie-Control Commission	§ 4 E-RBG as amended 02.12.2000

Does the regulator monitor unbundling?	Yes	§ 7 E-RBG since 24.08.2002 § 10 GWG since 01.10.2002	Yes	§ 7 E-RBG since 24.08.2002 § 10 GWG since 01.10.2002
Does the regulator have powers to collect information on unbundling in a given company?	Yes	§ 27 E-RBG since 24.08.2002 § 10 EIWOG since 01.10.2001	Yes	§ 27 E-RBG since 24.08.2002 § 8 GWG since 10.08.2000
Does the regulator have the power to require companies to take unbundling measures?	No	N/A	No	N/A
Can the regulator impose remedies? [y/n]	No	N/A	No	N/A
Have there been any complaints and/or decisions of the regulator on unbundling?	No	N/A	No	N/A

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Austria	Electricity				Gas				
	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8	Company 9
TSO or DSO?	TSO	DSO	DSO	DSO	DSO	Control Area Manager	DSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Position company holds within the integrated undertaking	Subsidiary	Subsidiary	Parent company	Subsidiary	Subsidiary	Subsidiary	Parent company	Subsidiary	subsidiary
Legal regime governing the relation	Company law	Company law	Company law	Company law	Company law	Company law	Company law	Company law	company law
Legally Unbundled?	Yes	not yet, but at the latest as of 1.1.2006	Yes	not yet, but at the latest as of 1.1.2006	Yes	Yes	Yes	Yes	Yes
Legal form chosen	PLC	separate company as of 1.1.2006	stock corporation	separate company as of 1.1.2006	LLC	PLC	stock corporation	LLC	PLC

Functional unbundling	Yes	Not available	Yes	Yes	Yes	Yes	Not available	Yes	Yes
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions?	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available
Management personnel of the company hold shares of related supply/generation company or division?	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	Yes: management services, telecom services, financing	Not available	No, but some services carried out by parent company for subsidiaries	Yes: controlling & finances, treasury, accounting, group valuation	No, but some services received from the holding company	No, but some services received from the holding company	No, but some organisation sections act also for subsidiaries	Not available, but some employees working also for other companies of the group	Yes: common services with a subsidiary (billing, IT, finances & accounting, human resources, insurances)

Salary of management based on performance of other related supply/generation companies or divisions?	Not available	Not available	salary based on the performance of the company (the DSO itself)	salary based on the performance of the company (the DSO itself)	salary based on the performance of the group	salary based on the performance of the company (the control area manager itself)	No	No	salary based on the performance of the company (the DSO itself)
Executive director for network department sitting on the Board of related supply/generation companies or divisions?	Not available	Not available	No	No	Not available	Not available	Not available	Not available	Not available
Board members also responsible for activities in the supply and / or generation?	Not available	Yes	Yes	Yes	Yes	No	No	No	No
Reasons for the removal of the executive director.	as provided by law	as provided by law	as provided by law	as provided by law	as provided by law	as provided by law	as provided by law	as provided by law	as provided by law

Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Involvement in the day-to-day business of the company by other supply/generation operations?	No	Not available for current situation; no involvement in the new network company	No	Not available for current situation; no involvement in the new network company	No	No	Not available for current situation; no involvement in the new network company	No	No
Effective decision making rights to operate network?	Yes	Yes	Decision making powers will be conferred on the new network company	Decision making powers will be conferred on the new network company	Yes	N/A	Not available for the current situation. Yes as of 1.1.2006	Yes	Yes

Compliance programme	No	No, at present only « instructions as to equality » ; programme planned for 2006	Yes	No, but planned for 2006	Yes	N/A	Yes	No	Yes
Rules governing access for personnel on premises?	Not available	Not available	Yes	Not available	Yes	N/A	Yes	NDt available	Yes
Penalties for violation of the rules?	Not available	Not available	Yes	Not available	Yes	N/A	Not available	Not available	Yes
Monitoring of compliance programme?	Not available	Not available	Yes	Not available	Yes	N/A	Yes	Not available	Yes
Separate location for network business?	No	No	No	No	No	N/A	No	Yes	Yes

2. BELGIUM

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

The original framework governing the electricity market in Belgium, was foreseen in the Law of March 25, 1925.

Since then the Belgian Government has been bestowed with a federal structure, with 1 Federal Government and 3 Regional Governments. Those 4 Governments each received a different level of competence with regards to energy matters. Due to these divisions of responsibilities the Energy Directives needed to be implemented and transposed on both the Federal as well as on the Regional levels.

The Belgian Federal Government passed, on April 29, 1999, a Federal law transposing the EU's first Directive on the liberalization of the electricity market.

The content of this law went much further than required and already anticipated by and large the content of the second Directive 54/2003.

Its provisions foresaw the institution of an independent regulator, CREG.

The federal regulator, CREG, was, amongst others, given the power to approve tariffs of the TSO and the DSO and appoint and supervise the TSO. The laws of June 1, 2005 completed the transposition of the second Directive.

The Corporate governance rules included in this law had to push further the liberalisation of the electricity market.

Meanwhile the same happened at the regional level. We see the creation of 3 regional regulators, VREG (Flanders), CWaPE (Wallonia) and IBGE-BIM for the Brussels-Capital Region although the latter only has an advisory role.

They are competent, amongst other things, for the licensing of the DSOs and the retailers/suppliers plus the general supervision of the DSO (except for tariffs, which fall under the competence of CREG)

<i>Chronology</i>	<i>Instruments of law</i>
❖ <u>1999</u> : the federal Law of April 29, 1999 in relation to the organization of the electricity market.	❖ Law of April 29, 1999
❖ <u>2000</u> : the Executive Order of the Flemish Parliament of July 17, 2000 in relation to the organization of the electricity market	❖ Law of June 1, 2005
❖ <u>2001</u> Executive Order of the Walloon Government of April 12, 2001 in relation to the organization of the electricity market as	❖ Royal Decree of May 3, 1999
	❖ Ministerial Decree of September 2002, appointing Elia as TSO
	❖ Executive Order of the Flemish Parliament of July 17, 2000
	❖ Executive Order of the Walloon Government of April 12, 2001 as amended by the

<p>amended by the Executive Order of April 22, 2004 and of April 21, 2005</p> <ul style="list-style-type: none"> ❖ <u>2001</u> Ordinance of July 19, 2001 as amended by the Ordinance of the Brussels Parliament of April 1, 2004 ❖ <u>2005</u> Federal law of June 1, 2005, transposing the Second EU Directive 	<p>Executive Order of April 21, 2005</p> <ul style="list-style-type: none"> ❖ Ordinance of the Brussels Parliament of July 19, 2001 as amended by the Ordinance of the of April 1, 2004
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TRANSMISSION

The Federal Government appointed Elia, by Ministerial Decree of 13 September 2002, as the sole Belgian TSO for electricity. The law of April 29, 1999 setting up the TSO, indicated that the TSO to be appointed should be an independent system operator which had a market share of 75% and which covered two thirds of each of the 3 Regions. Given the paramount role that the TSO would play with regards to Third Party Access, its objective and impartial nature needed to be guaranteed. The '99 law thus foresaw the creation of a totally independent juridical entity which would be designated for a renewable period of 20 years under the condition that such a designation could be recalled in case of a change in ownership which would endanger the independency of the TSO. Under these conditions the only company eligible for the position of TSO was Electrabel, the main producer and supplier of electricity.

When Electrabel (which, even before being officially nominated as TSO already acted de facto as such) took over the role of TSO under the name of Elia, additional conditions were laid down.

The first was a change in the shareholding. Elia was requested over time to be owned 30% by the municipalities, 30% by the producers and 40% had to be free floating.

Originally Electrabel held a 64% share in Elia, SPE (the second largest electricity producer and indirectly also a supplier) 6% and Publi-T, a consortium of municipalities, held the remaining 30%.

To meet the requirements of total independency, an agreement was reached in 2003 to rearrange the holdings of the shareholders. Due to this arrangement 40% of the shares were to be put on the stock market. The original September 2004 date to complete the transaction was postponed, partly because the shareholders found market conditions unsuitable. Finally in June 2005, Elia sold 40% of the company to private investors. The sales reduced the combined shares of Electrabel and SPE to 30%, and the remaining 30% stayed with Publi-T.

Following the law of April 1999, further requirements guaranteeing the independent nature of the TSO were laid down by a Royal Decree of May 3, 1999. Following this Decree, the Managing Committee and the Board of Directors need to be of an independent nature. It further foresees the setting up of a Corporate Governance Committee to oversee the internal independency, an Audit Committee, which is responsible for the financial analyses and a Remuneration Committee. These Corporate Governance Rules were strengthened in 2000 and incorporated in the law of June 1, 2005, transposing the second Directive. Thus the Board of Directors should now be composed of non-executive directors and half of them need to be independent. (An independent director is defined as a director who does not hold a management function with a transmission system or one of its daughter companies).

New in the 2005 law is that the independent directors should not be nominated merely because of their independency but also because of their financial and technical knowledge and one third of the Board needs to be of the opposite gender. The CREG, however, no longer needs to give advice beforehand on the nomination of the Directors. Its advice is only requested within a period of 30 days after it has received notification of the nomination.

Consequent to consultation with the CREG and the TSO, a Royal Decree of December 19, 2002 also imposed a technical regulation concerning the operation and access to the transmission network.

A Compliance Officer, supported by senior management and directors of Elia, puts together a compliance programme. Regular information on the compliance programme is made available through internal company newsletters and the website. Compliance reports should be handed over to the energy regulators. To oversee the compliance of Elia/Electrabel with the applicable law, the appointment of a government commissioner was agreed upon, at the political level.

Electrabel, however, still has the right to veto certain decisions in Elia and besides being Belgium's main producer and supplier of electricity, Electrabel holds shares in the majority of the DSOs, is 100% owner of Netmanagement which provides technical operating services and support to the DSOs.

Very recently Suez, which amongst others also has a share in Distrigas, Fluxys, ESO Elia, Electrabel ECS, Electrabel Netten Vlaanderen, raised its share in Electrabel from 50.1% to 97.5%.

DISTRIBUTION

The legal unbundling of the DSOs has been regulated at the regional level. The DSOs are thus legally distinct companies from the former integrated companies.

Flanders now has 15 DSOs, Wallonia 14 and the Brussels-Capital Region 1 DSO. Whilst some of the DSOs operate in more than one region, the total number of operative DSOs in Belgium is 27. Depending on the Region in which the DSO operates, it needs to obtain a licence from the relevant regulator.

For such a small country as Belgium the amount of DSOs is perceived as too high. Consolidation is to be expected. Already on September 14, 2005 the mixed intermunicipalities in Flanders, which are united under Intermixt, came to an Agreement with Electrabel, and agreed in the near future to merge their technical supporting companies GeDis, Indexis and Electrabel Netmanagement Vlaanderen. According to this same agreement, the mixed intermunicipalities in Flanders will, in the long run, try to harmonize their tariffs and try to operate as one entity. This will initially not jeopardize the existence of the different DSOs, but it might be indicative as to what the future holds in store.

In Flanders, where the retail market is fully liberalized, the DSOs are responsible for the operations, the maintenance and the development of the grid and must provide access on a fair and non-discriminatory basis. They are appointed by the regional regulator for the Flemish region, the VREG. The mixed intermunicipalities serve 80% of the territory of Flanders. The other 20% is served by pure intermunicipal companies. In Wallonia, where

the market is not yet fully liberalized, DSOs continue to supply captive customers. Also in the Brussels-Capital Region, the market has not yet been fully liberalized and DSOs also continue to supply captive customers.

At the time when the retail side had to be unbundled from the distribution side, the municipalities decided that they themselves should organize and manage the distribution activities. This could take the form of a "zuivere intercommunale", a pure intermunicipal company (20%) or of a "gemengde communale", a mixed intermunicipal company (80%). The latter are those municipalities which chose to work with Electrabel and in which Electrabel has ownership. Thus Electrabel (the main supplier and retailer of electricity) still holds shares in the majority of the DSOs. The involvement of Electrabel will gradually decrease in that, subsequent to a Flemish Executive Order and a Memorandum of Understanding on the Brussels side, all DSOs need to be owned completely by the municipalities at the latest by 2018. It is alleged that this forced exit could give cause to an artificial rise in value of Electrabel's shares.

Electrabel is still currently the 100% owner of Netmanagement, which provides support services for the DSOs.

DSOs (as well as TSOs) need to open their network according to published and regulated tariffs. CREG, the federal regulator, supervises tariff setting. When calculating the permitted tariff, DSOs are allowed to recuperate their costs increased by an equitable profit margin. Since the law does not provide any guidance as to what is to be understood by "equitable profit margin", CREG has laid down its own guidelines. DSOs attack the correctness of these guidelines in order to appeal the tariff which was set for them by CREG. Currently there are around 110 ongoing procedures and this number is still increasing. DSOs and TSOs currently can recuperate their operational costs. This may possibly hamper their operational efficiency. New entrant DSOs will always depend on a competitor for the supply of their energy needs, taking away any incentive to enter the energy market as a newcomer.

The functional unbundling of the DSOs is further guaranteed by the Rules of Corporate Governance which are embedded within the Energy laws. A general law of August 2, 2002 on corporate governance further guarantees the functional independence of the Executive Board of any network in view of activities that have no connection with the operation of the network.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Only a few items differ concerning the gas market. This is, in large, because we again find a lot of the same economic players.

Until the First EU Energy Directive was issued, the transport of gas was originally governed by the law of April 12, 1965.

This law was merely adapted and amended to transpose the First Directive into the national law, by the law of 29 April 1999. The transposition of the First Directive went, however, much further than required and already anticipated the content of the second Directive 54/2003. In July 2000 the Federal Government agreed to speed up market liberalization for industrial clients and distribution companies beyond the rate required in the European Directive.

Although the pace of liberalization was initially fast, due to the switch from negotiated third-party access (the original choice) to regulated third-party access and the lack of ownership, unbundling slowed down and became a stumbling block to full liberalization.

In Belgium we have to overcome an additional hurdle in the process of liberalization, and that is the presence of both high calorie gas (H-gas) and low calorie gas (L-gas) on the Belgian market.

The latest law of June 1, 2005 further transposed the second Directive into Belgian law.

Provisions foresee the institution of an independent regulator, CREG, which was, amongst others, given the power to approve the tariffs of the TSO and the DSO and appoint and supervise the TSO.

At the regional level, the same 3 regional regulators, VREG (Flanders), CWaPE (Wallonia) and IBGE-BIM in an advisory role have been appointed for the gas market. They, amongst other things, are competent for licensing of the DSOs and the retailers/suppliers, and the general supervision of the DSO (except the tariffs which fall under the competence of CREG).

<i>Chronology</i>	<i>Instruments of law</i>
<ul style="list-style-type: none"> ❖ <u>1999</u> the First Directive was transposed at the Federal level by the law of April 29, 1999, in relation to the organization of the gas market and the fiscal regime of the electricity producers. ❖ <u>2001</u> Executive Order of the Flemish Parliament of July 6, 2001 in relation to the organization of the gas market. 	<ul style="list-style-type: none"> ❖ Law of April 29 ❖ Law of June 1, 2005 ❖ Executive Order of the Flemish Parliament of July 6, 2001. ❖ Executive Order of the Walloon Government of December 19, 2002, as amended by the Executive Order of April 21, 2005 in relation to the full liberalization of the electricity and gas

<ul style="list-style-type: none"> ❖ <u>2001</u> Ordinance of the Brussels Parliament of July 19, 2001 in relation to the organization of the gas market as amended by the Ordinance of April 1, 2004. ❖ <u>2002</u> Executive Order of the Walloon Government of December 19, 2002 in relation to the organization of the regional gas market as amended by the Executive Order of April 22, 2004 and the Executive Order of April 21, 2005 in relation to the full liberalization of the electricity and gas markets. ❖ <u>2005</u> Federal law of June 1, 2005 further transposing the second Directive. 	<p>markets Energy Act 2004</p> <ul style="list-style-type: none"> ❖ Ordinance of the Brussels Parliament of July 19, 2001 as amended by the Ordinance of April 1, 2004
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TRANSMISSION

Historically, Distrigas was both the transport network manager (TSO) and the trader of gas. It is alleged that since CREG (the federal regulator) would be controlling the operations of the TSO, and Distrigas did not really want the regulator to look into its trading activities, it voluntarily split its activities in 2001. The trading activities were thereafter managed by Distrigas, and for its network activities a separate company was set up: Fluxys. Fluxys has never officially been appointed as the TSO for gas.

Fluxys is directly and indirectly owned 62.46% by Suez, 11.5% is on the Belgian stock exchange (but 5.21% thereof is owned by Suez which leaves only 6.49% for the open market) and 31.25% is in the hands of the mixed intermunicipalities (DSOs). The Government has one preferential golden share.

Suez, the major shareholder of Fluxys (TSO), is also a shareholder of Distrigas, who is responsible for the trading and the import of gas and for supplying gas to the end user as well as a shareholder of ECS, another supplier. Suez is also indirectly a shareholder in the mixed intermunicipalities that distribute the gas to the suppliers.

The law created legal and functional unbundling requirements to prevent the intermingling of the production, import and supply with the TSO.

The independence of Fluxys should be guaranteed by the Corporate Governance rules which are since 2005 embedded in law. These Corporate Governance rules impose the creation of an Audit Committee, a Remuneration Committee and a Corporate Governance committee within the Board of Directors of the appointed TSO.

It is to be noted that the corporate governance rules applicable on Fluxys (TSO for gas) are of a much less severe nature than the corporate governance rules which are imposed on Elia (TSO for electricity). The corporate governance rules with regards to the Board of Directors and the different Committees were only explicitly incorporated by law for the gas sector by the law of June 1, 2005.

Thus the Board of Directors for instance only needs to be constituted by one third (instead of half) of independent directors. Also the Corporate Governance Committee only needs to be composed of two thirds of independent directors (whilst in the electricity sector all of the directors need to be independent).

The management of the company, however, needs to achieve and observe the Code of Conduct rules established by the Royal Decree of 4 April 2003, containing the operational and administrative guidelines for gas transport companies and system users.

An internal compliance programme, which is devoted to transparency, non-discrimination and confidentiality, has been developed. All labour agreements of newly recruited staff members include a confidentiality clause and a non-competition clause. Each staff member needs to act in a non-discriminatory manner towards customers and strict control is imposed by the Risk Manager/Compliance Officer.

DISTRIBUTION

In the past the intermunicipalities acted both as distributors of the gas (DSO) and also as suppliers of the gas to the end-users. This could take the form of a "zuivere intercommunale", a pure intermunicipal company or of a "gemengde communale", a mixed intermunicipality. The latter are the municipalities who chose to work together with Distrigas. They are partially owned by the municipality and partially by Electrabel, which is in turn owned by Suez, as is Distrigas.

Since liberalization the municipalities have been prohibited from both distributing and supplying gas. In Belgium the municipalities traditionally chose to manage the distribution activities (DSO) and thus were prohibited from supplying gas to the end-users who after liberalization should be free to choose their supplier. There are 19 DSOs operating, as in the electricity market, in the form of a mixed or a pure intermunicipality.

The distribution activity is a far less profitable enterprise than actually selling the product. In order to offset the lost revenue, the six pure intermunicipalities (DSOs), formed a consortium called Publium, which has a 50% participation in a newly formed supply company called Luminus. Luminus is a consortium made up of 50% Publium and 50% Centria, a UK supplier.

The remaining 13 mixed intermunicipalities (DSOs) have an ownership in Distrigas, who amongst other things, is the main producer and trader of gas as well as a supplier through a vehicle called Publigas, which is a consortium analogous to Publium.

The DSOs are the subject of functional and legal unbundling.

However with regard to the operational side, Netmanagement provides connection services to the end-users, and repair services in case of, for instance, leaks. This company is owned by Distrigas, which is also one of the major suppliers.

Here also the DSOs need to open up their network in accordance with published and regulated tariffs, and same as for the electricity market, here again the tariffs set by CREG are under attack.

In general it can be said that the tension between the regulators and the industry, in some instances, is substantial.

The fact that Belgium has 4 regulators will not help to solve the problem.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: BELGIUM	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes	<p>* law of April 29, 1999, amended by Law of June 1, 2005</p> <p>* Executive Order of the Flemish Parliament July 17, 2000</p> <p>* Executive Order of the Walloon Government April 22, 2004 and Governmental Decree of April 21, 2005</p> <p>* Ordinance of Brussels Parliament of July 19, 2001 amended by Ordinance of April 1, 2004</p>	Yes	<p>* law of April 29, 1999, amended by Law of June 1, 2005</p> <p>* Executive Order of the Flemish Parliament July 6, 2001, amended by Executive Order of October 11, 2002</p> <p>* Governmental Decree of the Walloon Government of April 22, 2004, amended by Governmental Decree of April 21, 2005</p> <p>* Ordinance of Brussels Parliament of April 1, 2004</p>
Number of TSOs	1	CREG	1	CREG
Number of DSOs	27	VREG/BIM November 2005	19	VREG/BIM November 2005
How many of these DSOs have less than 100.000 customers?	No difference is made between DSOs with more or less then 100.000 customers	CREG/VREG/BIM	No difference is made between DSOs with more or less then 100.000 customers	CREG/VREG/BIM
TSO Unbundling regime	Legal and functional, but not ownership	Protocol signed on May 30, 2001 and Ministerial Decree of September 13, 2002.	Legal and functional, but not ownership	CREG/Fluxys
DSO unbundling regime	Legal and functional, but not ownership	VREG/BIM	Legal and functional, but not	VREG

			ownership	
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	No, already done	Executive Order of the Flemish Parliament of July 17, 2000 and Ordinance of July 19, 2001 as amended by the Ordinance of the Brussels Parliament of April 1, 2004.	No, already done	Executive Order of the Flemish Parliament of July 17, 2000 and Ordinance of July 19, 2001 as amended by the Ordinance of the Brussels Parliament of April 1, 2004.
100.000 customer exemption [y/n]	No		No	
How many DSOs are excluded [number]	No, no difference made.		No, no difference made.	
Share (%) of customers not benefiting from unbundling as a result of 100,000 customer rule	non		non	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?¹	Almost (IT)		Almost (IT)	
The Regulator [name]	*CREG *VREG *CWaPE *Brussels-Capital Government advised by BIM/IBGE		*CREG *VREG *CWaPE *Brussels-Capital Government advised by BIM/IBGE	
Does the regulator monitor unbundling?	Yes	Federal and Regional implementation of first and second Directive	Yes	Federal and Regional implementation of first and second Directive

¹ This aims to assess the general situation in the State regarding the practical implementation of unbundling. "Finalised" in this context refers to complying with the *current* obligations. Thus, in cases in which there is an exemption or a postponement until 2007, the process may nonetheless still be considered finalised.

Does the regulator have powers to collect information on unbundling in a given company?	Yes	Federal and Regional implementation of first and second Directive	Yes	Federal and Regional implementation of first and second Directive
Does the regulator have the power to require companies to take unbundling measures?	Yes	Federal and Regional implementation of first and second Directive	Yes	Federal and Regional implementation of first and second Directive
Can the regulator impose remedies? [y/n]	Yes	Federal and Regional implementation of first and second Directive	Yes	Federal and Regional implementation of first and second Directive
Have there been any complaints and/or decisions of the regulator on unbundling?	Yes	VREG	No	

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country:	Electricity			Gas		
BELGIUM	1	2	3	4	5	6
TSO or DSO?	TSO	DSO	DSO	TSO	DSO	DSO
Vertically integrated in production and/or supply?²	Yes	Yes	Yes	Yes	Yes	Yes
Position company holds within the integrated undertaking³	Subsidiary	Subsidiary/Affiliate	Subsidiary/Affiliate	Subsidiary	Subsidiary/Affiliate	Subsidiary/Affiliate
Legal regime governing the relation⁴	- Company law - Corporate Governance Code - Association Statutes - Regulator - Banking, Finance and Insurance Commission	- Company law - Corporate Governance Code - Association Statutes - Regulator - Banking, Finance and Insurance Commission	- Company law - Corporate Governance Code - Association Statutes - Regulator - Banking, Finance and Insurance Commission	- Company law - Corporate Governance Code - Association Statutes - Regulator - Banking, Finance and Insurance Commission	- Company law - Corporate Governance Code - Association Statutes - Regulator - Banking, Finance and Insurance Commission	- Company law - Corporate Governance Code - Association Statutes - Regulator - Banking, Finance and Insurance Commission
Legally Unbundled?	Yes	Yes	Yes	Yes	Yes	Yes
Legal form chosen⁵	NV/SA	CVBA	CVBA	NV/SA	CVBA	CVBA

² Vertically integrated undertaking (VIU) in this context means being part of a Group of companies active both in transmission/distribution and supply/generation, or part of a stand alone company active in both areas

³ Parent, subsidiary or division of a stand alone company active in both transmission/ distribution and generation/ supply.

⁴ By way of example, the legal regime may be based on standard company law, on contractual arrangements, or on other arrangements introducing further supervisory rights, such as codes of conduct.

⁵ Public Limited Company (PLC), Limited Liability Company (LLC)

Functional unbundling	Yes	Yes	Partially	Yes	Yes	Partially
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions?	No	No	No	No	No	No
Management personnel of the company hold shares of related supply/generation company or division?	Normally not, but no way of controlling	Normally not, but no way of controlling	Normally not, but no way of controlling	Normally not, but no way of controlling	Normally not, but no way of controlling	Normally not, but no way of controlling
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	No	- certain IT services - certain operational tasks via Electrabel	- certain IT-services - certain operational and administrative tasks via Electrabel - uses bank account from Electrabel	No	- certain IT-services - certain operational tasks via Electrabel	- certain IT-services - certain operational and administrative tasks via Electrabel - uses bank account from Electrabel

Salary of management based on performance of other related supply/ generation companies or divisions?	No	No information made available	No information made available	No information made available	No information made available	No information made available
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	No	No	No	No	No	No
Board members also responsible for activities in the supply and/ or generation?	Yes	Yes	Yes	Yes	Yes	Yes
Reasons for the removal of the executive director.	Company Law, Articles of Incorporation, Corporate Governance Code, By decision of the General Meeting and under supervision of CREG	Company Law, Articles of Incorporation, Corporate Governance Code,	Company Law, Articles of Incorporation, Corporate Governance Code, by decision of the General Meeting upon recommendation of the shareholders	Company Law, Articles of Incorporation, Corporate Governance Code	Company Law, Articles of Incorporation, Corporate Governance Code	Company Law , Articles of Incorporation, Corporate Governance Code, by decision of the General Meeting upon recommendation of the shareholders

Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No	Yes	Yes	No	Yes	Yes
Involvement in the day-to-day business of the company by other supply/generation operations?	No	No	No	No	No	Yes
Effective decision making rights to operate network?	Yes	Yes	Yes	No information made available	Yes	Yes
Compliance programme	Yes	Yes	Yes	Yes	Yes	Yes
Rules governing access for personnel on premises?	Yes	Yes	Yes	Yes	Yes	Yes
Penalties for violation of rules?	Yes	Yes	Yes	Yes	Yes	Yes
Monitoring of compliance programme?	Internal and CREG	Internal and VREG	Internal and BIM	Internal and CREG	Internal and VREG	Internal and BIM
Separate location for network business?	Yes	Yes	No, still shared with operational unit of Electrabel	Yes	Yes	No, still shared with operational unit of Electrabel

3. CZECH REPUBLIC

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

Between 1995 and 2001, both the electricity and gas industries were governed by Act No. 222/1994 Coll., on business conditions, on the execution of state administration in power industries and on the State Energy Inspection. This Act unified gas- and electricity-sector legislation, but it did not render possible to liberalize the electricity market. The regulating function was held by the Ministry of Industry and Trade and by the State Energetic Inspection. In 2001, when a new Energy Act came into force, it brought substantial changes to the Czech electricity sector, most of all new licensing system and a new regulator – the Energy Regulatory Office.

Until 1992, the current major generator, eight major DSOs, and the TSO were all parts of the state enterprise České energetické závody. In 1992, this enterprise was reconstituted as ČEZ, a.s. In 1994, eight regional DSOs were spun off from it, though they remained state owned. The spin-off was done to help the functioning of the companies and in the interest of economic competition, not on the grounds of any legal obligation. In 1998, ČEPS, a.s., the sole TSO license holder, was separated. ČEZ, a.s. remained as a generator. As of 2003, the controlling interest in all the state-owned major DSOs had been sold: five of them were put under the control of ČEZ, a.s., and thus are now members of the ČEZ Group, remaining two of them under the indirect control of E.ON AG. A controlling interest in Pražská energetika was sold to Pražská energetika Holding B.V., the shareholders of which are the Capital of Prague, GESO Beteiligungs und Beratungs AG and RWE Energie AG (under control of RWE AG).

EC Directive 2003/54 (the “ Electricity Directive”) has been transposed by the Act No. 670/2004, which amends the Energy Act. It sets down the legal and functional unbundling obligation for TSO as of 1 January 2005, and for the DSOs as of 1 January 2007. The crucial powers with regard to practical implementation have been given to the Energy Regulatory Office and the State Energetic Inspection. Penalty for the breach of an unbundling provision is up to 50.000.000 CZK (approx. EUR 1.660.000). The amendment has endorsed the 100.000 customer exception, though adjusting the number to 90.000 of the final customers. The Energy Act has not transposed Article 17 allowing for a combined DSO and TSO. The requirements in Article 19, concerning internal audit, have not been transposed as they are already governed under the general company law.. Thus, it can be said that the unbundling provisions of the Directive have been transposed but incompletely and in an adjusted way; the particular unbundling regime for the companies has been given and the provisions have been made enforceable.

There is no secondary or other legislation providing for the practical implementation of the unbundling provisions of the Energy Act.

<i>Chronology</i>	<i>Instruments of law</i>
❖ Communist era: the industry was governed by various Acts, the present major generator and DSOs belonged under one state enterprise	❖ Act No. 222/1994 Coll., on business conditions and on the execution of state administration in power industries and on the State Energy Inspection 1994 (overruled)

<ul style="list-style-type: none"> ❖ 1992: ČEZ, a.s., is established ❖ 1994: DSOs separated from CEZ ❖ 1995: Act No. 222/1994 Coll., on business conditions and on the execution of state administration in power industries and on the State Energy Inspection comes into force ❖ 1998: the sole TSO, ČEPS, a.s. separated from ČEZ, later ownership unbundled ❖ 2001: Energy Act comes into force ❖ As of 2003: controlling interests in all major DSOs sold ❖ 2005: Act No. 670/2004, which amends the Energy Act and transposes the Electricity Directive, comes into force 	<ul style="list-style-type: none"> ❖ Energy Act No. 458/2000 Coll. ❖ Amendment to the Energy Act No. 670/2004 Coll.
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TRANSMISSION

The sole TSO in the industry, ČEPS, a.s., was established in 1998, formerly being a part of ČEZ, a.s. It remained under the control of ČEZ, a.s., but pursuant to the decision of the Office for the Protection of Economic Competition, issued in 2003, ČEZ, a.s. had to transfer 51% of the shares to Osinek, a state-owned company. In 2004, a 34% interest in ČEPS was transferred to the Ministry of Finance. The Ministry of Labour and Social Affairs owns a 15% stake. ČEPS belongs therefore to the group of companies controlled by state-owned Osinek, a company that is neither a generator of electricity nor a supply company. The TSO is unbundled in ownership terms. It is not a vertically integrated undertaking, and thus the provisions on unbundling do not currently concern it; nevertheless, such provisions prevent it from future acts in breach of the unbundling provisions. In addition, in case there is a vertically integrated TSO in the future, the Energy Act sets down unbundling conditions analogous to those established for the gas TSO.

DISTRIBUTION

There are 314 DSOs in the industry. However, only seven have significant market shares. Eight former major regional DSOs were separated from ČEZ in 1994 and remained state controlled. As of 2003, majority interests in five of them were sold to ČEZ (as a kind of compensation for the forced sale of the interest in ČEPS); likewise, interests in two other DSOs were transmitted to E.ON Czech Holding Verwaltungs GmbH, a company under the indirect control of E.ON AG. A controlling interest in Pražská energetika was sold to Pražská energetika Holding.

Act No. 670/2004, which amends the Energy Act and transposes the Electricity Directive, sets down a functional and legal unbundling obligation as of 1 January 2007. The minimum unbundling criteria are as follows:

- General unbundling criteria pursuant to Article 15 of the Directive
- Adoption of the compliance programme to determine measures to eliminate discriminatory conduct, to determine informational and functional separation of electricity distribution from generation and supply, and to determine the regime of information treatment (April 30,2005),
- Informing the Regulator and Ministry of Industry and Trade,
- Prohibition to own an interest in an electricity generator, TSO or a supply company,

- A limitation of interest ownership up to 1% and the prohibition of its acquirement by a responsible body within the vertically integrated undertaking,
- Prohibition of agreements on control, and
- Separate bookkeeping in the case of unbundling implemented by lease of the business or of its part

As regards the process of unbundling, besides partial functional unbundling pursuant to the compliance programme, Pražská energetika has not yet undertaken any further steps.

Two DSOs that were under the control of E.ON Czech Holding are legally unbundled as from January 2005: new companies, E.ON Distribuce and E.ON Energie, were thus established (under control of E.ON Czech Holding). The defunct companies contributed, as parts of enterprise, their departments operating the distribution network to E.ON Distribuce, a separate legal entity, and they contributed, as parts of the enterprise, generation-and-supply operation departments to E.ON Energie. The companies are not fully unbundled in functional terms, since the common services are provided by E.ON Česká republika to both.

Five DSOs controlled by ČEZ, as of today partially functionally unbundled pursuant to the compliance programmes, are undertaking steps towards legal unbundling. Two new companies, ČEZ Distribuce and ČEZ Prodej, were established. The recent DSO companies contributed, as a part of the enterprise, their departments operating the distribution network to ČEZ Distribuce, a separate legal entity, and they contributed generation-and-supply operation departments to ČEZ Prodej. Each of the recent five DSO companies holds app. a 20% interest in ČEZ Distribuce and ČEZ Prodej. Still, companies within the ČEZ Group provide common services to the whole Group, to which the newly established companies belong.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Between 1995 and 2000, both the electricity and gas industries were governed by Act No. 222/1994 Coll., on business conditions and on the execution of state administration in power industries and on the State Energy Inspection. This legal rule unified gas and electricity industry legislation, but did not render liberalization of the gas market. The regulating function was held by the Ministry of Industry and Trade and by the State Energetic Inspection. In 2001, when a new Energy Act came into force, it brought substantial changes to the Czech gas industry, most of all new licensing system and a new regulator – the Energy Regulatory Office.

Until 1994, current major DSOs and TSO were parts of one state enterprise, Český plynárenský podnik. In 1994, based on the factual operation of transmission and distribution network in the frame of Český plynárenský podnik, not due to any legal obligation, eight new regional DSOs were created, together with TSO Transgas, and partially privatized. As of 2002, the controlling stakes in the eight regional DSOs and 97% of the shares of the TSO were sold to RWE Gas International AG, a company under the control of RWE AG. Six of the DSOs, where the RWE share is over 50%, formed RWE Group Czech Republic. The sale brought a strategic investor to the Czech gas industry; on the other hand, it did not help economic competition nor the opening of the market.

EC Directive 2003/55 (the “Gas Directive”) has been transposed by Act No. 670/2004, which amends the Energy Act. It sets down a legal and functional unbundling obligation for TSO as to 1 January 2006 and for the DSOs as to 1 January 2007. The crucial powers with regard to its practical implementation have been given to the Energy Regulatory Office and the State Energetic Inspection. The penalty for the breach of an unbundling provision is up to 50.000.000 CZK. The amendment has endorsed the 100.000 customer exception adjusting the number to 90.000 of final customers. The Energy Act allows for a combined DSO and TSO in the sense of Article 15; consequently this Article has not been transposed. The requirements regarding internal audit, as provided for in Article 17, are governed under general company law. Therefore, it can be said, the unbundling provisions of the Directive have been transposed but incompletely and in an adjusted way, the particular unbundling regime for the companies has been given and the provisions have been made enforceable.

The Decree of the Energy Regulatory Office 673/2004 Coll., laying down the rules for the organisation of the gas market, as amended, gives further details regarding the practical implementation of the Energy Act, but not in relation to the unbundling provisions. The Decree of the Energy Regulatory Office on proprieties and division of regulatory reports is to be issued, which should give further details on the implementation of accounting unbundling provisions of the Energy Act (Section 20).

<i>Chronology</i>	<i>Instruments of law</i>
❖ Until 1994: TSO and DSOs parts of Český plynárenský podnik	❖ Gas Industry Act No. 67/1960 Coll. (overruled)
❖ 1994: division of Český plynárenský podnik into the TSO and the DSOs	❖ Act on business conditions and on the execution of state administration in power industries and on the State Energy Inspection No. 222/1994 Coll. (overruled)
❖ 1995: the Act on business conditions and on the execution of state administration in power industries and on the State Energy Inspection	❖ Energy Act No. 458/2000 Coll.
	❖ Amendment to the Energy Act No. 670/2004

<p>comes into force</p> <ul style="list-style-type: none"> ❖ 1998: TSO made a separate, state-owned company ❖ 2001: Energy Act comes into force ❖ 2002: controlling interest in the TSO and the DSOs acquired by RWE Gas International ❖ 2005: Amendment to the Energy Act, transposing the unbundling provisions of the Directive, comes into force 	<p>Coll.</p>
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TRANSMISSION

The sole TSO in the industry, RWE Transgas, a.s., was formerly part of Český plynárenský podnik, as of 1994 a branch office of the same, as of 1995 a separate state enterprise, and as of 1998 a joint-stock company owned by the state. , In 2002, 97% of its shares were sold by the state to RWE Gas International, under the control and to the group of which it belongs. RWE Transgas also controls about 5% in the DSO Západočeská energetická.

Act No. 670/2004, which amends the Energy Act and transposes the Gas Directive, states the following minimum unbundling criteria:

- General unbundling criteria pursuant to Article 9 of the Directive
- Adoption of compliance programme to determine measures to eliminate discriminatory conduct and to determine a regime of information treatment (April 30,2005)
- Informing the Regulator and Ministry of Industry and Trade
- Limitation of interest ownership to 1% and prohibition of its acquirement by a responsible body within the vertically integrated undertaking
- Prohibition of agreements on control
- Separate bookkeeping in the case of unbundling implemented by lease of the business or of its part

RWE Transgas is a vertically integrated undertaking in the transmission, supply, and storage of gas. It shall be fully unbundled, both in functional and legal terms, as of 1 January 2006. As of today, it has undertaken partial functional unbundling, especially in respect of: treatment of confidential information, isolation of the TSO department employees with regard to figuring in relation to customers and salaries, compliance officer, hardware and software separation of the TSO department and confidential clauses.

DISTRIBUTION

In the gas industry, there are 123 DSOs; however, eight collectively control over a 99% market share. They are all under the control of RWE Gas International. Those six where the RWE Gas International share is over 50% formed RWE Group Czech Republic. In two of the companies, E.ON AG controls the relevant interest.

Act No. 670/2004, which amends the Energy Act and transposes the Gas Directive, sets down full functional and legal unbundling obligation as of January 1, 2007. The minimum unbundling criteria are as follows:

- General unbundling criteria pursuant to Article 13 of the Directive
- Adoption of compliance programme to determine measures to eliminate discriminatory conduct, to determine the regime of information treatment, and to determine measures to secure separation of gas distribution from gas generation, in organizational and informational terms, until the moment of a legal separation (April 30, 2005)
- Informing the Regulator and Ministry of Industry and Trade
- Prohibition of the ownership of an interest in gas generator and trading companies, i.e., supply companies
- Limitation of an interest ownership to 1% and the prohibition of its acquirement by a responsible body within the vertically integrated undertaking
- Prohibition of agreements on control
- Separate bookkeeping in the case of unbundling implemented by lease of the business or of its part

Meanwhile, all major DSO companies perform both the distribution and supply of gas. The major companies have endorsed compliance programmes that secure partial functional independence of their DSO departments.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Czech Republic	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Partly	Amendment to the Energy Act No. 670/2004 Coll.	Partly	Amendment to the Energy Act No. 670/2004 Coll.
Number of TSOs	1	August 2005, Energy Regulatory Office	1	August 2005, Energy Regulatory Office
Number of DSOs	314	August 2005, Energy Regulatory Office	123	August 2005, Energy Regulatory Office
How many of these DSOs have less than 100.000 customers?	307	August 2005, Energy Regulatory Office	115	August 2005, Energy Regulatory Office
TSO Unbundling regime	Ownership	Amendment to the Energy Act No. 670/2004 Coll.	Legal, Functional (as of 1 January 2006) Accounting (partly)	Amendment to the Energy Act No. 670/2004 Coll.
DSO unbundling regime	Legal, Functional (as of 1 January 2007) and Accounting (partly)	Amendment to the Energy Act No. 670/2004 Coll.	Legal, Functional (as of 1 January 2007) and Accounting (Partly)	Amendment to the Energy Act No. 670/2004 Coll.
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	Yes	Amendment to the Energy Act No. 670/2004 Coll.	Yes	Amendment to the Energy Act No. 670/2004 Coll.
100.000 customer exemption	Yes, in a modified way (90.000)	Amendment to the Energy Act	Yes, in a modified way (90.000)	Amendment to the Energy Act

[y/n]	customers exemption)	No. 670/2004 Coll	customers exemption)	No. 670/2004 Coll
How many DSOs are excluded [number]	307	August 2005, Energy Regulatory Office	115	August 2005, Energy Regulatory Office
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	Not available	N/A	1%	August 2005, Energy Regulatory Office
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	1 finalized, 5 on the way, 1 at the beginning	September 2005, Companies	No	September 2005, Companies
The Regulator name	Energy Regulatory Office	N/A	Energy Regulatory Office	N/A
Does the regulator monitor unbundling?	Yes	August 2005, Energy Regulatory Office	Yes	August 2005, Energy Regulatory Office
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Amendment to the Energy Act No. 670/2004 Coll	Yes	Amendment to the Energy Act No. 670/2004 Coll
Does the regulator have the power to require companies to take unbundling measures?	No	2005, Energy Act	No	2005, Energy Act
Can the regulator impose remedies? [y/n]	No	2005, Energy Act	No	2005, Energy Act
Have there been any complaints and/or decisions of the regulator on unbundling?	Only unofficially	August 2005, Energy Regulatory Office	Only unofficially	August 2005, Energy Regulatory Office

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Czech Republic	Electricity			Gas		
	1	2	3	4	5	6
TSO or DSO?	DSO	DSO	DSO	TSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes, distribution and supply	Yes, distribution and supply	Yes, distribution and supply	Yes, transmission and supply	Yes, distribution and supply	Yes, distribution and supply
Position company holds within the integrated undertaking	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary
Legal regime governing the relation	General company law	General company law	General company law	General company law	General company law	General company law
Legally unbundled?	No	No	No	No	No	No
Legal form chosen	N/A	N/A	N/A	N/A	N/A	N/A
Functional unbundling	Partially	Partially	Partially	Partially	Partially	Partially
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation	Partially	Partially	Partially	Partially	Partially	Partially

companies of the group or divisions?						
Management personnel of the company hold shares of related supply/generation company or division?	N/A	N/A	N/A	N/A	N/A	N/A
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	Yes, all common services within the company	Yes, telecommunication, legal, maintenance, logistics, client services, IT, software, trust	Yes, telecommunication, legal, maintenance, logistics, client services, IT, software, trust	Yes, telecommunication, IT services, purchase, salaries processing	Yes, all common services within the company	Yes, telecommunication, IT services, purchase, salaries processing
Salary of management based on performance of other related supply/generation companies or divisions?	Yes	Not available	Not available	Yes	Yes	Yes
Executive director for	Yes	No	Yes	Yes	No	No

network department sitting on the board of related supply/generation companies or divisions?						
Board members also responsible for activities in supply and/or generation?	Yes	Yes	Yes	Yes	Yes	Yes
Reasons for the removal of the executive director.	For any reason	For any reason	For any reason	For any reason	For any reason	For any reason
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No	Yes	Yes	Yes	No	No
Involvement in the day-to-day business of the company by other supply/generation	Yes	Yes	Yes	Yes	Yes	Yes

operations?						
Effective decision-making rights to operate network?	Yes	Yes	Yes	Yes	Yes	Yes
Compliance programme	Yes	Yes	Yes	Yes	Yes	Yes
Rules governing access for personnel on premises?	Yes	Yes	Yes	Yes	Yes	Yes
Penalties for violation of rules?	N/A	N/A	N/A	N/A	N/A	N/A
Monitoring of compliance programme?	Yes	Yes	Yes	Yes	Yes	Yes
Separate location for network business?	Yes	No	Yes	Yes	Yes	Yes

4. DENMARK

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

In the end of the 1990s the Danish Parliament passed a decision to liberalize the Danish electricity market with the purpose of enhancing efficiency and competitiveness while at the same time ensuring security of supply and protecting the environment.

The aim of the liberalization policy was to subject the production of and trading in electricity to free competition and to ensure transparency through public price regulation and free and equal access to the electricity grid.

As part of the liberalization the 1999 Act on Supply of Electricity, which is based on a licensing regime, required that activities of transmission or distribution are operated by a separate legal entity. Thus, the requirement of the Directive 2003/54/EC (the “Electricity Directive”) of legal unbundling was already a part of Danish legislation as per 1 January 2000, when the reform of the electricity market in Denmark entered into force.

In 2004 the requirements of functional unbundling of the Electricity Directive were implemented in Denmark by an amendment to the Act on Supply of Electricity. The implementation of these provisions are almost a word for word copy of the Electricity Directive, whereas other parts have been implemented through a general authorisation to the Minister of Economic and Business Affairs or to one of the regulatory authorities of which there are two in Denmark.

The substantive requirements of the Electricity Directive in relation to functional unbundling have been met through the 2004 amendment of the Act on Supply of Electricity, but not all the provisions of functional unbundling have at this time entered into force with full effect.

In August 2005 and with retroactive effect as per 1 January 2005, a state owned company (Energinet.dk) has been established with the purpose of owning and operating the overall electricity and gas grids in Denmark. The overall grids are, thus, unbundled in ownership terms.

<i>Chronology</i>	<i>Instruments of law</i>
❖ <u>1999</u> Act No. 375 of 2 July 1999 on Supply of Electricity – legal unbundling	❖ Act No. 375 of 2 July 1999 on Supply of Electricity
❖ <u>2004</u> Act No. 494 2004 of 4 June 2004 (L 2004 494) on amendment on the Act on supply of Electricity and the Act on supply of Heat. Implementation of the requirements of functional unbundling of the Electricity Directive	❖ Act No. 494 2004 of 4 June 2004 (L 2004 494) on amendment on the Act on supply of Electricity and the Act on supply of Heat
❖ <u>2004</u> Act No. 1384 on “Energinet Danmark”. Establishment of the legal	❖ Act No. 1384 on “Energinet Danmark”
	❖ Ministerial Order No. 635 of 27 June 2005 regarding compliance program for

<p>bases for the creation of a state owned and ownership unbundled TSO owning and operating the main grid for both electricity and gas.</p> <p>❖ <u>2005</u> Ministerial Order No. 635 of 27 June 2005 regarding compliance program for TSOs and DSOs</p>	<p>TSOs and DSOs</p>
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TRANSMISSION

According to “Danish Electricity Supply Statistical Survey 2004” (available on www.danskeenergi.dk), at the end of 2004 there were 11 regional transmission network companies (TSO’s).

With the establishment of the state owned company Energinet.dk (with retroactive effect as per 1 January 2005) by signing of the articles of incorporation and other relevant company documents on 24 August 2005, the two TSO’s owning and operating the 400 kV grids in Denmark, Eltra a/s and Elkraft Transmission A/S are now part of the company Energinet.dk together with the only TSO within the Danish gas sector, Gastra A/S. As per 1 January 2005 the state owned company Energinet.dk is the sole (ownership unbundled) TSO, which operates the 400 kV grid in Denmark.

Furthermore, 9 regional TSO’s operate the lower voltage transmission grid. These 9 regional TSOs are subjected to the requirements of legal and functional unbundling in the act on supply of electricity.

Since 1 January 2000, the Act on Supply of Electricity has stipulated the requirement of legal unbundling for both transmission and distribution businesses from each other as well as from generation and supply in order to obtain a license to conduct activities encompassed by the act.

With Act No. 494 2004 of 4 June 2004 the additional requirements of functional unbundling were implemented in Danish national law.

The amended act contains the following requirements in relation to functional unbundling for both TSOs and DSOs:

Management Separation

Section 45 of the Act on supply of electricity prohibits that managing executive directors, deputy managing executive directors, deputy directors and operational managers in TSO’s and DSO’s participate in the operation and management of a generator or supplier within the same group or another company within the group which directly or indirectly owns a generator or a supplier.

However, due to intertemporal provisions, persons within the executive management of the TSOs and DSOs who also have positions within generators and/or suppliers may continue their current terms in the management, however, for a maximum transitional period of three years.

Furthermore, the 100.000 customers exemption has been adopted in regard to the requirements of management separation, cf. Section 45(3) of the act.

Effective decision making rights

Section 45 (4) of the Act on supply of electricity delegates to the Minister of Economic and Business Affairs the authority to impose further provisions with the purpose of securing that the management of TSOs and DSOs may conduct business independent of commercial interests.

The Minister has as of yet not exercised the authority to issue further requirements.

Compliance

Section 20a of the Act on supply of electricity states that both TSO's and DSO's are required to prepare a program describing the company's actions in order to avoid discriminatory behaviour and the TSO's and DSO's are additionally required to ensure that the program is in fact complied with. Furthermore, an annual report describing the program and the measures taken to ensure and control compliance with the program must be filed with the Regulator.

The deadline for filing the compliance program with the Regulator is 1 July 2006.

Preservation of confidentiality – art. 12 and 16 of the directive

Section 84a of the Act on supply of Electricity is almost a word for word copy of articles 12 and 16 of the directive.

Furthermore, Section 84a subsection 3 stipulates that complaints regarding a breach of the obligation to undertake confidentiality must be filed with the Regulator.

DISTRIBUTION

According to "Danish Electricity Supply Statistical Survey 2004" (available on www.danskenergi.dk), at the end of 2004 there were about 115 distribution companies, of which 7 DSOs had more than 100.000 customers.

The act on supply of electricity requires that DSOs are unbundled in legal and functional terms. The requirements of Danish national law in respect of legal and functional unbundling are the same as those applying to TSOs, cf. above.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Like the electricity sector, the Danish gas sector has been gradually liberalized from the late 1990's when the Danish Parliament passed a new Act on the Supply of Natural Gas, which modernized the legal frame in Denmark for supply of natural gas and, in connection herewith implemented Directive 98/30/EC (internal market for natural gas). The new Act on Supply of Natural Gas entered into force from 2000.

The Act on Supply of Natural Gas, which is based on a licensing regime, has since then been amended numerous times.

Danish national legislation requires, as a condition for obtaining the required licenses, separation of transmission and distribution activities in legally separate entities (legal unbundling).

In 2004 the requirements of functional unbundling of the Directive 2003/55/EC (the "Gas Directive") were implemented in Denmark by an amendment to the Act on Supply of Natural Gas. The implementation of these provisions are in relation to some of the provisions an almost word for word copy of the Gas Directive, whereas other parts have been implemented through a general authorisation to the Minister of Economic and Business Affairs or to one of the regulatory authorities of which there are two in Denmark.

The substantive requirements of the Gas Directive in relation to legal and functional unbundling have been met through the 2004 amendment of the Act on Supply of Electricity, but not all the provisions of functional unbundling have at this time entered into force with full effect.

In August 2005 and with retroactive effect as per 1 January 2005 a state owned company (Energinet.dk) has been established with the purpose of owning and operating the overall electricity- and gas grids in Denmark. The overall grids are, thus, unbundled in ownership terms.

<i>Chronology</i>	<i>Instruments of law</i>
❖ <u>2004</u> Implementation of the requirements of legal and functional unbundling of the Gas Directive	❖ Act No. 494 2004 of 4 June 2004 (L 2004 494) on amendment on the Act on supply of Electricity and the Act on supply of Natural Gas and the Act on supply of Heat.
❖ <u>2004</u> Act No. 1384 on "Energinet Danmark". Establishment of the legal bases for the creation of a state owned and ownership unbundled TSO owning and operating the main grid for both electricity and gas.	❖ Act No. 1384 on "Energinet Danmark" which entered into force on 1 January 2005 according to Ministerial Decree No. 1483 2004.
❖ <u>2005</u> Ministerial Order No. 635 of 27 June 2005 regarding compliance program for TSOs and DSOs	❖ Ministerial Order No. 634 of 27 June 2005

TRANSMISSION

With the establishment of the state owned company Energinet.dk (with retroactive effect as per 1 January 2005) by signing of the articles of incorporation and other relevant company documents on 24 August 2005, the former only TSO within the gas sector, Gastra A/S, is now part of the state owned company Energinet.dk together with the two former TSOs within the electricity sector.

As per 1 January 2005 the state owned company Energinet.dk is the sole and ownership unbundled TSO within the gas sector in Denmark.

DISTRIBUTION

There are 4 regional DSOs in Denmark. One (DONG Distribution A/S) is owned by the state of Denmark and the remaining three are each owned by a large number of municipals within the respective regions.

None of the DSOs have less than 100.000 customers.

The DSOs are required to be legally unbundled as section 28 a of the Act on Supply of Natural Gas prescribes that the required license necessary to undertake both transmission and distribution activities cannot, as a main rule, be granted to the same undertaking and, furthermore, the undertaking may only have operations, which are covered by the particular license.

Furthermore, the above provision states that other activities not encompassed by the license must be exercised in independent limited liability companies.

As a consequence of the above, section 28 a of the Act on Supply of Natural Gas, which entered into force on 1 July 2004 established the requirement of legal unbundling of both the transmission and distribution business from each other as well as from generation and supply activities.

In regard to functional unbundling the Act on Supply of Natural Gas contains the following provisions:

Management separation

Section 28 b of the Act on supply of natural gas prescribes that managing executive directors, deputy managing executive directors, deputy directors and operational managers in TSO's and DSO's are prohibited from participating in the operation and management of a generator or supplier within the same group or another company within the group which directly or indirectly owns a generator or a supplier.

Subsection 2 furthermore states that members of the supervisory board of directors of a TSO or DSO are prohibited from participating in the operations or the management of a generator or supplier within the same group.

The requirement of management separation of the Directive has not yet entered into force with full effect as section 28 b allows persons, who as per 21 April 2004 legally were part of the executive management of a TSO or a DSO and at the same time directly or indirectly participated in the operations or management of a generator or supplier within the same group or another company within the group which directly or indirectly owns a generator or a supplier, to continue in both positions for a period of maximum 3 years after the time where the Act entered into force.

As for persons who as per 21 April 2004 were members of the supervisory board of directors in a TSO or DSO and at the same time directly or indirectly participating in the operation or management of a generator or supplier within the same group, these persons may continue in both positions until the expiry of the electoral period.

Effective decision making rights

Section 28 b (3) of the Act on supply of electricity delegates to the Minister of Economic and Business Affairs the authority to impose further provisions with the purpose of securing that the management of TSOs and DSOs may conduct business independent of commercial interests.

The Minister of Economic and Business Affairs has as of yet not exercised the authority to issue further requirements.

Compliance

Section 11 a of the Act on supply of natural gas states that both TSO's and DSO's are required to prepare a program describing the company's actions in order to avoid discriminatory behaviour and the TSO's and DSO's are furthermore required to ensure that the program is in fact complied with. Furthermore, an annual report describing the program and the measures taken to ensure and control the compliance with the program must be filed with the DERA.

Section 11 a was adopted by Act No. Act No. 494 2004 of 4 June 2004 (L 2004 494) an amendment to the Act on supply of natural gas. According to Ministerial Regulation No. 634 of June 27, 2005, art 5(2)) the deadline for filing the first compliance program with DERA is 1 July 2006.

As it appears from the study of the sample companies selected, only one of the companies has a compliance program at this time.

Preservation of confidentiality – art. 10 and 14 of the directive

Section 46 (1) of the Act on supply of natural gas is almost a word for word copy of articles 10 and 14 of the directive.

Furthermore, Section 36 (4) stipulates that complaints regarding breach of the obligation to undertake confidentiality must be filed with the Regulator.

The 100.000 customer exemption in the directive has not been implemented in the Act on supply of Natural Gas.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Denmark	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes	Act on supply of electricity (1999) as amended (2004) Act on establishment of Energinet.dk	Yes	Act on supply of electricity (1999) as amended (2004) Act on establishment of Energinet.dk
Number of TSOs	11	"Danish Electricity Supply Statistical Survey 2004"	1	
Number of DSOs	115	"Danish Electricity Supply Statistical Survey 2004"	4	
How many of these DSOs have less than 100.000 customers?	107	"Danish Electricity Supply Statistical Survey 2004"	0	
TSO Unbundling regime	Ownership/Legal, functional and accounting		Ownership/Legal	Act on establishment of Energinet.dk
DSO unbundling regime	Legal, functional and accounting		Legal, functional and accounting	
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	No		No	
100.000 customer exemption [y/n]	Yes, but only in relation to the requirement of management separation		No	
How many DSOs are excluded [number]	107, but only in relation to the requirement of management		0	

	separation			
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	Approximately 50%. However, the 100.000 customers exemption only applies to the requirement of management separation		0	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	Yes		Yes	
The Regulator [name]	The Danish Energy Authority and DERA		The Danish Energy Authority and DERA	
Does the regulator monitor unbundling?	Yes		Yes	
Does the regulator have powers to collect information on unbundling in a given company?	Yes		Yes	
Does the regulator have the power to require companies to take unbundling measures?	Yes		Yes	
Can the regulator impose remedies? [y/n]	Yes		Yes	
Have there been any complaints and/or decisions of the regulator on unbundling?	No	Information from the Regulator	No	Information from the Regulator

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Denmark	Electricity				Gas			
	1	2	3	4	5	6	7	8
TSO or DSO?	TSO	DSO	DSO	TSO	DSO	DSO	DSO	
Vertically integrated in production and/or supply?	No (owned by a large number of supply companies, but not a VIU)	Yes – in supply	Yes – in supply	Yes – in supply	Yes – in production and supply	Yes – in supply	Yes – in supply	
Position company holds within the integrated undertaking	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Parent	Parent	
Legal regime governing the relation	Company law and articles of association	Company law and articles of association	Company law and articles of association	Company law and articles of association	Company law and articles of association	Company law and articles of association	Company law and articles of association	
Legally Unbundled?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Legal form chosen	PLC	PLC	PLC	PLC	PLC	General Partnership	PLC	
Functional unbundling	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	No	Yes	Yes	Yes	Yes	Yes	Yes	
Management personnel of the company hold shares of	No	No	No	No	No	No	No	

related supply/generation company or division?								
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	No	Yes - communication, IT, organisation development, secretariat and economics	Yes – personal and accounting	Yes – all services	Yes – legal, accounting, it, finance	Yes	Yes	
Salary of management based on performance of other related supply/ generation companies or divisions?	No	No	No	No	No	No	Yes - partly	
Executive director for network department sitting on the Board of related supply/generation companies or divisions?	No	No	Yes	No	No	Yes	Yes	
Board members also responsible for activities in the supply and/ or generation?	No	No	Yes	Yes	No	Yes	Yes	
Reasons for the removal of the executive director.	None explicitly stated	None explicitly stated	None explicitly stated	None explicitly stated	None explicitly stated	None explicitly stated	None explicitly stated	
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No	Yes	No	No	No	Yes	Yes	

Involvement in the day-to-day business of the company by other supply/generation operations?	No	No	No	No	No	No	No	
Effective decision making rights to operate network?	Yes	Yes	Yes	yes	Yes	Yes	Yes	
Compliance programme	No	No	No	No	Yes	No	Yes	
Rules governing access for personnel on premises?	No	No	No	No	Yes	No	Yes	
Penalties for violation of rules?	No	No	No	No	Yes	No	Yes	
Monitoring of compliance programme?	Yes - DERA	Yes - DERA	Yes - DERA	Yes - DERA	Yes - DERA	Yes - DERA	Yes - DERA	
Separate location for network business?	Yes	Yes	Yes	No	Yes	No	Yes	

5. FINLAND

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

The reform and deregulation of the Finnish electricity market started in 1995 with the entry into force of the Electricity Market Act (386/1995). The electricity market is regulated by the Electricity Market Act and the statutes issued by virtue of the Act. All users are currently free to buy their electricity from any available electricity supplier.

Electricity sales activities can be freely exercised and do not call for a licence. Electricity transmission and electricity distribution on the other hand are both licensed activities.

The Second Electricity Directive has been implemented in Finland by means of amending the Electricity Market Act (1172/2004). The substantive requirements of Articles 10 and 15 of the Second Electricity Directive have been met through the establishment of an independent company to operate as the TSO in 1997 and through the passing of specific provisions amending the Electricity Market Act. The Finnish legislation contains certain deviations from the Second Electricity Directive regarding inter alia the prerequisites for exemption from the unbundling provisions.

Compliance with the legal unbundling provisions is not obligatory for the companies active in the Finnish electricity market until 1 January 2007. As regards the largest electricity companies, to which the provisions of functional unbundling apply as of the date they become legally unbundled, further provisions and guidelines on functional unbundling will be passed in the near future. In general, due to the fact that most of the DSOs are in municipal ownership and the provided for transition period, only approximately 10 % of the companies have to date implemented their legal unbundling. Some companies have nevertheless taken measures in order to prepare for compliance with the forthcoming requirements on functional unbundling.

Finland has endorsed the 100,000 customer rule of the Second Electricity Directive in modified form, due to the relatively small size of DSOs in Finland. The legal unbundling obligation applies to companies, in which the electricity distributed in 0,4 kV networks during the past three calendar years has been at least 200 GWh/year. If this threshold is met and the system operator has at least 50,000 customers, also the relevant provisions in the Electricity Market Act on functional unbundling apply. The provisions on functional unbundling provide that a person managing a system operator engaged in legally unbundled electricity system operation with 50,000 customers or more may not act as the managing director of a utility in charge of electricity generation or electricity sale or as a member of its board of directors or a corresponding organ, if the system operator and the utility are under the authority of the same party. Furthermore, if the threshold is met and the system operator has at least 100,000 customers, the Ministry of Trade and Industry may decree further provisions on functional unbundling in relation to decision-making on the prerequisites purporting to ensure the independence of the persons managing the system operator, and the system operator's obligation to establish a program of measures ensuring that the system operator meets its obligations referred to in chapters 3 and 4 of the Electricity Market Act in a non-discriminatory manner.

In addition to the Electricity Market Act, there are other instruments of law, through which the legal and practical implementation of the unbundling provisions are/will be enforced:

- The Ministry of Trade and Industry is currently drafting a decree on further provisions regarding functional unbundling;
- The Association of Finnish Energy Industries has published guidelines in March 2005 regarding confidentiality requirements to be applied in the electricity market. The guidelines apply to the whole industry;
- The Energy Market Authority established a working group in September 2005 to draft guidelines regarding a programme to avoid discrimination and to report on progresses. The guidelines should be more detailed than the forthcoming decree of the Ministry of Trade and Industry and will thus be valuable for the implementation of the unbundling provisions in practice.

There is one TSO in Finland. There are 13 regional network operators and 91 DSOs in Finland. 85 DSOs have less than 100.000 customers. There are approximately 120 electricity generators, approximately 400 power plants and 74 retail suppliers in Finland.

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>1995</u>: Electricity Market Act - partial opening of the electricity market to competition (freedom to choose electricity supplier available for users with consumption exceeding 500 kW) ❖ <u>1995</u>: Electricity Market Authority founded (Changed its name to Energy Market Authority in 2000) ❖ <u>1997</u>: Amendment to the Electricity Market Act - full opening of the electricity market to competition (all users free to choose supplier) ❖ <u>2004</u>: Amendment to the Electricity Market Act – provisions on legal and functional unbundling 	<ul style="list-style-type: none"> ❖ Electricity Market Act (386/1995, as amended) ❖ Act on the Electricity Market Authority (387/1995, replaced by the Act on the Energy Market Authority 507/2000) ❖ Forthcoming guidelines on unbundling ❖ Existing guidelines on confidentiality requirements

TRANSMISSION

The Finnish TSO, Finnish Power Grid Plc (Fingrid), started its operations in September 1997 and is responsible for high-voltage power transmission on the national grid. The TSO is not directly or indirectly controlled by any supply or generation company and is thus legally unbundled. The State of Finland owns approximately 12 % of the shares in the TSO.

Fingrid both operates and owns the national grid. The company has no generation or supply affiliates nor does it carry out such activities itself.

Fingrid holds a specific license required to carry out its activities. The Electricity Market Act lays down strict requirements for the fairness and impartiality of the TSO's operations, and the Energy Market Authority supervises its activities.

The wording of the Electricity Market Act suggests that the provisions on legal and functional unbundling referred to above apply also to TSOs. However, the only Finnish TSO is ownership unbundled and thus not a vertically integrated undertaking.

DISTRIBUTION

In Finland, distribution network operators must hold a license in order to be allowed to distribute electricity. There are currently 91 DSOs in Finland, of which 85 have less than 100,000 customers. During the past 20 years, the number of DSOs has decreased significantly from the original 200 companies. The majority of the DSOs are in municipal ownership. The State of Finland has indirect control over one DSO.

Most DSOs are active in generation, distribution and supply of electricity or belong to a group of companies active in the said businesses.

As a result of the legal unbundling provisions having been implemented in modified form under the available exemption, the smallest companies obliged to implement legal unbundling have approximately 18,000 customers. According to the statistics of the Finnish regulator, the Energy Market Authority, 59 DSOs are exempted from the legal unbundling provisions. This corresponds to approximately 15 % of the distributed energy and approximately 13 % of the customers in Finland. The provisions on functional unbundling apply to 15 DSOs. The scope of obligations regarding functional unbundling varies depending on the number of customers that a DSO has. Only the largest DSOs with more than 100,000 customers will be obliged to prepare a compliance program, following the passing of the decree thereon by the Ministry of Trade and Industry.

Pursuant to the Electricity Market Act, legal unbundling shall be effected as of 1 January 2007. Due to the transition period, only approximately 10 % of the DSOs have begun to implement the legal unbundling provisions.

The Electricity Market Act does not directly provide for a transition period with regard to functional unbundling but the provisions related thereto apply only to operators that are legally unbundled. Thus, in most cases functional unbundling may de facto be implemented on 1 January 2007 at the latest. Some DSOs have also taken measures or begun to prepare themselves for the functional unbundling provisions. The analysis of the three DSOs supported this view.

One of the analyzed DSOs is already legally unbundled. The other two DSOs are not legally unbundled but are business units in Vertically Integrated Undertakings. All DSOs are, however, to a large extent independent in their budgeting and decision making as regards the assets necessary for operating, maintaining and developing the network. Those responsible for the management of the DSO are not involved in the day-to-day operation of generation or supply operations.

All three DSOs have certain common services, covering such areas as legal, IT, finance and personnel services. In some cases the executive directors of the network business are members of the management group of the Group, but they do not in this context participate in the activities related to generation and supply of electricity.

To date the DSOs examined have yet to establish any compliance programs. Two of the DSOs examined have taken measures for functional unbundling through training of staff and preparing internally for the further regulations. One DSO has also partially separate office premises for the personnel of the network business.

B. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Finland	Electricity	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes Partially	Electricity Market Act (386/1995, amended 21 December 2004/1172)
Number of TSOs	1	
Number of DSOs	91	Energy Market Authority
How many of these DSOs have less than 100.000 customers?	85	Energy Market Authority
TSO Unbundling regime	Ownership	
DSO unbundling regime	Accounting (Legal and functional as of 1/1/07)	Sections 28-34 of the Electricity Market Act (accounting), Section 34 a of the Electricity Market Act (legal) and 34 c of the Electricity Market Act (functional)
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	No (Postponement until 1 January 2007 of legal unbundling for all DSOs, to which the provision is applicable)	Implementing provision of Act 1172/2004, Section 6
100.000 customer exemption [y/n]	Yes (modified)	Section 34 a of the Electricity Market Act
How many DSOs are excluded [number]	59	Energy Market Authority
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer	The excluded 59 DSOs represent 13 % of the customers.	Energy Market Authority

rule		
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	Yes	
The Regulator [name]	Energiamarkkinavirasto (Energy Market Authority)	
Does the regulator monitor unbundling?	Yes	Section 38 of the Electricity Market Act
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Section 42 of the Electricity Market Act
Does the regulator have the power to require companies to take unbundling measures?	Yes	Section 39 of the Electricity Market Act.
Can the regulator impose remedies? [y/n]	Yes	Section 39 of the Electricity Market Act.
Have there been any complaints and/or decisions of the regulator on unbundling?	No	

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Finland	Electricity		
	1	2	3
TSO or DSO?	DSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes (production and supply)	Yes (production and supply)	Yes (production and supply)
Position company holds within the integrated undertaking ⁶	Business unit	Business unit	Business unit of the company that is parent of the supply and generation companies
Legal regime governing the relation	Contractual and administrative arrangements	Company law	Company law
Legally Unbundled?	No	No	Yes
Legal form chosen	N/A	N/A	Business unit of a PLC
Functional unbundling	No	No	No
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	No	No	No
Management personnel of the company hold shares of related supply/generation company or division?	No	No	No
Common services shared by TSO/DSO and related supply/ generation companies or divisions? Which ones?	Yes Legal, finance, personnel, material, property, transport, IT, communications	Yes Personnel, IT, transport, real estate, finance, risk management	Yes Legal, finance, IT, accommodation, accounting, cleaning

⁶ Parent, subsidiary or division of a stand alone company active in both transmission/ distribution and generation/ supply.

	and customer, corporate security		
Salary of management based on performance of other related supply/ generation companies or divisions?	Yes Minor part of the total compensation is based on success of the net-work business and the company as a whole.	No	No
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	No	No	No
Board members also responsible for activities in the supply and/ or generation?	No	No	No
Reasons for the removal of the executive director.	Agreement	The organ appointing the executive director may remove him, reasons may be stipulated in agreement	The organ appointing the executive director may remove him, reasons may be stipulated in agreement
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No	No	No The network operations are carried out in a business unit of the parent company for the supply and generation companies of the Group. The business unit itself does not hold any shares in the supply or generation company.
Involvement in the day-to-day business of the company by other supply/generation operations?	No	No	No
Effective decision making rights to operate network?	Yes	Yes	Yes
Compliance programme	No	No	No
Rules governing access for personnel	Yes	No	No

on premises?			
Penalties for violation of rules?	Yes Disciplinary measures in accordance with employment law	No	No
Monitoring of compliance programme?	No	No	No
Separate location for network business?	Yes Partially	No	No

6. FRANCE

A. Electricity: overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

Under French law, the main texts governing electricity activities are the Law n°2003-8 of 3 January 2003 related to the gas and electricity market and to the public service of energy (the "2003 Law") and the Law n°2000-108 of February 2000 related to the modernisation and the development of the public service of electricity (the "2000 Law").

Prior to the 2000 Law, electricity activities were carried out by a vertically-integrated national company, Electricité de France ("EDF"). The 2000 Law transposed the Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity into French law and brought a partial liberalisation of the production activity and definition of a restricted category of eligible clients. Concerning transport, it provided that the management of the transmission system should be entrusted by EDF to an autonomous service (which would not constitute a separate legal entity). The 2000 Law put in place provisions tending to ensure the independence of the electricity TSO and created the sector regulating body.

The 2003 Law transposed the Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas into French law, and brought some amendments to the 2000 Law. Notably, it reinforced the provisions aiming to guarantee the independence of the TSO.

The Electricity Directive 2003/54/EC (the "Electricity Directive") has been transposed into French law by the Law n°2004-803 of 9 August 2004 related to the gas and electricity public service and to gas and electricity undertakings (the "2004 Law"). More recently, a new text has been adopted, the Law n°2005-781 of July 13, 2005, relating to the trends of the energy policy (the "2005 Law"). The above mentioned texts have been modified in accordance with these new provisions.

In addition to these texts, secondary legislation has been adopted and more is expected to be adopted in the future. No particular instruments (such as guidelines) have been adopted in order to help practical implementation, but the regulator responds to requests for clarification from the operators.

All the compulsory provisions of the Directive have been transposed into French law but, contrary to the European unbundling provisions that are dispatched in two Directives, most of French unbundling provisions related to gas and electricity are gathered in common texts.

<i>Chronology</i>	<i>Instruments of law</i>
<ul style="list-style-type: none"> ❖ <u>2000</u>: transposition of the Directive 96/92/EC – Partial opening of the electricity market. Separation of the management of the transmission system. 	<ul style="list-style-type: none"> ❖ Law n° 2000-108 of 10 February 2000 related to the modernisation and the development of the public service of electricity

<ul style="list-style-type: none"> ❖ <u>2003</u>: transposition of the Directive 98/30/EC – Amendments to the 2000 Law, particularly concerning confidentiality duties. ❖ <u>2004</u>: transposition of the Electricity Directive– Legal and functional separation of transmission activities; functional separation of distribution activities. ❖ <u>2005</u>: minor amendments to transposition provisions and general rules on energy policy. 	<ul style="list-style-type: none"> ❖ Law n°2003-8 of 3 January 2003 related to the gas and electricity market and to the public service of energy; ❖ Law n°2004-803 of 9 August 2004 related to the gas and electricity public service and to gas and electricity undertakings ❖ 2005 Law
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TRANSMISSION

The 2004 Law ensures the transposition of the legal unbundling obligation applicable to TSOs, since it provides for the creation of a separate legal entity (distinct from the one handling generation and supply), which shall be entrusted with the management of the transmission system.

In practice, this obligation has been complied with by the creation of RTE EDF Transmission SA ("RTE"), an independent company in charge of the management of the electricity transmission system.

RTE is the only electricity TSO in France and is held by Electricité de France ("EDF"), the most important electricity generator and supplier in France. EDF, is owned by the French State but the government has announced that 15 % of its capital should be privatised before the end of 2005. The public offering is currently taking place.

The by-laws of RTE have been recently approved by the Decree n°2005-1069 of 30 August 2005.

The functional unbundling obligation has also been transposed into French law. The independent operation of the TSO is ensured by a set of provisions essentially related to the management (such as, for example, the prohibition for persons with executive functions in the management of the TSO to have direct or indirect functions in the management of activities related to generation or supply, or the obligation to obtain the prior opinion of the regulator before the removal of such persons). Moreover, a decree is expected to be adopted before the end of 2005, which shall provide for measures in order to guarantee the professional interests of the management and enable them to act independently.

French law provides for the adoption of a compliance programme compiling the measures taken in order to prevent discriminatory conducts as regards the access to the transmission system. The regulator is expected to publish, around the end of 2005, a report assessing the compliance policy of the TSO, as well as its independence.

The TSO has adopted internal measures in order to guarantee its independence (physical separation, management independence, confidentiality measures, codes of good conduct, etc.). However, the regulator has expressed some doubts concerning the inclusion of the name "EDF" in the name of the TSO.

DISTRIBUTION

There are between 160 and 170 DSOs in France. Most of them are controlled by the State or public entities but some of them are partially held by private entities.

Under French law, the implementation of the legal unbundling of DSOs has been postponed until a later date. However, French law does impose on vertically integrated operators the obligation to create a distinct internal service in charge of the management of the distribution system. Such service shall be independent from the other activities in terms of its organisation and decision-making powers.

In addition, France has endorsed the 100.000 customer exemption: therefore, the obligation to create a separate internal service in charge of the distribution system is only imposed on the few DSOs that meet this threshold. According to the 2004 activity report published by the regulator, only the following 5 DSOs are currently subject to this obligation in France:

- Electricité de France Réseau de Distribution (ERD)
- Electricité de Strasbourg (ES) ;
- Usine d'électricité de Metz (UEM) ;
- Société de revente d'électricité et de gaz, d'investissement et d'exploitation en énergie et de services (Sorégies) ;
- Régie du Syndicat intercommunal d'énergie des Deux Sèvres (RSIEDS).

For these DSOs, the independent operation of the internal service is ensured by provisions contained in the 2004 Law, relating to the management (such as, for example, the prohibition for persons with executive functions in the management of the DSO to have direct or indirect functions in the management of activities related to the generation or the supply, or the obligation to obtain the prior opinion of the regulator before the removal of such persons).

Since the adoption of the 2004 Law, the five DSOs subject to unbundling provisions have constituted separate internal services in charge of the management of the distribution network.

French law provides for the adoption of a compliance programme compiling the measures taken to prevent discriminatory conducts as regards the access to the system. The report that is to be published shortly by the regulator will also evaluate the respect of compliance programmes by DSOs and assess their independence.

The provisions of the Electricity Directive regarding the unbundling of accounts have also been transposed into French law.

In general, all of the five above-mentioned DSOs have also implemented the functional unbundling obligations provided for in the Electricity Directive and the French transposition provisions. However, there might be slight differences in the way these provisions have been implemented by each operator:

- All of the DSOs have adopted a Code of Good Conduct, some of them very detailed.
- All of the DSOs have adopted internal measures aiming at guaranteeing the confidentiality of sensitive information, in compliance with the specific rules existing under French law.
- In general, the personnel of the DSOs works exclusively for this service; however, in some cases, DSOs share common services with the companies in which they are integrated.
- Generally, the transfer of employees between the DSOs and other services of the company has not been subject to restrictive provisions. However, in some cases, certain measures have been adopted in order to guarantee the confidentiality of sensitive information.
- The management of the DSOs is protected by several provisions, in particular relating to their removal. This aspect should be improved in the future, since a Decree relating to the independence of the management of the DSO is expected to be adopted.
- The management of the DSOs is granted a certain level of independence concerning the management of the day-to-day operations. The role of the integrated company is generally defined in the by-laws or other internal documents, and is limited to specific decisions, in general above certain thresholds.
- In general, all DSOs are physically located in premises different from those occupied by other activities.

The Regulator

The regulatory authority exists in France under the name of "*Commission de Régulation de l'Energie*" (CRE).

The main missions of the CRE are the monitoring of access to public electricity and gas transmission and distribution systems and LNG plants, and the regulation of the markets. Moreover, the CRE ensures that public electricity and gas systems and LNG plants are operated and developed properly.

The CRE's disposes of a range of powers normally attributed to independent bodies in charge of the regulation of a market. Among others, it is empowered to grant different authorisations and approvals, to settle disputes related to access to public electricity and gas systems, to sanction the violation of the rules governing electricity and gas activities, to request information and to launch investigations.

B. Gas: overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Under French law, the main text governing activities related to gas is the 2003 Law, which transposed the Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas.

As explained above, most of French unbundling provisions related to gas and electricity are gathered in common texts. The Directive 2003/55/EC (the "Gas Directive") has been transposed into French law by the same legal instrument as the Electricity Directive, the 2004 Law.

Consequently the provisions of the 2003 Law relating to gas have also been modified by the 2004 Law and the 2005 Law.

Like for electricity, secondary legislation has already been adopted and more is expected to be adopted in the future. Equally, no particular instruments (such as guidelines) have been adopted in order to help practical implementation, but the regulator responds to requests for clarification from the operators.

<i>Chronology</i>	<i>Instruments of law</i>
<ul style="list-style-type: none"> ❖ <u>2003</u>: transposition of the Directive 98/30/EC – Partial opening of the gas market. Extension of the powers of the electricity regulators to the gas sector. ❖ <u>2004</u>: transposition of the Gas Directive – Legal and functional separation of transmission activities; functional separation of distribution activities. ❖ <u>2005</u>: amendments to the 2004 Law. 	<ul style="list-style-type: none"> ❖ 2003 Law ❖ 2004 Law ❖ 2005 Law

TRANSMISSION

The 2004 Law ensures the transposition of the legal unbundling obligation applicable to TSOs, since it provides for the creation of a separate legal entity (distinct from the one handling generation and supply) in charge of the management of the transmission system.

There are two gas TSOs in France: Gaz de France Réseau Transport (GDF-RT) and Total Infrastructures Gaz de France (TIGF).

In compliance with the above mentioned obligation both TSOs have been unbundled in legal terms, which means that GDF-RT and TIGF are separate entities, distinct from their groups.

GDF-RT is a fully-owned subsidiary of the group Gaz de France. Gaz de France is the historic gas operator and used to be entirely owned by the State, but its capital has been recently opened to the public. TIGF is a fully-owned subsidiary of the group Total, which is headed by a publicly listed company.

The functional unbundling obligation has also been transposed into French law. The obligations are essentially the same as those provided for electricity activities. Thus the independent operation of the TSO is ensured by a set of provisions related to the management (such as, for example, the prohibition for persons with executive functions in the management of the TSO to have direct or indirect functions in the management of activities related to the generation or the supply, or the obligation to obtain the prior opinion of the regulator before the removal of such persons). Contrary to what is provided for electricity and as regards measures to be taken in order to guarantee the professional interests of these persons and enable them to act independently, no decree is expected, for the time being, concerning the management of gas TSOs.

French law provides for the adoption of a compliance programme compiling the measures taken to prevent discriminatory conducts as regards the access to the transmission systems. The regulator is expected to publish, around the end of 2005, a report assessing the compliance policies of the TSOs, as well as their independence.

As for the electricity TSO, the gas TSO has adopted internal measures in order to guarantee its independence (physical separation, management independence, confidentiality measures, codes of good conduct, etc.). The regulator has also expressed some doubts concerning the inclusion of the name "GDF" in the name of the TSO as well as the visual identity of these two entities: however, the TSO has announced that these points should be amended in the near future.

DISTRIBUTION

It results from the report "*Electricity and gas market observatory*" for the second 2005 quarter, published by the regulator, that there are 22 gas DSOs in France.

Under French law, the implementation of the legal unbundling of DSOs has been postponed until a later date. However, French law does impose the creation of a distinct internal service in charge of the management of the distribution system. Such service shall be independent from the other activities in terms of its organisation and decision-making powers.

In addition, France has endorsed the 100.000 customer exemption: therefore, the obligation to create a separate internal service in charge of the distribution system is only imposed on the few DSOs meeting this threshold. According to the information provided by the regulator, only 3 DSOs have more than 100.000 customers: GDF, Gaz de Bordeaux and Gaz de Strasbourg. All of them have constituted separate internal services in charge of the management of the distribution network.

For these DSOs, the independent operation of the internal service is ensured by provisions contained in the 2004 Law, relating to the management (such as, for example, the prohibition for persons with executive function in the management of the DSO to have direct or indirect functions in the management of activities related to generation or supply, or the obligation to obtain the prior opinion of the regulator before the removal of such persons).

French law provides for the adoption of a compliance programme compiling the measures taken to prevent discriminatory conducts as regards the access to the system. The report that is to be published shortly by the regulator will also evaluate the respect of compliance programmes by DSOs and assess their independence.

The provisions of the Gas Directive regarding the unbundling of accounts have also been transposed into French law.

The remarks concerning electricity DSOs are also applicable to gas DSOs: all of these DSOs have also implemented the functional unbundling obligations provided for in the Directives and the French transposition provisions. However, there might be slight differences in the way these provisions have been implemented by each operator:

The Regulator

Please refer to part A of this country summary.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: France	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes	2005 Law 2004 Law 2003 Law 2000 Law	Yes	2005 Law 2004 Law 2003 Law
Number of TSOs	1		2	
Number of DSOs	160/170		22	
How many of these DSOs have less than 100.000 customers?	155/165		19	
TSO Unbundling regime	Legal, functional and accounting.	Art. 5 to 10 of the 2004 law. Art. 25 to 27 of the 2000 Law, as amended by the 2004 Law.	Legal, functional and accounting.	Art. 5 and 6 of 2004 law. Art. 8 of the 2003 Law, as amended by the 2004 Law.
DSO unbundling regime	Legal (postponed until, probably, 2007) Functional and Accounting.	Art. 13 to 15 of the 2004 Law. Art. 25 to 27 of the 2000 Law, as amended by the 2004 Law.	Legal (postponed until, probably, 2007) Functional and Accounting	Art. 13 to 15 of the 2004 Law. Art. 8 of the 2003 Law, as amended by the 2004 Law.
Postponement until 1 July 2007 of legal unbundling	Yes	Art. 13 of the 2004 Law	Yes	Art. 13 of the 2004 Law

for larger DSOs				
100.000 customer exemption [y/n]	Yes	Art. 13 of the 2004 Law	Yes	Art. 13 of the 2004 Law
How many DSOs are excluded [number]	5	N/A	3	N/A
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	Less than 5%	Less than 5%	Less than 5%	Less than 5%
Unbundling by companies finalised to comply with the unbundling rules of the Directives	Yes	N/A	Yes	N/A
The Regulator [name]	Commission de Régulation de l'Energie (CRE)	N/A	Commission de Régulation de l'Energie (CRE)	N/A
Does the regulator monitor unbundling?	Yes	Not available	Yes	Not available
Does the regulator have concurrent power under competition rules? [y/n]	No	Art. 39 of the 2000 Law	No	Art. 39 of the 2000 Law.
Does the regulator	Yes	Art. 33 and 40 of the 2000 Law.	Yes	Art. 33 and 40 of the 2000 Law.

have powers to collect information on unbundling in a given company? [y/n]				
Does the regulator have the power to require companies to take unbundling measures?	Yes ⁷	Arts. 6 and 15 of the 2004 Law	Yes	Arts. 6 and 15 of the 2004 Law
Can the regulator impose remedies? [y/n]	Yes	Art. 38 and 40 of the 2000 Law as amended by the 2004 Law	Yes	Art. 38 and 40 of the 2000 Law as amended by the 2004 Law
Have there been any complaints and/or decisions of the regulator on unbundling?	No ⁸	N/A	No	N/A

⁷ Arts. 6 and 15 of the 2004 Law actually grant the regulator the possibility to suggest measures. However, the Regulator has a general power concerning sanctions and remedies in the field of network access.

⁸ Complaints submitted to the regulator in the last years concern access problems in general and not unbundling in particular.

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: France	Electricity			Gas		
	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
TSO or DSO?	TSO	DSO	DSO	TSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	Yes	Yes
Position company holds within the integrated undertaking	Subsidiary	Internal division within parent company	Internal division within subsidiary	Subsidiary	Internal division within subsidiary	Internal division within independent company
Legal regime governing the relation	Company law By-laws	N/A (internal division)	N/A (internal division)	Company law By-laws	N/A (internal division)	N/A (internal division)
Legally Unbundled?	Yes	No	No	Yes	No	No
Legal form chosen	PLC ⁹	Internal division	Internal division	PLC ¹⁰	Internal division	Internal division
Functional unbundling	Yes	Yes	Yes	Yes	Yes	Yes
Management of company directly or indirectly involved	No	No	No	No	No	No

⁹ French "société anonyme".

¹⁰ French "société anonyme".

in day-to-day operation of other related supply/generation companies of the group or divisions?						
Management personnel of the company hold shares of related supply/generation company or division?	Not available	No	No	No	No	No
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	Not available	No	No	No (certain activities subcontracted to mother company)	Yes	Yes
Salary of management based on performance or other related supply/generation companies or divisions?	Not available	Yes	No	Yes	No	No
Executive director	No (according to	No	No	No	No	No

for network department sitting on the Board of related supply/generation companies or divisions?	public information available)					
Board members also responsible for activities in the supply and/ or generation? [No (according to public information available)	No	No	No	No	No
Reasons for the removal of the executive director.	CRE prior opinion	CRE prior opinion	Gross misconduct declared by Tribunal (only for representatives of the employees) Serious disagreement decided by general meeting In all cases: CRE prior opinion	CRE prior opinion	CRE prior opinion	CRE prior opinion
Company holding shares of the holding company of the Group or of related	No (according to public information available)	N/A (Internal service)	N/A (internal service)	No	N/A (internal service)	N/A (internal service)

supply/generation companies of the Group						
Involvement in the day-to-day business of the company by other supply/generation operations?	No (according to public information available)	No	No	No	No	Not available
Effective decision making rights to operate network?	Yes (according to public information available)	Yes	Yes	Yes	Yes	Not available
Compliance programme	Yes	Yes	Yes	Yes	Yes	Yes
Rules governing access for personnel on premises?	No	Yes	Yes	Yes	Yes	Yes
Penalties for violation of the rules?	Yes	Yes	Yes	Yes	Yes	Yes
Monitoring of compliance programme?	Yes, CRE	Yes, Internal monitoring + CRE	Yes, Internal monitoring + CRE	Yes, Internal monitoring (Head of the “Pôle Engagements” of the TSO) + CRE	Yes, internal monitoring + CRE	Yes, internal monitoring + CRE
Separate location	Yes	Yes	Yes	Yes	Yes	Not available

for network business?						
Unbundled DSO only in functional terms?	No	Yes	Yes	No	Yes	Yes
Network business in separate department headed by director not sitting in board of company?	N/A	Yes	Yes	N/A	Yes	Yes
Staff of the network business exclusively working for this department?	Not available	Yes	Yes	Yes	Mostly (only excluded logistics service)	Yes
Other measures aimed at increasing the independence of network operation	Separate web site Information not available (other than measures described in good conduct code)	Separate web site, separate information system, slightly different corporate image	Separate web site, separate information system	Separate web site, different name and visual identity, separate information system	Separate web site, separate information system and software	Separate web site (from 15/10/05), specific registered trademark

7. GERMANY

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

In Germany, the Directive 2003/54/EC (the “Electricity Directive”) has been implemented by „Gesetz über die Elektrizitäts- und Gasversorgung – Energiewirtschaftsgesetz“ (hereinafter: EnWG) which came into effect on 13 July 2005.

The provisions on unbundling - articles 10, 15, 17 and 19 of Directive 2003/54/EC - have been implemented into domestic law by sections 7, 8 and 10 EnWG. In *concreto*: articles 10, 15 and 17 of Directive 2003/54/EC by sections 7 and 8 EnWG; article 19 of the Electricity Directive by section 10 EnWG.

Section 7 (1) EnWG requires vertically integrated energy supply undertakings to ensure that system operators related to them are independent from other activities in terms of legal form.

From this obligation section 7 (2) exempts vertically integrated energy supply undertakings with less than 100.000 customers connected, directly or indirectly, to their energy supply system in respect to the distribution system operators related to them.

Furthermore, Germany has made use of the possibility to postpone the legal unbundling requirement until 1 July 2007 in respect to distribution system operators.

Pursuant to section 8 (1) EnWG, vertically integrated energy supply undertakings must ensure the independence of system operators related to them in terms of organisation, decision-making and running of the network business.

Exempted from these requirements are vertically integrated energy supply undertakings with less than 100.000 customers connected, directly or indirectly, to their energy supply system in respect to the distribution system operators related to them.

The “principal” obligation provided for in section 8 (1) EnWG is put into concrete terms by subsections 2 to 5 which set the following core requirements:

- persons entrusted with management functions for the system operator or entitled to make final decisions which are crucial to ensure non-discriminatory operation of the system must not be related to company structures of the vertically integrated energy supply undertaking responsible, directly or indirectly, for the day-to-day operation of the generation or supply business;
- the system operator shall have effective decision-making rights in respect to assets of the vertically integrated energy supply undertaking which are necessary for the operation, maintenance and development of the network and are capable of exercising them independently from the management and other company structures of the vertically integrated energy supply undertaking;

- the exercise of influencing and control instruments, inter alia, instruction, determination of global limits on the levels of indebtedness and approval of the annual financial plan, is permitted only so far as it is necessary to ensure the legitimate interests of the vertically integrated energy supply undertaking; instructions regarding the day-to-day operation of the system are prohibited under any circumstances;
- the vertically integrated energy supply undertakings are required to establish a compliance program for employees dealing with activities of the network system which sets binding rules to ensure that the system is operated in a non-discriminatory way and contains specific sanctions for the case of violation of the rules.

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>2005</u>: Gesetz über die Elektrizitäts- und Gasversorgung – Energiewirtschaftsgesetz“ ❖ <u>2005</u>: Regulation on access to electricity distribution systems (Verordnung über den Zugang zu Elektrizitätsversorgungsnetzen) ❖ <u>2005</u>: Regulation on tariffs for access to electricity distribution systems (Verordnung über die Entgelte für den Zugang zu Elektrizitätsversorgungsnetzen) 	<ul style="list-style-type: none"> ❖ Gesetz über die Elektrizitäts- und Gasversorgung – Energiewirtschaftsgesetz ❖ Regulation on access to electricity distribution systems (Verordnung über den Zugang zu Elektrizitätsversorgungsnetzen) ❖ Regulation on tariffs for access to electricity distribution systems (Verordnung über die Entgelte für den Zugang zu Elektrizitätsversorgungsnetzen)

TRANSMISSION

In respect to transmission system operators the vertically integrated energy supply undertakings have to meet the legal and functional unbundling requirements immediately, irrespective of whether they have more or less than 100.000 customers. The exemption section 7 (2) EnWG provides for, solely benefits vertically integrated energy supply undertakings in respect to their distribution system operators. The same applies in respect to section 7 (3) EnWG which postpones the legal unbundling requirement until 1 July 2007.

Currently, there are four transmission system operators in the electricity market, all of which are unbundled in legal terms. Within the integrated undertakings the system operators hold the position of a subsidiary.

The reviewed transmission system operator meets – in respect to functional unbundling - the following requirements:

- the management of the network company is neither directly nor indirectly involved in day-to-day operations of other related supply/generation companies of the group
- vice versa there is no involvement from companies with supply and/or generation interests in the day-to-day operations of the network business
- the management personnel of the company does not hold shares of other related supply/generation companies of the group

- effective decision-making rights do exist
- a compliance program was set up to ensure that independence between the operations is maintained
- the compliance program is regularly monitored by the companies themselves, and also from the regulatory authority, to whom they annually report

There are services which are related to supply/generation companies and shared by the transmission system operator, namely accounting, auditing, facility management, IT services and personnel.

As to the remaining three transmission system operators a definite judgement may not be provided. The regulatory authority is conducting an investigation into the practical implementation of the unbundling provisions; the results have not been published yet, a provisional appraisal was not provided. According to the association representing the interests of the electricity industry, all transmission system operators are already unbundled in functional terms or, at least, have taken far-reaching measures in this respect.

DISTRIBUTION

In respect to distribution system operators the vertically integrated energy supply undertakings have to meet the functional unbundling requirements immediately, the legal unbundling requirement has to be met by 1 July 2007. However, vertically integrated energy supply undertakings with less than 100.000 customers connected, directly or indirectly, to their energy supply system are exempted from functional and legal unbundling.

According to an estimate of the regulatory authority ("Bundesnetzagentur"), the approximate number of distribution system operators in the electricity market is 900. Around 120 of these have more than 100.000 customers and a market share of around 90 %. They are required to be unbundled in legal terms until 1 July 2007 and in functional terms immediately.

The investigation into three (significant) distribution system operators has shown that they are unbundled in legal terms, even though they are not obliged to do so prior to 1 July 2007. Within the integrated undertakings the system operators hold the position of a subsidiary.

Moreover, the reviewed distribution system operators meet – in respect to functional unbundling - the following requirements:

- the management of the network company is neither directly nor indirectly involved in day-to-day operations of other related supply/generation companies of the group
- vice versa there is no involvement from companies with supply and/or generation interests in the day-to-day operations of the network business
- the management personnel of the company does not hold shares of other related supply/generation companies of the group
- effective decision-making rights do exist
- a compliance program was set up to ensure that independence between the operations is maintained

- the compliance program is regularly monitored by the companies themselves, and also from the regulatory authority, to whom they annually report

There are – to a different extent - services which are related to supply/generation companies and are shared by the distribution system operators, namely accounting, auditing, company development, communication/marketing, facility management, finance, general services, IT services, legal services, logistics, personnel, risk management, storage facilities, strategy and tax.

In respect to the other (approximately 117) distribution system operators required for unbundling, reliable information may not be provided. The “Bundesnetzagentur” is conducting a review into the practical implementation of the unbundling provisions; the results have not been published yet, a provisional appraisal was not provided. However, we learnt that one of the two big energy supply undertakings in the German electricity market already has unbundled all distribution system operators related to it in legal terms; the other one intends to do so within the next months.

Regulation issues

In Germany the function of regulation is conferred upon the “Bundesnetzagentur” and further regulatory authorities in the states (Bundesländer), the so-called “Landesregulierungsbehörden”. In respect to unbundling, the responsibilities lie with the “Bundesnetzagentur”.

The “Bundesnetzagentur” started its operations on 13 July 2005. It is the successor of the former “Regulierungsbehörde für Telekommunikation und Post” (regulatory authority for telecommunication and post).

Aside from regulatory issues in relation to the electricity and gas market, the “Bundesnetzagentur” remains responsible for regulatory issues in relation to the telecommunication and post market and will – as of 1 January 2006 – also be responsible for regulatory issues in relation to railway infrastructure access.

The “Bundesnetzagentur” is assigned to the Federal Ministry of Economics and Labour. However, it has the status of an independent authority.

The “Bundesnetzagentur” has extensive powers in relation to unbundling and (non-discriminatory) network access.

Pursuant to section 65 (1) EnWG, it is empowered to require undertakings or groups of undertakings to cease a behaviour contrary to the provisions of the EnWG or a regulation based on the EnWG. In case an undertaking or a group of undertakings does not comply with the requirements pursuant to the EnWG or a regulation based on the EnWG, the “Bundesnetzagentur” may require the undertaking or group of undertakings to take the necessary measures (section 65 (2) EnWG).

The “Bundesnetzagentur” is empowered to consider issues of access. Its mandate also extends to cover remedial powers. In detail: The “Bundesnetzagentur” shall stipulate conditions and methods of network access (section 29 (1) EnWG). Section 30 (1) clause 2 EnWG provides that the breach of any provision relating to network access constitutes an abuse of the (specific) position the system operator holds. In such a case the regulatory authority is empowered to require the abusing system operator to take any measures necessary in order to ensure the effective termination of the abuse. In particular, it may order the granting of access, if the denial of access constitutes the abuse. Moreover, section 33 (1) EnWG provides that the regulatory authority may order an

undertaking to siphon off the profits it gained by infringing, deliberately or negligently, a provision or a decision of the regulatory authority relating to the issue of network access.

Furthermore, the “Bundesnetzagentur” has effective powers to collect information. It may, inter alia, request undertakings and groups of undertakings to provide information about their technical and economical conditions and financial situations or to produce documents. Above that, it is empowered to enter premises and facilities of undertakings. The search of premises is permitted by warrant or, if there are reasonable grounds for suspecting that relevant documents would be interfered with, if the premises were not entered instantly.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

In Germany, the Directive 2003/55/EC (the "Gas Directive") has been implemented by „Gesetz über die Elektrizitäts- und Gasversorgung – Energiewirtschaftsgesetz“ (hereinafter: EnWG) which came into effect on 13 July 2005.

The provisions on unbundling - articles 9, 13, 15 and 17 of the Gas Directive - have been implemented into domestic law by sections 7, 8 and 10 EnWG. In *concreto*: articles 9, 13 and 15 of the Gas Directive by sections 7 and 8 EnWG; article 17 of the Gas Directive by section 10 EnWG.

Section 7 (1) EnWG requires vertically integrated energy supply undertakings to ensure that system operators related to them are independent from other activities in terms of legal form.

From this obligation section 7 (2) exempts vertically integrated energy supply undertakings with less than 100.000 customers connected, directly or indirectly, to their energy supply system in respect to the distribution system operators related to them.

Furthermore, Germany has made use of the possibility to postpone the legal unbundling requirement until 1 July 2007 in respect to distribution system operators.

Pursuant to section 8 (1) EnWG, vertically integrated energy supply undertakings must ensure the independence of system operators related to them in terms of organisation, decision-making and running of the network business.

Exempted from these requirements are vertically integrated energy supply undertakings with less than 100.000 customers connected, directly or indirectly, to their energy supply system in respect to the distribution system operators related to them.

The "principal" obligation provided for in section 8 (1) EnWG is put into concrete terms by subsections 2 to 5 which set the following core requirements:

- persons entrusted with management functions for the system operator or entitled to make final decisions which are crucial to ensure non-discriminatory operation of the system must not be related to company structures of the vertically integrated energy supply undertaking responsible, directly or indirectly, for the day-to-day operation of the generation or supply business;
- the system operator shall have effective decision-making rights in respect to assets of the vertically integrated energy supply undertaking which are necessary for the operation, maintenance and development of the network and are capable of exercising them independently from the management and other company structures of the vertically integrated energy supply undertaking;
- the exercise of influencing and control instruments, inter alia instruction, determination of global limits on the levels of indebtedness and approval of the annual financial plan, is permitted only so far as it is necessary to ensure the legitimate interests of the vertically integrated energy

supply undertaking; instructions regarding the day-to-day operation of the system are prohibited under any circumstances;

- the vertically integrated energy supply undertakings are required to establish a compliance program for employees dealing with activities of the network system which sets binding rules to ensure that the system is operated in a non-discriminatory way and contains specific sanctions for the case of violation of the rules; furthermore, a person or body responsible for monitoring the observance of the program has to be appointed.

Chronology	Instruments of law
❖ <u>2005</u> : Gesetz über die Elektrizitäts- und Gasversorgung – Energiewirtschaftsgesetz“	❖ Gesetz über die Elektrizitäts- und Gasversorgung – Energiewirtschaftsgesetz“
❖ <u>2005</u> : Regulation on access to gas distribution systems (Verordnung über den Zugang zu Gasversorgungsnetzen)	❖ Regulation on access to gas distribution systems (Verordnung über den Zugang zu Gasversorgungsnetzen)
❖ <u>2005</u> : Regulation on tariffs for access to gas distribution systems (Verordnung über die Entgelte für den Zugang zu Gasversorgungsnetzen)	❖ Regulation on tariffs for access to gas distribution systems (Verordnung über die Entgelte für den Zugang zu Gasversorgungsnetzen)

TRANSMISSION

In respect to transmission system operators the vertically integrated energy supply undertakings have to meet the legal and functional unbundling requirements immediately, irrespective of whether they have more or less than 100.000 customers. The exemption section 7 (2) EnWG provides for, solely benefits vertically integrated energy supply undertakings in respect to their distribution system operators. The same applies in respect to section 7 (3) EnWG which postpones the legal unbundling requirement until 1 July 2007.

As to the gas market it is currently not possible to determine the definite number of transmission system operators. That is explained by the fact that the interpretation of the term “transmission system operator” (“Fernleitungsnetzbetreiber”) is strongly disputed. Neither the Federal Ministry of Economics and Labour nor the “Bundesnetzagentur” are able to provide suitable criteria to determine which undertakings come under the term “transmission system operator” (“Fernleitungsnetzbetreiber”) in respect to the gas market.

According to the association representing the interests of the gas industry only five companies should be classified as “transmission system operators”. In respect to these five undertakings the situation is as follows:

Three are unbundled in legal terms. Within the integrated undertakings the system operators hold the position of a subsidiary.

The reviewed transmission system operator meets – in respect to functional unbundling - the following requirements:

- the management of the network company is neither directly nor indirectly involved in day-to-day operations of other related supply/generation companies of the group

- vice versa there is no involvement from companies with supply and/or generation interests in the day-to-day operations of the network business
- the management personnel of the company does not hold shares of other related supply/generation companies of the group
- effective decision-making rights do exist
- a compliance program was set up to ensure that independence between the operations is maintained
- the compliance program is regularly monitored by the companies themselves, and also from the regulatory authority, to whom they annually report

There are services which are related to supply/generation companies and are shared by the transmission system operator, namely accounting, auditing, data protection, environmental conservation, facility management, finance, industrial safety, IT services, maintenance services, materials management, personnel, taxation.

As to the remaining four transmission system operators a definite judgement may not be provided. The regulatory authority is conducting an investigation into the practical implementation of the unbundling provisions; the results have not been published yet, a provisional appraisal was not provided. According to the association representing the interests of the gas industry, all transmission system operators are already unbundled in functional terms or, at least, have taken far-reaching measures in this respect.

DISTRIBUTION

In respect to distribution system operators the vertically integrated energy supply undertakings have to meet the functional unbundling requirements immediately, the legal unbundling requirement until 1 July 2007. However, vertically integrated energy supply undertakings with less than 100.000 customers connected, directly or indirectly, to their energy supply system are exempted from functional and legal unbundling.

According to an estimate of the regulatory authority ("Bundesnetzagentur"), the approximate number of distribution system operators in the gas market is 700. Around 70 of these have more than 100.000 customers and a market share of around 80 %. They are required to be unbundled in legal terms until 1 July 2007 and in functional terms immediately.

The investigation into three (significant) distribution system operators has shown that they are unbundled in legal terms, even though they are not obliged to do so prior to 1 July 2007. Within the integrated undertakings the system operators hold the position of a subsidiary.

Moreover, the reviewed distribution system operators meet – in respect to functional unbundling - the following requirements:

- the management of the network company is neither directly nor indirectly involved in day-to-day operations of other related supply/generation companies of the group
- vice versa there is no involvement from companies with supply and/or generation interests in the day-to-day operations of the network business

- the management personnel of the company does not hold shares of other related supply/generation companies of the group
- effective decision-making rights do exist
- a compliance program was set up to ensure that independence between the operations is maintained
- the compliance program is regularly monitored by the companies themselves, and also from the regulatory authority, to whom they annually report

There are – to a different extend - services which are related to supply/generation companies and are shared by the distribution system operators, namely accounting, auditing, company development, communication/marketing, data protection, environmental conservation, finance, general services, IT services, industrial safety, legal services, logistics, maintenance services, materials management, personnel, storage facilities, strategy, tax, technical services.

In respect to the other (approximately 67) distribution system operators required for unbundling, reliable information may not be provided. The “Bundesnetzagentur” is conducting a review into the practical implementation of the unbundling provisions; the results have not been published yet and a provisional appraisal was not provided. However, we learnt that one of the two big energy supply undertakings in the German gas market already has unbundled all distribution system operators related to it in legal terms; the other one intends to do so within the next months.

Regulation issues

In Germany the function of regulation is conferred upon the “Bundesnetzagentur” and further regulatory authorities in the states (Bundesländer), the so-called “Landesregulierungsbehörden”. In respect to unbundling the responsibilities lie with the “Bundesnetzagentur”.

The “Bundesnetzagentur” started its operations on 13 July 2005. It is the successor of the former “Regulierungsbehörde für Telekommunikation und Post” (regulatory authority for telecommunication and post).

Aside from regulatory issues in relation to the electricity and gas market, the “Bundesnetzagentur” remains responsible for regulatory issues in relation to the telecommunication and post market and will – as of 1 January 2006 – also be responsible for regulatory issues in relation to railway infrastructure access.

The “Bundesnetzagentur” is assigned to the Federal Ministry of Economics and Labour. However, it has the status of an independent authority.

The “Bundesnetzagentur” has extensive powers in relation to unbundling and (non-discriminatory) network access.

Pursuant to section 65 (1) EnWG, it is empowered to require undertakings or groups of undertakings to cease a behaviour contrary to the provisions of the EnWG or a regulation based on the EnWG. In case an undertaking or a group of undertakings does not comply with the requirements pursuant to the EnWG or a regulation based on the EnWG, the “Bundesnetzagentur” may require the undertaking or group of undertakings to take the necessary measures (section 65 (2) EnWG).

The “Bundesnetzagentur” is empowered to consider issues of access. Its mandate also extends to cover remedial powers. In detail: The “Bundesnetzagentur” shall stipulate conditions and methods of network access (section 29 (1) EnWG). Section 30 (1) clause 2 EnWG provides that the breach of any provision relating to network access constitutes an abuse of the (specific) position the system operator holds. In such a case the regulatory authority is empowered to require the abusing system operator to take any measures necessary in order to ensure the effective termination of the abuse. In particular, it may order the granting of access, if the denial of access constitutes the abuse. Moreover, section 33 (1) EnWG provides that the regulatory authority may order an undertaking to siphon off the profits it gained by infringing, deliberately or negligently, a provision or a decision of the regulatory authority relating to the issue of network access.

Furthermore, the “Bundesnetzagentur” has effective powers to collect information. It may, inter alia, request undertakings and groups of undertakings to provide information about their technical and economical conditions and financial situations or to produce documents. Above that, it is empowered to enter premises and facilities of undertakings. The search of premises is permitted by warrant or, if there are reasonable grounds for suspecting that relevant documents would be interfered with, if the premises were not entered instantly.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Germany	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes	Gesetz über die Elektrizitäts- und Gasversorgung – Energiewirtschaftsgesetz“ Regulation on access to electricity distribution systems (Verordnung über den Zugang zu Elektrizitätsversorgungsnetzen) Regulation on tariffs for access to electricity distribution systems (Verordnung über die Entgelte für den Zugang zu Elektrizitätsversorgungsnetzen)	Yes	Gesetz über die Elektrizitäts- und Gasversorgung – Energiewirtschaftsgesetz“ Regulation on access to gas distribution systems (Verordnung über den Zugang zu Gasversorgungsnetzen) Regulation on tariffs for access to gas distribution systems (Verordnung über die Entgelte für den Zugang zu Gasversorgungsnetzen)
Number of TSOs	4	Literature; the information provided corresponds with the Commission „Benchmark Report“.	5 Please note that there is a high degree of uncertainty as to the question which gas companies come under the term “transmission system operator” (“Fernleitungsnetzbetreiber”)	Bundesverband der deutschen Gas- und Wasserwirtschaft (Association representing the interests of the gas industry)
Number of DSOs	900 (circa)	“Bundesnetzagentur”	700 (circa)	“Bundesnetzagentur”
How many of these DSOs have less than 100.000 customers?	780 (circa)	“Bundesnetzagentur”	630 (circa)	“Bundesnetzagentur”
TSO Unbundling regime	Legal, functional and	Sections 7, 8, 10 EnWG	Legal, functional and	Sections 7, 8, 10 EnWG

	accounting		accounting	
DSO unbundling regime	Legal, functional and accounting	Sections 7, 8, 10 EnWG	Legal, functional and accounting	Sections 7, 8, 10 EnWG
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	Yes	Section 7 (3) EnWG	Yes	Section 7 (3) EnWG
100.000 customer exemption [y/n]	Yes	Section 7 (2) EnWG	Yes	Section 7 (2) EnWG
How many DSOs are excluded [number]	780 (circa)	"Bundesnetzagentur"	630 (circa)	"Bundesnetzagentur"
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	10 % (circa)	"Bundesnetzagentur"	20 % (circa)	"Bundesnetzagentur"
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	<p>It is necessary to differentiate as follows:</p> <p>The four TSOs are unbundled in legal terms. In respect to the TSO which we have investigated we may state that it also meets the requirements for functional unbundling. As to the remaining three TSOs we cannot form a definite judgement. However, according to the association representing the interests of the electricity industry, they have at least taken far-reaching measures.</p>	<p>Information provided by the sample companies and the association representing the electricity industry.</p>	<p>It is necessary to differentiate as follows:</p> <p>Three of the five TSOs are unbundled in legal terms. In respect to the TSO which we have investigated we may state that it also meets the requirements for functional unbundling. As to the remaining four TSOs we cannot form a definite judgement. However, according to the association representing the interests of the gas industry, they have at least taken far-reaching measures.</p>	<p>Information provided by the sample companies and the association representing the gas industry.</p>

	<p>Our investigation into three significant DSOs has shown that they do meet the requirement for legal unbundling even though they are not obliged to do so prior to 1 July 2007. Furthermore, they are already unbundled in functional terms.</p> <p>In respect to the other (approximately 117) DSOs we may not form a definite judgement. The “Bundesnetzagentur” is conducting a review into the practical implementation of the unbundling provisions; the results have not been published yet, a provisional appraisal was not provided.</p>		<p>Our investigation into three significant DSOs has shown that they do meet the requirement for legal unbundling even though they are not obliged to do so prior to 1 July 2007. Furthermore, they are also unbundled in functional terms.</p> <p>In respect to the other (approximately 67) DSOs we may not form a definite judgement. The “Bundesnetzagentur” is conducting a review into the practical implementation of the unbundling provisions; the results have not been published yet, a provisional appraisal was not provided.</p>	
The Regulator [name]	Bundesnetzagentur / Landesregulierungsbehörden	Compare section 55 EnWG	Bundesnetzagentur / Landesregulierungsbehörden	Compare section 55 EnWG
Does the regulator monitor unbundling?	Yes	Sections 8 (5), 35 (1) EnWG	Yes	Sections 8 (5), 35 (1) EnWG
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Section 69 EnWG	Yes	Section 69 EnWG
Does the regulator have the	Yes	Section 65 EnWG	Yes	Section 65 EnWG

power to require companies to take unbundling measures?				
Can the regulator impose remedies? [y/n]	Yes	Sections 30 (2), 35 EnWG	Yes	Sections 30 (2), 35 EnWG
Have there been any complaints and/or decisions of the regulator on unbundling?	Not recorded		Not recorded	

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country:	Electricity				Gas			
	1	2	3	4	5	6	7	8
Germany								
TSO or DSO?	TSO	DSO	DSO	DSO	TSO	DSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Position company holds within the integrated undertaking	subsidiary	subsidiary	subsidiary	Subsidiary	subsidiary	subsidiary	Subsidiary	subsidiary
Legal regime governing the relation	Company Law / Articles of Association	Company Law / Articles of Association	Company Law / Articles of Association	Company Law / Articles of Association	Company Law / Articles of Association	Company Law / Articles of Association	Company Law / Articles of Association	Company Law / Articles of Association
Legally Unbundled?	Yes	Yes	Yes	Yes. As of 1 January 2006	Yes	Yes. As of 1 January 2006	Yes	Yes
Legal form chosen	Limited liability company	Limited liability company	Limited liability company	Limited liability company	Limited liability company	Limited partnership	Limited liability company	Limited liability company
Functional unbundling	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Management of company directly or indirectly involved in day-to-day operation	No	No	No	No	No	No	No	No

of other related supply/generation companies of the group or divisions ?								
Management personnel of the company hold shares of related supply/generation company or division?	No	No	No	No	No	No	No	No
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	Yes accounting, auditing, facility management, IT services, personnel	Yes accounting, facility management, finance, IT services, logistics, personnel	Yes not provided	Yes accounting, auditing, company development, communication/marketing, controlling/finance, general services (car pool, health, material management, real estate, security management),	Yes accounting and finance, auditing, data protection, environmental conservation, industrial safety, IT services, maintenance services, materials management, personnel, taxation	Yes accounting, auditing, company development/strategy, controlling, finance/tax, IT services, legal services, logistics, marketing, personnel, storage facilities	Yes accounting, controlling, corporate/managerial communication, IT services, legal advice, maintenance services, personnel	Yes accounting, finance, general services, IT services, legal services, material management, personnel, technical services

				insurances, IT services, legal services, personnel, risk management, storage facilities, strategy, tax				
Salary of management based on performance of other related supply/ generation companies or divisions?	On a minor scale	No	No	Insignificantly	On a minor scale	No	On a minor scale	No
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	No	No	No	No	No	No	No	No
Board members also responsible	No	No	No	No	No	No	No	No

for activities in the supply and/or generation?								
Reasons for the removal of the executive director.	Generally: No specific ground necessary (section 38 (1) GmbHG) However, a removal due to refusal to exercise an instruction aimed at influencing the day-to-day-operation would be void pursuant to section 134 BGB in conjunction with 8 EnWG	Generally: No specific ground necessary (section 38 (1) GmbHG) However, a removal due to refusal to exercise an instruction aimed at influencing the day-to-day-operation would be void pursuant to section 134 BGB in conjunction with 8 EnWG	Generally: No specific ground necessary (section 38 (1) GmbHG) However, a removal due to refusal to exercise an instruction aimed at influencing the day-to-day-operation would be void pursuant to section 134 BGB in conjunction with 8 EnWG	Generally: No specific ground necessary (section 38 (1) GmbHG) However, a removal due to refusal to exercise an instruction aimed at influencing the day-to-day-operation would be void pursuant to section 134 BGB in conjunction with 8 EnWG	Generally: No specific ground necessary (section 38 (1) GmbHG) However, a removal due to refusal to exercise an instruction aimed at influencing the day-to-day-operation would be void pursuant to section 134 BGB in conjunction with 8 EnWG	Generally: No specific ground necessary (section 38 (1) GmbHG) However, a removal due to refusal to exercise an instruction aimed at influencing the day-to-day-operation would be void pursuant to section 134 BGB in conjunction with 8 EnWG	Generally: No specific ground necessary (section 38 (1) GmbHG) However, a removal due to refusal to exercise an instruction aimed at influencing the day-to-day-operation would be void pursuant to section 134 BGB in conjunction with 8 EnWG	Generally: No specific ground necessary (section 38 (1) GmbHG) However, a removal due to refusal to exercise an instruction aimed at influencing the day-to-day-operation would be void pursuant to section 134 BGB in conjunction with 8 EnWG
Company holding shares of the holding company of the Group or of related supply/generation companies	No	No	No	No	No	No	No	No

of the Group?								
Involvement in the day-to-day business of the company by other supply/generation operations?	No	No	No	No	No	No	No	No
Effective decision making rights to operate network?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Compliance programme	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rules governing access for personnel on premises?	No specific rules	No specific rules	No specific rules	Yes	No specific rules	No specific rules	No specific rules	Yes
Penalties for violation of rules?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Monitoring of compliance programme?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Separate location for network business?	Yes (separate building)	Yes (same building, separate floor)	No	Same building, strictly separated (lock system)	Yes (same building, separate floor)	Yes (same building, separate floor)	Yes (separate building)	Yes (same building, strictly separated by lock system)

8. HUNGARY

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

First of all, it has to be noted that the organizational structure of the Hungarian electricity industry follows a somewhat different approach to that of the Electricity Directive 2003/54/EC. The difference results mainly from the fact, that the Hungarian electricity market has been re-structured already in 1993/1994 after the transformation of the country's economy into a market economy. One of the main differences concerns the position of the transmission system operator. While the Electricity Directive 2003/54/EC (as well as the Electricity Directive 96/92/EC) proceeds on the assumption that the proprietor of the transmission grid carries out the tasks of the system operator as well, the Hungarian legislator decided in favour of an independent system operator (ISO). The tasks of the ISO were assigned to the wholly state-owned company MAVIR Rt., while the transmission network's right of ownership belonged to a separate undertaking, MVM Rt. Moreover, in the course of implementation of the First Electricity Directive 96/92/EC the market has been divided into a public service and a "liberalized" part. Within the public sector, MVM Rt. was responsible for the acquisition and dispatch of electricity for the public service sector from the generation facilities, thus it was the only wholesaler for this part of the market. In order to fulfil its supply obligations, MVM had concluded long-term supply contracts with the generation companies, of which some have contractual terms up to 20-25 years. The distribution system operators (DSO) were required to buy the electricity they needed to fulfil their public service obligations (since the DSOs were entrusted with the task of supply to the end users, in particular the consumers) from the public service wholesaler. Only since 2003, in connection with the implementation of the Electricity Directive 96/92/EC, the generation companies were allowed to sell electricity directly to the DSOs and to electricity trading companies, however, above the amount not locked up by the long-term supply contracts with MVM only. The trading companies were also allowed to import and export electricity (from) abroad and to sell it to end consumers which were not any longer bound to the public service sector. The Electricity Directive has been transposed into Hungarian law by Act No. LXXIX of 2005 on the amendment of Act No. CX/2001 on Electricity (hereinafter "Act No. LXXIX/2005" and "Act No. CX/2001"). Due to the different history of market reform and re-structuring in Hungary, Act No. CX/2001 (as amended by Act No. LXXIX/2005) is not a word-for-word copy of the Electricity Directive, although some parts and specific provisions are closely modelled upon it. In any case, the substantive requirements of the Electricity Directive with regard to unbundling are met. In comparison to the former legal situation and besides the introduction of the unbundling requirements, Act No. LXXIX/2005 induced one major change to the structure of Hungary's electricity market: The transformation of the ISO (MAVIR Rt.) into a transmission system operator in the meaning of the Electricity Directive.

The electricity market consists of the following companies: MAVIR Rt. as the TSO, MVM Rt. as the public service wholesale company, six companies acting as DSOs and public service supply companies simultaneously, the generation companies and the electricity trading companies. The regulation of the electricity market is assigned to the Hungarian Energy Authority (HEA; in Hungarian: "Magyar Energia Hivatal" or "MEH"). All of the aforementioned market activities are generally subject to a license regime apart from small generation facilities with a capacity of less than 50 MW. With regard to generation, the overwhelming part of Hungary's electricity is produced by 11 companies operating 22 power plants. Furthermore, there exist a number of companies operating small generation facilities which generate electricity by use of water, wind or biomass and other means. These

small companies have a negligible market share (in total less than 5%) and are merely of local relevance. Electricity trading is performed by 30 licensed companies, of which seven companies are licensed for cross-border trading only. However, a certain number of these trading companies are subsidiaries of companies with high-level electricity consumption and, therefore, serve mainly as an “outsourced” procurement department, i.e. are not active with respect to other eligible customers.

Legal implementation of the unbundling provisions

The provisions on unbundling – Art. 10, 15, 17 and 19 of the Electricity Directive – have been fully transposed into Hungarian law by Act No. LXXIX/2005, amending the provisions of Act No. CX/2001. However, only a part of the transposed provisions entered into force so far, the major part of the unbundling regime, in particular, will enter into force on 1 January 2006. The current legal situation is as follows:

Art. 102 of Act CX/2001 provides that each market player (i.e. the system operator, transmission network operator, the distribution network operators, the operator of the organised electricity market, the public service wholesaler and the public service suppliers) may not carry out any other activity, which is subject to authorisation. However, the transmission system operator may perform simultaneously the activity of the public service wholesaler, and the distribution network operator the activity of the public service supplier.

Additionally, *Sec. 101 Act CX/2001* stipulates that horizontally and vertically integrated undertakings shall maintain separate accounts for their activities in the electricity and the non-electricity market, respectively, as well as with regard to their different activities in the electricity market if allowed by law.

However, the unbundling provisions of the Electricity Directive will be implemented gradually by *Act LXXIX/2005* into Hungarian law as of 1 September 2005, 1 January 2006 and 1 July 2007, respectively.

The provisions in Art. 15 (1) of the Electricity Directive 2003/54/EC which provide for unbundling in terms of legal form will come into force from 1 July 2007 only. With respect to this provision, Hungary took advantage of the possibility in Art. 30 (2) 1 of the Electricity Directive 2003/54/EC to postpone the implementation.

Art. 10 (1) of Directive 2003/54/EC – Legal Unbundling of TSO

The requirement of Art. 10 (1) of the Electricity Directive , i.e. the independence of the TSO being part of a vertically integrated undertaking in terms of **legal form**, will enter into force on 1 January 2006.

Pursuant to this provision, the TSO shall not perform any other activity on the electricity market which is subject to authorisation, unless the law provides otherwise.

Art. 15 (1) of Directive 2003/54/EC – Legal Unbundling of DSO

The requirement of Art. 15 (1) of the Electricity Directive , i.e. the independence of the DSO being part of a vertical integrated undertaking in terms of **legal form**, will enter into force on 1 July 2007.

Pursuant to *Sec. 102 (1), (2) Act CX/2001*, the distribution system operator must not be active in any other activity in the electricity market, which is subject to authorisation, i.e. as system operator, transmission network operator, operator of the organised electricity market, public service wholesaler and public service supplier respectively. However, until 30 June 2007 a distribution system operator may simultaneously be active as public service supplier.

Art. 10 (1), (2), 15 (2) of Directive 2003/54/EC – Unbundling as to Organisation and Decision-Making of TSO/DSO

The requirement of Art. 10 (1), (2) of the Electricity Directive, i.e. the independence of the transmission system operator being part of a vertically integrated undertaking in terms of **organisation and decision-making**, will be gradually implemented into Hungarian law.

a) Art. 10 (1), (2) lit. a), b) and Art. 15 (1), (2) lit. a), b) of Directive 2003/54/EC – Personal Independence

The requirement of Art. 10 (1), (2) lit. a), b) of the Electricity Directive will be implemented into Hungarian law by Sec. 102/A (3) lit. a), b), c) and d) Act CX/2001 (as amended by Sec. 53 of Act LXXIX/2005). The provision will enter into force on 1 January 2006 (Sec. 60 (4) Act LXXIX/2005).

According to the amended provision, the executive and managing employees of the system operator, the transmission network operator and the distribution system operator shall not

- acquire shares in any other company performing activities in the electricity market, which are subject to authorisation,
- have or obtain the authority to represent any other company performing activities in the electricity market, which are subject to authorisation,
- enter into any employment contract or any other type of contract, which is aimed at the performance of services.

Moreover, the respective persons must not be dispatched to any other company which is part of the vertically integrated undertaking and performs other than the activities of the system operator, the transmission network operator and the distribution system operator, respectively.

Additionally, the contractual rights and obligations, the remuneration and the benefits of the management personnel shall be determined in a manner that these persons, in the course of making decisions with effect on the functioning of the respective operator company, will perform their duties with respect to the principle of equal treatment and without undue influence by third persons.

The remuneration and the benefits of the department's manager, which is responsible for the operation of the transmission network and the distribution system, respectively, must not be bound to the performance of the vertical integrated undertaking activities' in other fields of business not connected to the operation of the transmission network and the distribution system, respectively.

b) Art. 10 (1), (2) lit. c) and Art. 15 (1), (2) lit. c) of Directive 2003/54/EC – Independence in Decision-Making

The requirement of Art. 10 (1), (2) lit. c) of the Electricity Directive will be implemented into Hungarian law by Sec. 102/A (3) lit. e) and f) Act CX/2001 (as amended by Sec. 53 of Act LXXIX/2005). The provision will enter into force on 1 January 2006.

According to the amended provision, the transmission network operator and the distribution system operator, respectively, shall make decisions on the network's operation, maintenance and development, including the

individual decisions within the framework of the annual business plan concerning the day-to-day operation, the construction of transmission and distribution lines and their renovation, with respect to the principle of equal treatment and without undue influence by third persons.

Decisions on the operation, maintenance and development of the information technology and communication equipment required for the operation of the electricity system shall be made by the DSO with respect to the principle of equal treatment and without undue influence by third persons. The proprietor must not give individual orders concerning such decisions.

c) Art. 10 (1), (2) lit. d) and Art. 15 (1), (2) lit. d) of Directive 2003/54/EC – Compliance Programme

The requirement of Art. 10 (1), (2) lit. d) of the Electricity Directive has been implemented into Hungarian law by *Sec. 102/B (2), (3) and (4) Act CX/2001* (as amended by *Sec. 53 of Act LXXIX/2005*). The provision came into force on 1 September 2005.

According to the amended provision), the vertically integrated undertaking, which is active as system operator, the transmission network operator and the distribution system operator respectively, shall ensure that other undertakings with a license for activities in the electricity market enjoy equal treatment, regardless of their affiliation with the vertically integrated undertaking.

The respective companies shall establish a compliance regime, which sets out measures to ensure that discriminatory conduct is excluded. The compliance programme is subject to approval by the Hungarian Energy Authority. An annual report on the compliance with the compliance regime's requirements, subject to approval by the Hungarian Energy Authority, shall be prepared and published. The compliance regime and the annual report shall provide for rules and measures taken, which ensure the principle of equal treatment and, in particular, the requirements set out in *Sec. 102, 102/A and 102/B of Act CX/2001*. Details concerning the compliance regime and the annual report will be provided for by governmental regulation. This regulation is not yet published (as of 07 September 2005).

Art. 15 (2) of Directive 2003/54/EC – “De Minimis Rule”

The “**de minimis**” rule in Art. 15 (2) of Directive 2003/54/EC has not been and will not be transposed into Hungarian law, i.e. there will be no exception for distribution system operators with regard to the unbundling requirements of Art. 15 (1), (2) of Directive 2003/54/EC. The reason is that none of the six distribution system operators active in Hungary has less than 100,000 connected customers or serves small isolated systems.

Art. 17 of Directive 2003/54/EC – Unbundling of Combined Operator

The requirements provided in Art. 17 of the Electricity Directive are not subject to implementation into Hungarian law since *Act CX/2001* as well as *Act LXXIX/2005* do not provide for the possibility that the transmission and the distribution system might be operated by the same company. In contrary, *Sec. 102 (1) of Act CX/2001* in its current version as well as in its version as amended by *Act LXXIX/2005* stipulates that the transmission system operator and the distribution system operator shall not perform any other activity in the electricity market, which is subject to authorisation.

Article 19 of Directive 2003/54/EC- Unbundling of Accounts

The requirements provided in Article 19 of the Electricity Directive , i.e. the **unbundling of accounts** of each electricity market activity within a vertically integrated undertaking, have been implemented into Hungarian law since 1 January 2003 by *Sec. 101 Act CX/2001*.

Other instruments for the implementation of the Directive 2003/54/EC

Apart from the *Act LXXIX/2005*, at the time being the only other legal instrument or explanatory document with regard to the implementation of the Electricity Directive is the *Government Decision No. 1070/2005 (VII. 8.)* This decision concerns the formation of a transmission system operator in Hungary and, in particular, lays down the steps to be taken by the different parts of the government and the companies concerned in order to achieve this goal. The content of the Government Decision highlights the fact that, as for the time being, the Hungarian electricity market is in a period of transition from the system of an independent system operator to that of a TSO within the meaning of the Electricity Directive. Accordingly, it might be said that the Government Decision contains the basic “script” for the transformation of the ISO into a TSO:

Basically, MAVIR Rt. shall take up the responsibilities of a TSO in the meaning of the Electricity Directive as of 1 January 2006. Accordingly, the shares in MAVIR Rt. shall be transferred to MVM Rt. as contribution in kind, except one share with preferential voting rights (= “golden share”). The proprietor of the “golden share” shall remain the Hungarian State. In the following, the assets required for the operation of the transmission system network shall be transferred from MVM Rt. to MAVIR Rt. as contribution in kind. In line with the requirements of the Electricity Directive for unbundling in terms of legal form, organisation and decision-making, the independence of MAVIR Rt. from other activities in the electricity market, which are subject to authorisation, shall be secured. Then, the MVM Rt. shall be re-organised into a holding company in the framework of which the independence of the transmission system operator shall be secured in terms of legal form and decision-making.

The enactment of a governmental regulation detailing the provisions of *Act LXXIX/2005* can be expected for the near future as it was practised with regard to *Act CX/2001*. In the latter case, the detailed provisions were set out in the *Governmental Regulation No. 181/2002 (VIII. 23.)*. The new regulation is not yet published (as of 07 September 2005).

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>1994</u>: Act No. XLVIII/1994 on the generation, transmission and supply of electricity – introduction of regulation within the electricity sector with the aim to set market rules and providing for secure public service and supply ❖ <u>1995</u>: segmentation of the state monopoly and privatisation of most generation and all distribution and supply companies ❖ <u>2001</u>: Act No. CX/2001 – implementation of the Directive 96/92/EC ❖ <u>2005</u>: Act No. LXXIX/2005 – transposition of the Electricity Directive 	<ul style="list-style-type: none"> ❖ Act No. CX/2001 as amended by Act No. LXXIX/2005 ❖ Government Regulation 181/2002 (VIII. 23.) ❖ Government Decision No. 1070/2005 (VII. 8.) ❖ Licenses

TRANSMISSION

As a result of the transposition and implementation of the Electricity Directive, the transmission system is operated by one company nationwide, i.e. MAVIR Rt. This company will be a 100% owned subsidiary of a vertically integrated undertaking (MVM Rt.), i.e. the process of integration within the MVM group of companies has started already, but will only be completed as of 1 January 2006. After the transfer of the shareholding in MAVIR Rt. from the Hungarian State to MVM Rt., the latter will be the main shareholder of MAVIR Rt., while one share with preferential voting rights will remain with the Hungarian State (represented by the Ministry of Economics and Transport). This "golden share" leaves the Hungarian state with influence on important decisions concerning the operation of MAVIR Rt. Since MVM Rt. as the new shareholder of MAVIR Rt. is also active in power generation (as sole or significant shareholder in several power generation companies) and is the sole wholesaler for public service supply, MAVIR Rt. might not be seen anymore as fully independent from a generation company, i.e. MAVIR Rt. will not be unbundled in ownership terms in the future.

DISTRIBUTION

Six DSOs operate in Hungary. These are Budapesti Elektromos Művek Rt. (ELMŰ Rt.), E.ON Dél-dunántúli Áramszolgáltató Rt. (E.ON DÉDÁSZ Rt.), Délmagyarországi Áramszolgáltató Rt. (DÉMÁSZ Rt.), E.ON Észak-dunántúli Áramszolgáltató Rt. (E.ON ÉDÁSZ Rt.), Észak-Magyarországi Áramszolgáltató Rt. (ÉMÁSZ Rt.) and E.ON Tiszántúli Áramszolgáltató Rt. (E.ON TITÁSZ Rt.).

All of the six Hungarian DSOs are part of groups of companies, of which the respective holding companies also have shareholdings in power generation and supply companies, respectively. Actually, all six DSOs are simultaneously active in the field of public service supply, while the generation activities are performed by separate legal entities within the holding structure.

The DSOs are unbundled in legal terms only with respect to certain activities in the electricity market. Hungarian law principally does not allow for companies active in the electricity market to be active in another field of electricity activity (i.e. as system operator, transmission network operator, operator of the organised electricity market, public service wholesaler and public service supplier respectively). Pursuant to *Sec. 102 (2) Act CX/2001*, however, the DSOs may simultaneously perform the activity of a public service supplier. All six Hungarian DSOs took advantage of that exemption. Though, the provision will cease to be in force on 30 June 2007, i.e. as of 1 July 2007 all DSOs are required to unbundle their distribution activities from the supply activities in terms of legal form.

Until 1 September 2005, Hungarian legislation did not provide for any regulations regarding the functional independence of the distribution system operator and the other companies active in the electricity market respectively. The only such regulation, *Sec. 90 (5) of the Government Regulation 181/2002 (VIII. 23.)*, provides that the employees and executive officers of the electricity trading companies shall not be employed by and not be executive officers of the system operator, the transmission network operator, the distribution system operator, the public service wholesaler, the public service suppliers and the operator of the organised electricity market (exchange) respectively. Thus, the provision does not provide for the functional unbundling between the other market players. However, pursuant to *Sec. 53 of Act LXXIX/2005*, the requirements of Art. 15 (1) and (2) of Electricity Directive are implemented into Hungarian law as of 1 September 2005 and 1 January 2006, respectively.

The requirement concerning the independence of the vertically integrated DSO in terms of **organisation** and **decision-making**, will enter into force on 1 January 2006. Therefore, none of the Hungarian DSOs fulfil the respective unbundling provisions yet. With respect to the requirement to establish a **compliance programme**, the respective provision came into force on 1 September 2005. As far as could be observed, none of the DSOs have adopted such a compliance programme so far. This is due to the fact that the respective executive regulations by the government and the Hungarian Electricity Authority have not been issued yet.

Additionally, it has to be noted that any horizontally and vertically integrated undertaking respectively is obliged to keep separate accounts for each of its activities, as if the activity in question would be carried out by a separate undertaking. This provision has been in force since 1 January 2003.

Finally, none of the six DSOs will benefit from the 100.000 customers exception since this “de minimis” rule has not been and will not be transposed into Hungarian law, i.e. all DSOs will be unbundled.

Summary

Since the unbundling requirements, as set out in Art. 10, 15 of the Electricity Directive, are currently in the process of implementation into Hungarian law (i.e. a minor part took effect on 1 September 2005) while the majority of the provisions will enter into force on 1 January 2006 only, specific conclusions cannot be made either on the undertakings' compliance with the unbundling provisions or on their practicability. Although the undertakings were obliged to unbundle the accounts of their departments active in the respective fields of the electricity market since 1 January 2002, this obligation was not enough to fulfil the basic goals of the unbundling regime.

Therefore, a meaningful appraisal on the Electricity Directive's successful implementation into Hungarian law might be made in the course of 2006 only, when (almost) all of the amendments to the Act CX/2001 have been in effect for a certain period of time.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Until the introduction of the Act no. XLII of 2003 on the Gas Supply (the “**Gas Act**”) the act no. XLI of 1994 contained provisions regarding the gas supply. The original gas act of 1994 needed to be amended in order to comply with the legislative rules of the European Union, especially relating to the liberalisation of the gas market. The detailed rules of the execution of the provisions of the Gas Act were contained by the Government Decree Nr. 111/2003 (07.29.) on the execution of the provisions of the Gas Act (in the following referred to as: “**Execution Decree**”). Both the Gas Act and the Execution Decree contained provisions relating to the unbundling regime as the drafts of the Directive were already available when the Gas Act and the Execution Decree were prepared, therefore the provisions which were at this date most likely to be accepted in the final version of the Directive 2003/55/EC (the “Gas Directive”), were taken into the Gas Act and to the Execution Decree. Both the Gas Act and the Execution Decree entered into force on 1 January 2004, certain provisions were already in force before this date.

The provisions of the Gas Directive were, on the other hand, transposed by the act no. LXIII. of 2005 on the Amendment of the Gas Act (the “**Amendment of the Gas Act**”). The provisions of the Amendment of the Gas Act enter into force at different dates, on 1 August 2005 and thereafter.

The provisions of the Execution Decree have not yet been modified, despite the Execution Decree aims to provide guidance to the execution of the provisions of the Gas Act, which were modified by the Amendment of the Gas Act. According to the information received from MEH, the draft modification has been prepared by MEH and is subject to discussions, but no final agreed text is yet available. Consequently, the detailed rules of certain aspects of the unbundling regime (e.g. content of compliance rules) are not yet available.

The Hungarian legislative rules required from TSOs to be legally unbundled from 1 January 2004 onwards. DSOs should only be legally unbundled from 1 July 2007.

Both the vertically integrated TSO and DSOs were required to fulfil certain aspects of functional unbundling provisions as required by the relevant provisions of the Execution Decree from 1 August 2003 onwards. The new provisions entirely transposing the functional unbundling requirements of the Directive will enter into force on 1 January 2006 only. The 100.000 customer exemption was also transposed into the Gas Act; however it will also enter into effect on 1 January 2006.

There were certain requirements in relation to the unbundling of accounts both in the Gas Act and in the Execution Decree being in force since 1 January 2004. The new provisions transposing all of the relevant requirements of the Directive entered into force on 1 August 2005.

The practical implementation of the provisions of the Directive, however, may not be subject to a detailed analysis currently as most of the legislative rules implementing the provisions of the Directive are quite new or are not yet in force at all, and certain detailed provisions thereof are yet to be issued in the modification of the Execution Decree.

As to the Hungarian gas market, the regulator is called: Hungarian Energy Authority (in Hungarian: Magyar Energetikai Hivatal). Gas related activities (with the exemption of gas generation in which the mining authority has competence) as defined in the Gas Act may only be performed on the basis of a license to be obtained from the regulatory authority (MEH). Gas related activities subject to the license of MEH are, amongst others: operation of the entire gas system, gas transmission, gas distribution, access to the gas network crossing the borders of Hungary, etc. Currently there is one TSO and there are 12 DSO license holders in Hungary.

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>1994</u>: Gas Act-setting the legal framework for the gas supply system ❖ <u>2003</u>: Gas Act- provisions in order to fulfil the EU legislative requirements re market liberalisation ❖ <u>2003</u>: Execution Decree – detailing the provisions of the Gas Act ❖ <u>2005</u>: Amendment of the Gas Act- in order to comply with the provisions of the Gas Directive; provisions of this act enter into force at different dates 	<ul style="list-style-type: none"> ❖ Act no XLI of 1994 on the Gas Supply ❖ Act no. XLII of 2003 on the Gas Supply ❖ Government Decree Nr. 111/2003 (07.29.) on the execution of the provisions of the Gas Act ❖ Act no. LXIII. of 2005 on the Amendment of the Gas Act ❖ Licenses

TRANSMISSION

There is only one TSO in Hungary, which started its operation on 1 January 2004. The TSO holds a transmission license (issued by resolution no. 464/2003 of MEH), a system operation license (issued by resolution no. 468/2003 of MEH) and a license to access the cross-border gas network of Hungary (issued by resolution no. 469/2003 of MEH). This means that the legal unbundling requirements (i.e. the TSO may not carry out any generation and supply activities) were practically implemented by establishing a separate undertaking within the MOL group of companies in 2004.

The vertically integrated TSO was required to fulfil certain aspects of functional unbundling provisions as required by the relevant provisions of the Execution Decree from 1 August 2003 onwards. Basically, section 6 of the Execution Decree required that (i) the management of a vertically integrated TSO shall neither directly nor indirectly be entitled to carry out gas related activities being subject to a operation license by MEH, and (ii) the decision-makers shall be entitled to freely make and execute their decisions concerning the system operation, maintenance and development, (iii) the license holders shall carry out their operations in a non-discriminatory manner and according to the principle of equal treatment with regard to other licensees. Additionally, section 6 of the Execution Decree required from the vertically integrated TSOs also that the decisions in relation to gas transmission shall be taken by a separate organisation unit. The Execution Decree, however, did not provide for the preparation of a compliance program by the TSO.

The new provisions entirely implementing the functional unbundling requirements of the Directive will enter into force on 1 January 2006 only.

There were certain requirements in relation to the unbundling of accounts both in the Gas Act and in the Execution Decree being in force since 1 January 2004. The new provisions transposing all of the relevant requirements of the Directive entered into force on 1 August 2005.

DISTRIBUTION

There are 12 DSO licence holders currently in Hungary.

DSOs have to execute the legal unbundling provisions by 1 July 2007. MEH confirmed that none of the distribution license holders has executed the legal unbundling, each of them holds a public supply license at the same time.

Vertically integrated DSOs have fulfilled the functional unbundling provisions as prescribed by section 6 of the Execution Decree (i.e. since 1 August 2003 they fulfil the functional unbundling requirements as prescribed by the provisions of the Execution Decree). The fulfilment of these provisions was a precondition for issuing the distribution operation licenses to these companies by MEH and according to MEH, the fulfilment of these provisions have been regularly checked by MEH. The new unbundling provisions will only enter into force on 1 January 2006.

Section 51 of the Gas Act, section 35 and Annex 6 of the Execution Decree contained provisions relating to the unbundling of accounts. These were amended by the new provisions of the Amendment of the Gas Act, which are effective from 1 August 2005. This means, that the provisions of the Gas Act and the Execution Decree have been fulfilled by DSOs since 2004, the new requirements have been fulfilled since 1 August 2005.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Hungary	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes	Act No. CX/2001 as amended by Act No. LXXIYX/2005	Basically, yes (further legislative rules are yet to be issued)	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
Number of TSOs	1	Act No. CX/2001 as amended by Act No. LXXIYX/2005	1	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
Number of DSOs	6	Information obtained from MEH	12	Information obtained from MEH
How many of these DSOs have less than 100.000 customers?	0	Information obtained from MEH	6	Information obtained from MEH
TSO Unbundling regime	Legal and accounting (functional as of 1 January 2006)	Act No. CX/2001 as amended by Act No. LXXIYX/2005	Legal and accounting (functional as of 1 January 2006)	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
DSO unbundling regime	Accounting (functional as of 1 January 2006, legal as of 1 July 2007)	Act No. CX/2001 as amended by Act No. LXXIYX/2005	Accounting (legal as of 1 July 2007, functional as of 1 January 2006)	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	Yes	Act No. CX/2001 as amended by Act No. LXXIYX/2005	Yes	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
100.000 customer exemption [y/n]	No		Not yet (only as of 1 January 2006)	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
How many DSOs are excluded	None		Currently 6 DSOs have	Information received from MEH

[number]			customers less than 100.000	
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	0		Not yet applicable	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	No. At the time of the study the respective regulations were partly in force only. and even those were not implemented yet due to the lack of a more detailed executing regulation		No	
The Regulator [name]	Magyar Energia Hivatal (MEH) = Hungarian Energy Authority (HEA)	Act No. CX/2001 as amended by Act No. LXXIYX/2005	Magyar Energia Hivatal (MEH) = Hungarian Energy Authority (HEA)	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
Does the regulator monitor unbundling?	Yes	Act No. CX/2001 as amended by Act No. LXXIYX/2005	Yes	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Act No. CX/2001 as amended by Act No. LXXIYX/2005	Yes	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
Does the regulator have the power to require companies to take unbundling measures?	Yes	Act No. CX/2001 as amended by Act No. LXXIYX/2005	Yes	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
Can the regulator impose remedies? [y/n]	Yes		Yes	Act no. XLII of 2003 on the Gas Supply as amended by Act no. LXIII. of 2005
Have there been any complaints and/or decisions of the regulator on unbundling?	No		No	

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Hungary	Electricity			Gas		
	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6
TSO or DSO?	DSO	DSO	DSO	TSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes, in production	Yes	Yes
Position company holds within the integrated undertaking	N/A	N/A	N/A	It is the subsidiary of MOL Rt, a production license holder	N/A	N/A
Legal regime governing the relation	N/A	N/A	N/A	deed of foundation (on the basis of the company law), internal policies of the MOL-Group	N/A	N/A
Legally Unbundled? [y/n]	No	No	No	Yes.	No	No
Legal form chosen	N/A	N/A	N/A	Company limited by shares (részvénytársaság)	N/A	N/A
Functional unbundling [y/n]	No	No	No	Yes, however partly only, since the respective Hungarian legal framework did not encompass all aspects of functional unbundling as provided for by the Directive (e.g. no compliance program was required).	No (as to the new functional unbundling requirements) Yes (as to the requirements set by Section 6 Execution Decree)	No (as to the new functional unbundling requirements) Yes (as to the requirements set by Section 6 Execution Decree)
Management of company directly or indirectly involved	N/A	N/A	N/A	No	N/A	N/A

in day-to-day operation of other related supply/generation companies of the group or divisions?						
Management personnel hold shares of related supply/generation company or division?	N/A	N/A	N/A	No, 100% of the shares are owned by MOL Rt.	N/A	N/A
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	N/A	N/A	N/A	Yes -Legal and financial services, HR; -Project implementation; -IT services; -road transport; -cleaning.	N/A	N/A
Salary of management based on performance of other related supply/generation companies or divisions?	N/A	N/A	N/A	Part of their bonus only.	N/A	N/A
Executive director for network department sitting	N/A	N/A	N/A	No	N/A	N/A

on the Board of related supply/generation companies or divisions?						
Board members also responsible for activities in supply and/ or generation?	N/A	N/A	N/A	No	N/A	N/A
Reasons for the removal of the executive director	N/A	N/A	N/A	It is the sole discretion of the Board of Directors (executive organ) of MOL Rt.	N/A	N/A
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group)?	N/A	N/A	N/A	No	N/A	N/A
Involvement in the day-to-day business of the company by other supply/generation operations?	N/A	N/A	N/A	No	N/A	N/A
Effective decision making rights to operate the	N/A	N/A	N/A	Basically it is decided in the business plans to be approved by the parent company, MOL Rt.	N/A	N/A

network?				MEH (authority) also has an influence by approving the long term development concept. Within such frames, yes.		
Compliance programme	No	No	No	No (Relevant legal provisions are in force since 1 August 2005 only, details of compliance rules to be prepared may be contained by the amendment of the Execution Decree yet to be issued.)	No	No
Rules governing access for personnel on premises?	N/A	N/A	N/A	Yes	N/A	N/A
Penalties for violation of the rules?	N/A	N/A	N/A	No specific provisions in relation to the breach of such rules, the general legislative rules are applicable.	N/A	N/A
Monitoring of compliance programme?	N/A	N/A	N/A	Monitoring of the compliance program is, in lack of detailed relevant legislative provisions, not relevant. MEH (authority) has (will have) control rights also in this respect.	N/A	N/A
Separate location for network business?	No	No	No	Yes	No	No

9. IRELAND

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

The principal legislation governing the electricity industry is the Electricity Regulation 1999 Act, as amended, the ("1999 Act") which provides for the establishment of a regulatory framework for the introduction of competition in the generation and supply of electricity in the Republic of Ireland. The 1999 Act established the Commission for Energy Regulation ("CER") as the independent body responsible for overseeing the liberalisation of Ireland's energy sector and granting licences for the generation, transmission, distribution and supply of electricity. The Minister for Communications, Marine and Natural Resources has overall policy responsibility for the electricity sector. The CER has a variety of powers in relation to unbundling which include monitoring the progress of unbundling and the approval of revised management structures and codes of conduct within the transmission system operator ("TSO") and distribution system operator ("DSO").

The electricity transmission and distribution systems in Ireland are owned by the Electricity Supply Board ("ESB"), a vertically integrated state owned corporation established pursuant to the Electricity (Supply) Act 1927, as amended. ESB is also the dominant generator and public electricity supplier in Ireland.

The European Communities (Internal Market in Electricity) Regulations 2000 (the "**2000 Regulations**") completed the transposition of the Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity ("Directive 96/92/EC"). The European Communities (Internal Market in Electricity) Regulations 2005 (the "**2005 Regulations**") were promulgated to transpose the requirements of Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC (the "Electricity Directive"). National law is not a word-for-word copy of the Electricity Directive.

There is one TSO and one DSO. EirGrid is owned by the state and is the designate TSO and sole TSO licensee. However EirGrid has not yet been vested with its functions. Functional unbundling has occurred with TSO functions being currently exercised by ESB National Grid (a division of ESB), as a part of transition arrangements. Legal unbundling is expected to occur upon the execution of an infrastructure agreement to be entered into between EirGrid and ESB which will further set out the functions of the TSO and the implementation of a transfer scheme. ESB Networks (an independent ring-fenced division of ESB) is the sole DSO. Functional unbundling has occurred in respect of the DSO but there is currently no requirement in Irish law requiring the legal unbundling of the DSO although the CER expects that legal unbundling will occur within the July 2007 deadline set by Article 30(2) of the Electricity Directive.

There is a separate transmission system owner, which is also a division of ESB (ESB Networks). The Public Electricity Supplier is also a division of ESB, although the electricity supply market is fully contestable and a number of suppliers participate in this market.

The most significant recent development in the Irish electricity sector is the proposal to establish a single All-Island Electricity Market encompassing both the Republic of Ireland and Northern Ireland with a target

implementation date of 1 July 2007. Key characteristics of the proposed single All-Island Electricity Market include a gross mandatory pool with central commitment, a single system marginal price and the introduction of transmission constraint payments and capacity payments.

Full competition has been introduced in the generation sector in Ireland. However, the dominant State-owned incumbent, ESB, still owns or controls a substantial majority of installed generating capacity. In addition, much of the independently owned generation in Ireland is contracted to ESB through a range of government-sponsored support mechanisms for renewable energy, indigenous fuel sources and additional capacity for security of supply. The only large scale independent power plants not contracted to ESB and supported by public service obligation levies are the Viridian owned 343MW CCGT Huntstown Power Plant which was commissioned in 2002 and the 401MW CCGT Huntstown Phase II Power Plant which is currently under construction. On the supply side, full retail contestability was introduced on 19th February 2005. Customers do not have to change from ESB Public Electricity Supplier, but a significant number of larger customers have chosen to do so, with Energija (a Viridian Group PLC subsidiary), Airtricity, ESB Independent Energy (shortly to be renamed at the behest of the CER) and Bord Gáis Eireann being active in this market. No independent suppliers offer electricity to residential customers.

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>1999</u>: Electricity Regulation Act, 1999 – establishment of regulatory framework and regulator (“CER”) ❖ <u>2000</u>: 2000 Regulations – transpose Directive 96/92/EC, providing for designation of TSO, DSO and management independence of TSO ❖ <u>2005</u>: 2005 Regulations – transpose the Electricity Directive including measures for consumer protection, licensing of public electricity supplier and a mechanism for a Supplier of Last Resort. 	<ul style="list-style-type: none"> ❖ Electricity Regulation Act, 1999 ❖ European Communities (Internal Market in Electricity) Regulations 2000 ❖ European Communities (Internal Market in Electricity) Regulations 2005

TRANSMISSION

In the electricity sector, whilst the Electricity Directive has been fully transposed, legal unbundling has not yet occurred. A TSO licence was granted by the CER to EirGrid (as the sole TSO) on 20 June 2001 pending the vesting of the functions of TSO in EirGrid. However, as at the date of this study, these functions have not been vested in EirGrid. EirGrid is state controlled.

Until such functions are vested in EirGrid, ESB National Grid, an independent ring-fenced business unit of the ESB discharges the TSO function under transitional arrangements. National legislation requires an infrastructure agreement (the “Infrastructure Agreement”) to be entered into between EirGrid and ESB Networks (the transmission asset owner) to ensure that effective separation of the businesses occurs and is maintained. A transfer scheme is also to be implemented under which the assets, contracts, rights, obligations, liabilities and staff will transfer from ESB Networks to EirGrid.

The terms of the Infrastructure Agreement have been agreed by EirGrid and ESB Networks and is currently with the CER for approval. CER advise us that they have no issues of substance with the Infrastructure Agreement although further discussion is expected regarding the effective date of the Infrastructure Agreement and its relationship to the transfer scheme being made between the TSO and ESB for the transfer of assets, contracts, rights, obligations, liabilities and staff from ESB to EirGrid. It is expected that once the Infrastructure Agreement and transfer scheme are effective, legal unbundling will have occurred. Functional unbundling has occurred in the electricity sector with the supply business being ring-fenced from the transmission and distribution businesses within ESB.

The TSO licence granted to EirGrid further provides for restrictions on the use of commercially sensitive information held and / or obtained by EirGrid in the discharge of its functions as TSO.

Article 10(2)(c) of the Electricity Directive has been transposed through Regulation 9 of the 2000 Regulations which provides that the transmission system owner shall neither direct nor give any instructions to the TSO in relation to any of the functions conferred on the TSO by the 2000 Regulations. Condition 9 of the licence granted to ESB as transmission system owner places obligations on ESB to facilitate the discharge of EirGrid's functions as TSO but prohibits instructions being given by ESB to EirGrid and requires ESB to provide such co-operation to EirGrid as may be required by EirGrid.

Each of the licences granted to EirGrid as TSO and ESB as transmission system owner prevent the grant of any subsidy or cross-subsidy (direct or indirect) to any separate business of the licensee and / or any affiliate or related undertaking of the licensee.

Article 10(2)(c) of the Electricity Directive has been transposed by Regulation 11 of the 2000 Regulations (as amended by Regulation 8 of the 2005 Electricity Regulations) requiring the TSO to establish a compliance programme which sets out measures to ensure that discriminatory conduct by the TSO and its employees is prevented and annual reports are made to the CER specifying the measures taken and the level of compliance.

Condition 20 of the TSO licence granted to EirGrid provides that EirGrid shall prepare annual audited accounts to be delivered to the CER and are to be in accordance with such regulatory accounting guidelines as may be issued by CER from time to time.

We have been informed by the CER that it is of the view that with the exception of the implementation of measures in relation to legal unbundling of the TSO, the evidence would suggest that the guidelines set out in the Commission Note on the Unbundling Regime have been complied with for the TSO. However, we note that ESB does not appear to have complied with its licence obligation to rebrand its independent supply business (ESB Independent Energy).

DISTRIBUTION

The distribution system is owned and operated by ESB Networks which is an independent ring-fenced division of ESB and the sole distribution system operator ("DSO"). Pursuant to Regulation 7 of the 2000 Regulations only ESB may be granted a licence as distribution system operator.

Functional unbundling has occurred in respect of the DSO but there is currently no requirement in Irish law requiring the legal unbundling of the DSO, although the CER expects that legal unbundling will occur within the July 2007 deadline set by Article 30(2) of the Electricity Directive.

On 25 June 2001, the CER issued a licence to ESB to carry out the function of DSO, although it is carried out by a separate distribution business known as ESB Networks. In respect of Article 15(2)(a) and Article 15(2)(b) of the Electricity Directive, Regulation 22 of the 2000 Regulations provides that ESB shall designate a division within ESB to exercise the functions of the DSO / distribution business and ESB shall provide to such division (this being ESB Networks) sufficient resources, including a managing director and staff necessary for the performance of the DSO functions. Regulation 22 was amended by Regulation 10 of the 2005 Regulations which stated that the DSO shall be independent of ESB in terms of its organization and decision making and independent from other activities of ESB not related to distribution. Such designation is to continue in force until measures are brought into operation by the Minister to give effect to legal unbundling.

In respect of Article 15(2)(c) of the Electricity Directive, Condition 18 of the DSO licence granted to ESB further provides that such Managing Director shall not be a member of the executive board of directors of ESB or of any affiliate, related undertaking or separate business of ESB. The Managing Director of the distribution business shall not be engaged in any other capacity other than as managing director of the distribution business and shall report on the operation of the distribution business to the CEO and / or executive board of directors of ESB only. Condition 18.6 requires ESB to secure the complete and effective separation of the distribution business from other separate businesses of ESB, such separation shall include but not be limited to ring-fencing in relation to:

- (a) access to and exchange of information undertakings by individual employees regarding the non-disclosure of information;
- (b) information systems;
- (c) resources including staff, premises, finance;
- (d) the setting up of a Meter Registration System Operator; and
- (e) a code of conduct on the transfer and / or movement of employees, either part-time or full-time, between the distribution business and any other separate business of the licensee.

Under Condition 18.8 of the DSO licence, ESB must also appoint a compliance officer who is responsible for ensuring that the distribution business complies with the provisions of the licence with regard to separation of the distribution business.

Under Condition 20 of the DSO licence, ESB must procure that the distribution business does not give any subsidy or cross-subsidy (direct or indirect) to any other separate business of ESB and / or any affiliate or related undertaking of ESB.

Article 15(2)(d) of the Electricity Directive has been transposed by Regulation 23 of the 2000 Regulations (as amended by Regulation 11 of the 2005 Electricity Regulations) requiring the DSO to establish a compliance programme which sets out measures to ensure that discriminatory conduct by the DSO and its employees is prevented and annual reports are made to the CER specifying the measures taken and the level of compliance.

Under Condition 19 of the DSO licence, ESB shall prepare annual audited accounts to be delivered to the CER and are to be in accordance with such regulatory accounting guidelines as may be issued by CER from time to time.

The CER advise us that they are of the view that evidence would indicate that functional unbundling has occurred based on criteria stated in the Commission Note on Unbundling.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Directive 2003/55/EC concerning common rules for the internal market in natural gas (the “Gas Directive”) has been substantially implemented through the amendment of the principal legislative instrument which governs the Irish gas sector, this being the Gas Act 1976, as amended (the “Gas Act”). The Gas Act established Bord Gais Eireann (the Irish Gas Board) (“BGE”) as owner and operator of the gas transmission and distribution systems and, as a result of recent amendments, provides the framework for the introduction of competition into gas shipping and supply.

The Gas (Interim) (Regulation) Act 2002 (the “GIR Act”), which also amended the Electricity Regulation Act 1999 (the “1999 Act”) changed the name of the Commission for Electricity Regulation to the Commission for Energy Regulation (“CER”) and vests the CER with responsibility for independent regulation of the gas sector. The European Communities (Internal Market in Natural Gas) (No. 2) Regulations 2004 (the “2004 Regulations”) were promulgated on 20 July 2004 to transpose the non-discretionary provisions of the Gas Directive.

The responsibilities of the CER include regulation of downstream transmission and distribution, supply and storage of natural gas. Overall policy responsibility for the gas sector resides with the Minister for Communications, Marine and Natural Resources. The national law is not a word-for-word copy of the Gas Directive.

The transportation and distribution system in Ireland is owned by the vertically integrated state owned BGE. The transmission and distribution system operation is undertaken by an independent ring-fenced division of BGE known as BGE Networks. There is one Combined Operator and no other TSOs or DSOs although franchise supply rights for certain parts of the country have been granted to two different entities (BGE Energy Supply (a ring-fenced division of BGE) and Flogas).

BGE is a “combined operator” within the meaning of Article 15 of the Gas Directive. However, we note that BGE’s TSO and DSO licences require it to operate its transmission and distribution businesses separately except to the extent agreed by the CER. By direction dated 25 February 2005, the CER approved a combined transmission and distribution Code of Operations for BGE, thereby expressly permitting BGE to operate as a Combined Operator. Article 18, 19, 20, 21 and 25(5) were later transposed into Irish law under the European Communities (Internal Market in Natural Gas) Regulations 2005 (the “2005 Gas Regulations”) which were promulgated on 30 June 2005. However Article 15 (Combined Operator) has been transposed through the imposition of specific licence conditions in the TSO and DSO licences granted to BGE in 2004.

Ireland has limited indigenous gas resources. Approximately 86% of Ireland’s total natural gas supply market by volume is open to competition. BGE is the dominant domestic gas supplier although Flogas has been appointed to supply gas to domestic customers in a number of newly connected towns. New market entrants in the eligible sector include RWE; Vayu Limited, the promoter of the Irish Energy Co-operative; and Energia, a subsidiary of Viridian Group plc and the largest independent electricity supplier in Ireland.

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>1976</u>: Gas Act – establishment of BGE as owner and operator of gas transmission and distribution systems ❖ <u>2002</u>: GIR Act vests CER with responsibility for gas sector regulation ❖ <u>2004</u>: 2004 Regulations transpose non-discretionary requirements of Gas Directive to continue liberalisation ❖ <u>2005</u>: 2005 Regulations transpose further requirements of the Gas Directive 	<ul style="list-style-type: none"> ❖ Gas Act, 1976 ❖ Gas (Interim) (Regulation) Act, 2002 ❖ European Communities (Internal Market in Natural Gas) (No. 2) Regulations 2004 ❖ European Communities (Internal Market in Natural Gas) Regulations 2005

TRANSMISSION

BGE is a combined operator within the meaning of Article 15 of the Gas Directive. The combined system operator activities are undertaken by a separate ring-fenced division of BGE known as BGE Networks.

Article 9 (Unbundling of TSO) and Article 13 (Unbundling of DSO) have not been transposed into Irish law. Proceedings were commenced by the European Commission on 6 July 2005 for failure to transpose the Gas Directive. The CER advice is that a statutory instrument will be promulgated in the near future to transpose these provisions.

Condition 22 of the transmission licence and Condition 21 of the distribution licence require BGE to designate a separate division to exercise the functions of the transmission business and distribution business respectively. Each of the transmission business division and distribution business division must establish and maintain full managerial and operational independence from other businesses of BGE

Condition 22 of the transmission licence and Condition 21 of the distribution licence impose restrictions on the disclosure of information by BGE as TSO / DSO to persons engaged in any separate business of BGE. The licence conditions also impose restrictions on the employment by BGE as TSO / DSO of persons who have worked in the previous three months for a separate business of BGE.

BGE as TSO / DSO must also prepare and publish, in a form approved by CER, the procedures and systems adopted by BGE to ensure its compliance with these licence conditions (thus satisfying the requirements of Article 15(d) of the Directive). BGE as TSO / DSO must annually review such statement of compliance and appoint a compliance officer to facilitate compliance by BGE with its duties (Condition 23 of the transmission licence and Condition 22 of the distribution licence). Condition 24 of the transmission licence and Condition 23 of the distribution licence requires BGE as TSO / DSO to act in a manner calculated to secure that it has sufficient management resources and financial facilities to enable it to carry on the transmission / distribution business.

Condition 27 of the transmission licence and Condition 26 of the distribution licence prohibit the giving of direct or indirect cross-subsidies or the receipt of direct or indirect cross-subsidies to any other business of BGE.

Article 17 (Unbundling of Accounts) has been transposed into Irish law by Section 17 of the GIR Act and Section 9(1B) of the 1999 Act. The GIR Act was passed on 10 April 2002 although the CER was formally given its powers in respect of the unbundling of accounts on 30 April 2002. Under Section 17 of the GIR Act, integrated natural gas undertakings shall keep separate accounts for their transmission, distribution, storage and supply activities, as if the activities in question were carried out by separate companies. Every natural gas undertaking, whatever its system of ownership or legal form, shall also, where the Companies Acts, 1963 to 2001, prepare and publish annual audited accounts and make such accounts available for inspection at its head office.

We are advised by the CER that compliance with the licence conditions and national legislation has resulted in BGE Networks, as a combined operator, having achieved functional unbundling from the rest of the BGE businesses. We have been informed by the CER that they of the view that the evidence would suggest that the guidelines set out in the Commission Note on the Unbundling Regime have been complied with. Legal unbundling has not subsequently occurred as the TSO and DSO and supply businesses remain part of one entity, BGE which is a vertically integrated undertaking. We are advised by the CER that it is expected that a statutory instrument will be promulgated in the near future to ensure that the legal unbundling provisions of the Gas Directive are transposed.

DISTRIBUTION

Please see above in relation to our comments for transmission. The TSO and DSO are a combined operator and whilst functional unbundling has occurred with the DSO activities being undertaken by an independent ring-fenced division within BGE, BGE also undertakes supply activities. Legal unbundling has therefore not occurred although it is expected that a statutory instrument will be promulgated in the near future to ensure that the legal unbundling provisions of the Gas Directive are transposed.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Ireland	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes but not completely. Legal unbundling provisions have been transposed but not fully implemented.	Electricity Regulation Act 1999 ("1999 Act"), European Communities (Internal Market in Electricity) Regulations 2000 ("2000 Regulations") and European Communities (Internal Market in Electricity) Regulations 2005 ("2005 Electricity Regulations")	Yes but not completely. Legal unbundling provisions have not been transposed.	Gas Act 1976 ("Gas Act"), Gas (Interim)(Regulation) Act 2002 ("GIR Act"), European Communities (Internal Market in Natural Gas)(No. 2) Regulations 2004 ("2004 Regulations"), European Communities (Internal Market in Natural Gas) Regulations 2005 ("2005 Gas Regulations")
Number of TSOs	1		1	
Number of DSOs	1		1	
How many of these DSOs have less than 100.000 customers?	0		0	
TSO Unbundling regime	Legal unbundling legislative framework introduced but legal unbundling yet to occur Functional unbundling and unbundling of accounts has		Functional unbundling and unbundling of accounts has occurred. Supply business yet to be separated [N.B TSO and DSO are	

	occurred		combined operator]	
DSO unbundling regime	Functional unbundling and unbundling of accounts has occurred. Legal unbundling has not occurred.		Functional unbundling and unbundling of accounts has occurred. Legal unbundling has not occurred as supply business yet to be separated [N.B TSO and DSO are combined operator]	
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	Yes		Yes	
100.000 customer exemption [y/n]	No		No	
How many DSOs are excluded [number]	0		0	
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	N/A		N/A	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	No		No	
The Regulator [name]	Commission for Energy Regulation	Established as the Commission for Electricity Regulation on 14 July 1999 pursuant to the 1999 Act (as amended by the 2000 Regulations (promulgated on 20	Commission for Energy Regulation	Commission for Electricity Regulation changed to Commission for Energy Regulation on 30 April 2002 pursuant to the GIR Act which

		December 2000) and the 2000 Electricity Regulations (promulgated on 8 February 2005)		amended the 1999 Act. Functions of CER amended by GIR Act, 2004 Regulations and 2005 Gas Regulations.
Does the regulator monitor unbundling?	Yes	Section 9(1D) of the 1999 Act	Yes	Section 9(1B) of the 1999 Act
Does the regulator have powers to collect information on unbundling in a given company?	Yes	See Condition 25 of TSO licence and Condition 19 of DSO licence	Yes	Section 17(4) and 17(5) of the GIR Act, Condition 22 of the TSO licence and Condition 21 of the DSO licence.
Does the regulator have the power to require companies to take unbundling measures?	Yes (other than legal unbundling)	The CER may revoke the TSO and DSO licence where the licensee fails to comply with a direction, determination or order under the 1999 Act or the 2000 Regulations which has been made in respect of a contravention of a licence condition. (see Schedule to TSO and DSO licence). See sections 24, 25 and 26 of the 1999 Act	Yes (other than legal unbundling)	The CER may revoke the TSO and DSO licence where the licensee fails to comply with a direction, determination or order under the 1999 Act or section 16 of the GIR Act which has been made in respect of a contravention of a licence condition. (see Schedule to TSO and DSO licence). See sections 24, 25 and 26 of the 1999 Act
Can the regulator impose remedies? [y/n]	Yes (see question 22)	Sections 33 and 34 of the 1999 Act (as amended)	Yes (see question 48)	Section 10A of the Gas Act
Have there been any complaints and/or decisions of the regulator on unbundling?	Yes but resolved. See response to question 26	Source: CER. None in public domain	No	Source: CER. None in public domain.

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Ireland	Electricity		Gas
	1	2	3
TSO or DSO?	TSO ESB National Grid (Designate TSO is EirGrid plc)	DSO ESB Networks	TSO / DSO (Combined Operator) BGE Networks
Vertically integrated in production and/or supply?	Yes (generation and supply)	Yes (generation and supply)	Yes (supply)
Position company holds within the integrated undertaking	ESB National Grid is a ring-fenced division within ESB	ESB Networks is a ring-fenced division within ESB	BGE Networks is a ring-fenced division within BGE
Legal regime governing the relation	ESB National Grid is a ring-fenced division within ESB	ESB Networks is a ring-fenced division within ESB	BGE Networks is a ring-fenced division within BGE
Legally Unbundled?	No	No	No
Legal form chosen	N/A. Although EirGrid is a public limited company and is expected to be vested with TSO functions in the near future.	N/A. ESB Networks is a ring-fenced division within - ESB	N/A. BGE Networks is a ring-fenced division within BGE
Functional unbundling	Yes	Yes	Yes
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	No	No	No

Management personnel of the company hold shares of related supply/generation company or division?	No (not directly - ESB is a statutory corporation 95% owned by the Government with 5% held in an employee share ownership trust).	No (not directly - ESB is a statutory corporation 95% owned by the Government with 5% held in an employee share ownership trust).	No
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	Yes - Premises are shared but with restricted access to TSO offices. We are advised that following services are common to ESB National Grid and ESB: (i) payroll administration; (ii) catering (iii) cleaning; (iv) security	Yes – the following services are purchased from ESB: (i) IT (ii) Legal (iii) Financial (iv) insurance (v) property management	Yes – Premises are shared but with restricted access. The following services are provided by a Shared Services group: (i) IT (ii) Legal (iii) Financial (iv) HR
Salary of management based on performance of other related supply/ generation companies or divisions?	Yes – We are advised that 5% of annual profits (after tax and before exceptional), shared among ESB staff, subject to a minimum of 2% of basic pay. This amount to be paid when annual profits are declared.	No (based on advice from ESB)	Yes - We are advised that staff can receive bonuses which are capped at approximately 6% of salary of which a weighted percentage (less than one third) is based on the overall performance of BGE.
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	No	No	No
Board members also responsible for activities in the supply and/ or generation?	Yes – the members of the ITSO Board Committee responsible for ESBNG are non-executive directors of ESB	Yes – ESB Networks is part of ESB and therefore subject to the ultimate supervision of the ESB executive board	Yes – the members of the Board Committee on Infrastructure Investment is part of the executive board of BGE.

Reasons for the removal of the executive director.	N/A – TSO is a ringfenced division within ESB	N/A – DSO is a ringfenced division within ESB	N/A – Combined operator is a ringfenced division within BGE
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No – however ITSO Board Committee is comprised of directors of ESB	No – however subject to ultimate supervision of the ESB executive board	No – however subject to ultimate supervision of the BGE executive board
Involvement in the day-to-day business of the company by other supply/generation operations?	Yes – in a practical sense. This will be formalised when Eirgrid is vested with the functions of TSO	Yes	Yes
Effective decision making rights to operate network?	Yes – in a practical sense. This will be formalised when Eirgrid is vested with the functions of TSO	Yes	Yes
Compliance programme	Yes	Yes	Yes – currently in the form of training modules. Currently being formalised into a Code for Regulator approval.
Rules governing access for personnel on premises?	Yes	Yes	Yes
Penalties for violation of rules?	Yes	Yes	Yes
Monitoring of compliance programme?	Yes – Compliance Officer (position is currently vacant (due to previous occupant's relocation to the UK) and is filled on an interim basis by ESB National Grid's external auditors)	Yes – Compliance Officer	Yes – Compliance Officer
Separate location for network	Yes – ESB National Grid is located in the	Yes – ESB Networks is in the same building	Yes – In some cases BGE Networks is in

business?	same building as ESB but in a separate part of the building with restricted access.	as ESB but in a separate part of the building with restricted access	the same building as BGE but in a separate part of the building with restricted access
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10. ITALY

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

The liberalisation of the electricity market in Italy started in early 90s, when Law No. 9/1991 and 10/1991 begun eroding the monopoly of ENEL by liberalising the production of electricity from renewable sources, and Law Decree No. 333/1992 transformed ENEL into a joint-stock company (as such, governed by civil law). This process culminated with the enactment of Decree No. 79 of 19 February 1999 (the “**Electricity Decree**”), implementing Directive 96/92/EC and drafting a new architecture for Italy’s power system. The Electricity Decree gradually introduced the free competition in the power generation with respect to the so-called “eligible costumers” (i.e. costumers free to choose their suppliers), while a monopoly structure was maintained for power transmission, distribution and sale to end-customers not allowed to choose their supplier (the so-called “non eligible costumers”). In fact, according to the Electricity Decree, transmission and dispatching activities must be carried out on the basis of a license.

The Electricity Decree also sets forth that those who carry out generation, import, export, purchase, sale and distribution on the basis of a special or exclusive title, may carry out other activities provided that the accounting and administrative unbundling is guaranteed (pursuant to modalities established by the Regulator, *Autorità per l’Energia Elettrica e il Gas* “**AEEG**”). As a consequence of that, by Resolution No. 61/1999, the AEEG introduced an obligation on electricity operators to manage each activity autonomously as if each activity was carried out by a separate company, as well as to submit detailed accounts for the exclusive use of the AEEG, along with more concise accounts for each unbundled activity, which would be made available to the public. With Resolution No. 310/2001 such accounting system was simplified in order to introduce a higher degree of flexibility and minimise companies’ administrative costs. Simplified procedures have been adopted for small companies. The accounting/administrative unbundling applicable pursuant to the AEEG Resolutions is a sort of functional unbundling. In particular, the “accounting unbundling” is aimed at rendering transparent the resources dedicated to (and arising out of) each activity carried out by the electricity operator (also with a view of avoiding cross-subsidies between the different activities). The “administrative unbundling” imposes the creation of separate administrative units with autonomous management, as if each activity was carried out by separate entities. The Resolutions actually in force have not been issued with a view of transposing the Directive 2003/54/EC (the “**Electricity Directive**”). On the contrary, they were enacted in the framework of the transposition of the Directive 96/92/EC. Consequently, there is no exact correspondence between the concept of functional unbundling included in the Electricity Directive and the concept of “administrative and accounting unbundling” contained in the unbundling provisions currently applicable.

In the first years of liberalisation and up to October 2005, the TSO was a State-owned company called GRTN (*Gestore della Rete di Trasmissione Nazionale*). It operated the National Transmission System (“**NTS**”), while TERNA SPA, belonging to the Enel Group, was the owner of the largest part of this grid. Recently, the two merged (see the paragraph dedicated to Transmission).

The Electricity Decree started to reorganize distribution which, as a rule, was carried out on a Municipality basis. However, notwithstanding the rules supporting the aggregation of minor players gave raise to several mergers and acquisitions, distribution remains a highly fragmented activity in Italy, with monopolies of various size, as

resulting from each license. As concerns the unbundling regime, the first liberalisation rules established some legal unbundling obligations on major DSOs, i.e. serving more than 300.000 end customers. More recently, these legal unbundling obligations became applicable on a facultative basis, but a mandatory accounting and administrative unbundling applies (for more info see the paragraph dedicated to Distribution).

Special provisions were issued with regard to the monopolist. The Electricity Decree required ENEL to be unbundled into the following companies: a) generation; b) distribution and sale to non eligible customers; c) sale to eligible customers; d) ownership of the grid (this activity was assigned to TERN SPA); and e) dismantling of nuclear power plants. Furthermore, ENEL's market share in generation/import was limited to a maximum of 50% of the whole Italian market, this cap being applicable as of 1 January 2003. Consequently, ENEL had to dispose of 15GW (around 25% of ENEL's total generating capacity); to do so it incorporated three separate generation companies (the so-called "Gencos"), i.e. Elettrogen SPA, Eurogen SPA and Interpower SPA. The following table summarises the sale of the Gencos (AEEG 2003 Report, p. 149):

Genco	Closing date	Purchaser	New Genco's denomination
Elettrogen	July 2001	Endesa 51%, Banco Santander Central Hispano 34%, Asm Brescia 15%	Endesa Italia
Eurogen	May 2002	Edison 40%, Aem Milano 13,4%, Aem Torino 13,3%, Atel 13,3%, Unicredito Italiano 10%, Interbanca 5%, Royal Bank of Scotland 5%	Edipower
Interpower	January 2003	Acea Electrabel 50%, Energia Italia 50%	Tirreno Power

After the coming into force of the Electricity Decree, the Energy Regulator issued important resolutions concerning third party access to the grid, the register of Eligible Clients and the import of electricity. In 1999 most of the AEEG's efforts concerned the reform of the electricity tariffs and the revision of technical and economic conditions for access to the grids.

Afterwards, the most significant pieces of legislation have been enacted with the special purpose to face the need to increase power generation and competition. In this respect, the following pieces of legislation are particularly relevant:

1) Law Decree No. 7 of 7 February 2002 (converted into law by Law No. 55 of 9 April 2002), also known as the "Sbloccacentrali Decree", which rationalised the permitting process for the building and operation of power plants, by introducing a single permit applicable to conventional installations with a capacity in excess of 300 MW.

2) Law Decree No. 239 of 29 August 2003 (converted by Law No. 290 of 27 October 2003) providing for the unification of ownership of assets and operation of the NTS. As a consequence of this provision (and of Decree of

the President of the Council of Ministries of 11 May 2004, which implements it), starting from 1 November 2005, the ownership and the operation of the NTS have been unified through the acquisition by TERNA SPA of a branch of the GRTN's business concern including despatching, network planning and development activities. Moreover, Law Decree No. 239/2003 establishes that, as of 1 July 2007, any company operating in electricity or NG production, import, distribution and sale (even if by means of companies belonging to the same group), as well as any State owned company (even if indirectly owned by the State) operating in the above sectors, may not hold, directly or indirectly, more than 20% of the shares of companies which own and manage electricity/gas transport national networks.

3) Law No. 239 of 23 August 2004 (also known as the "**Marzano Law**"), bringing a new wave of liberalisation involving the energy sector in the whole. The Marzano Law lists the general principles of the energy sector to be observed by the Regions in ruling on energy matters falling into their competence; introduces some measures to ease the lay down of energy transport grids and establishes a Governmental control in case of mergers involving foreign companies of Member States where there is not adequate guarantee of reciprocity (Article 1, para 29); and delegates to the Government the reorganization of several issues relating to the energy sector. This law completed the process of liberalisation of the electricity market (thus implementing in part the Electricity Directive) and introduced some measures simplifying the permitting process applicable to transport grids. Moreover, it amended the Electricity Decree as regards the unbundling of major DSOs (those serving more than 300.000 customers); as a result, legal unbundling is now facultative for distribution operators and a sort of functional unbundling applies (i.e. accounting and administrative unbundling).

The Electricity Directive has not yet been officially transposed by the Italian legislator; consequently, the concept of "functional unbundling", as established under the above Directive, does not apply in Italy. The Italian Parliament has delegated the Government to transpose the Electricity Directive by May 2006. Only Directive 96/92/EC has been formally transposed, so far.

Chronology	Instruments of law
❖ <u>1999</u> : Liberalisation	❖ Electricity Decree 1999
❖ <u>1999-2001</u> : Administrative and accounting unbundling	❖ AEEG Resolutions No. 61/1999 and 310/2001
❖ <u>2002</u> : Promotion of power generation	❖ Sbloccacentrali Decree 2002
❖ <u>2003</u> : Limitation of shareholdings in energy undertakings	❖ Law Decree No. 239/2003
❖ <u>2004</u> : Reorganisation of Energy sector	❖ Marzano Law 2004
❖ <u>2005</u> : Unification of ownership and operation of the NTS	

TRANSMISSION

Electricity transmission is a service carried out on the basis of a license and remunerated with a tariff, in compliance with the parameters established by AEEG.

Up to the end of October 2005, the NTS was operated solely by an independent entity, the GRTN, which is a State-owned company. Operation and ownership were separated, with the ownership of the largest part of the NTS resting on TERN SPA, a subsidiary of ENEL, the former monopolist.

As of 1st November 2005, TERN SPA merged with part of GRTN. As a consequence, the new TERN SPA owns and operates electricity transmission and dispatching over the high-voltage (HV) and extra-high voltage (EHV) grid throughout Italy.

Less than 10% of the grid is still owned and operated by minor TSOs, which are subject to legal unbundling. However, the reform currently in process establishes that the merger between TERN and GRTN should be completed with the whole unification of the NTS.

It is worth mentioning that the State (through the Ministry of Economy and Finance, in agreement with the Ministry for Productive Affairs - "**MAP**") may exercise *vis-à-vis* TERN a number of special powers (Article 6.3 of TERN bylaws), among which a veto right, justified with regard to the detriment to vital national interests.

In this new scenario, competition should be safeguarded by the 20% cap to the shares that energy companies may hold in the new TSO (i.e. no gas or electricity production, import, distribution and sale company shall have more than 20% of the new TSO's shares); this obligation applies as of 1 July 2007. By this term, Enel SPA shall reduce its participation in TERN.

The electricity transmission license between the State and TERN (which was adopted with Ministerial Decree of 20 April 2005) requires, amongst others, the following conditions:

- the impartiality and neutrality of transmission and despatching services in order to ensure non-discriminatory access to all users;
- the adoption of a Grid Code granting an objective and non discriminatory access to the network, on the basis of the guidelines issued by AEEG;
- the adoption of a compliance programme (or of a behavioural code) establishing appropriate measures, internal procedures and duties to be observed by the company's employees in order to prevent any discriminatory behaviour in the performance of their activities;
- the appointment of a compliance officer;
- a 5% cap applicable to the voting rights of electricity production, import, distribution, sale and transmission undertakings (the cap applies to the whole undertaking's group);
- TERN may supply services to third parties, as well as purchase companies or going concerns or shares of companies active in sectors which are similar, related or instrumental to its corporate purpose. Third parties' services are subject to administrative and accounting unbundling; if these services are in excess of 10% of the global company's turnover, either a legal unbundling or a distinct assets structure are applicable. Furthermore, TERN may purchase companies or going concerns or shares of companies active in sectors which are different from those listed above; these activities are carried out throughout either separate companies (i.e. legal unbundling applies) or separate assets, provided that – in the latter case – administrative and accounting unbundling applies. In any case, any activity carried out by TERN should not prejudice its independence, as a transmission operator, with regard to electricity production, import and sale;
- TERN has the faculty to incorporate a separate company to which transfer the title to the license and the related duties and rights.

Our analysis of the sample companies in the electricity sector does not include GRTN (since not vertically integrated), nor TERNA, because the merger with GRTN was in process when this study was started. Among the sample companies, only one is a TSO. It operates within the territory of a Municipality and belongs to a vertically integrated Group where the parent company (whose major shareholder is the same Municipality served by the TSO) exercises direction and coordination powers over its subsidiaries, even if it is not involved in day-to-day operation. The parent company also provides some common services to its subsidiaries. The non-discriminated access to the network is ensured by an Ethical Code binding for all the companies of the Group and for their staffs. An internal committee monitors the observance of this Ethical Code.

DISTRIBUTION

Distribution is a monopoly, carried out on the basis of licenses granted by the MAP.

In order to rationalise the distribution activity, in 1999 the Electricity Decree set forth the grant of only one distribution license within the territory of each Municipality. The massive fragmentation of this sector is evident if one considers that Italy has more than 8.000 Municipalities, and that the rules establishing a single license for each Municipality were aimed at reducing the number of the existing operators. As a consequence of these rules, distributors operating in the territory of the same Municipality had to merge their activities. Moreover, the Electricity Decree strengthens the distribution operators participated by the Municipalities, thus promoting competition, to the extent it allows them to purchase from ENEL the distribution going concerns in the Municipalities where the above utilities serve at least the 20% of the end users or in the areas where they serve at least 100.000 end users. In the 2002-early 2004 period, 38 utilities took benefit of the above procedure and purchased portions of the grid by Enel Distribuzione (AEEG 2003 Report, p. 179-180 and 2004 Report, p. 160). These utilities and Enel Distribuzione may be considered as the major DSOs in Italy.

As far as the licenses in force as of 31 March 2001 are concerned, distribution undertakings will continue to operate until 31 December 2030. New licenses (which will be operative from that expiry date) will be granted by the MAP by means of tendering procedures to be called, in compliance with national and European public procurement rules, not later than five years prior to 31 December 2030.

The grant of new licenses will be based on criteria which will be established by further ministerial regulation. The Electricity Decree envisages the basic territorial framework which will be applicable to such new distribution licenses, in that it provides for a minimum size (a Municipality) and also a maximum size (an area including a quarter of all final consumers) for each license.

Distribution companies are subject to third party access rights, i.e. they must grant access to their systems to all persons applying for connection, provided that continuity of supply is preserved and that the technical rules and the tariff system established by the AEEG are complied with.

The Electricity Decree set forth that within 180 days from its entry into force, the owners of distribution plants serving more than 300.000 end customers had to establish one or more companies to which transfer, within 6 months from their establishment, all the assets, the relationships, the liabilities relating to distribution and sale activities to non-eligible customers (i.e. to the captive market). In other terms, major DSO's were subject to legal unbundling. The only DSOs to meet the above threshold were AEM MILANO SPA, ACEA SPA and ENEL SPA;

all of them timely implemented the unbundling provisions. In 2004 (when the deadline established by law had already expired and the concerned DSO's had already implemented the legal unbundling obligation) the above provision was amended. The provision currently applicable sets forth that distribution operators may incorporate one or more controlled companies for the distribution and sale to the captive market, while the AEEG establishes the accounting and administrative unbundling rules applicable to these activities. Consequently, there is no a current obligation for legal unbundling.

Distribution is still characterized by the presence of lots of small players (e.g. in 1999 there were only three DSOs serving more than 300.000 final customers). The most important DSOs belong to large and vertically-integrated groups of companies operating in the energy sector. Therefore, it appears that the unbundling obligations have not proved to be sufficient to ensure a workable competition.

Both the DSOs analysed carry out in the same structures electricity distribution and sale to the captive market, subject to an obligation of administrative and accounting unbundling. Each of them belongs to a group of companies and in both cases one of the shareholders of the parent companies is a public body. The parent company exercises direction and coordination powers, therefore, even if not imposing day-to-day operation choices, it may influence the managerial choices of the subsidiaries. There are also common services carried out by the parent company or by other companies of the Group on the basis of *ad hoc* service agreements. The companies analysed have no compliance programme but non-discrimination is ensured through the adoption of behavioural codes binding for all companies of the Group and their staff. Internal committees monitor the application of these behavioural codes. One DSO has separate location from the other companies of the Group.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

NG is a vertically integrated system that was totally dominated by a *de facto* monopoly of ENI, a the State-owned company. The input for the liberalisation came from the EU level. In fact, in 2000 the Legislative Decree No. 164 of 23 May, transposing the Directive 98/30/EC, drafted a newly liberalised environment for gas activities by introducing the right of third parties to have access to the existing infrastructures, some antitrust ceilings (i.e. maximum thresholds for carrying out certain upstream and downstream activities), and a mandatory unbundling of gas companies.

The unbundling provisions introduced in the Italian gas system two forms of mandatory unbundling: a legal one and a so-called “accounting and administrative” unbundling, . The obligation to separately manage certain activities, even only for accounting or management purposes, is aimed at avoiding any cross-subsidy among such activities, so that each cost is clearly related to the activity it pertains, so as to increase the number of NG competitors.

The following activities are subject to legal unbundling:

- transport and dispatching must be separated from any other gas activity (except storage);
- storage must be separated from any other gas activity (except transport and dispatching);
- distribution must be separated from any other gas activity; and
- sale may be performed only by undertakings which do not perform any other gas activity (except import, export, exploitation and wholesale activities).

As regards the accounting and administrative unbundling, the Gas Decree establishes that transport and dispatching accounts and management must be separated from those concerning storage.

With Resolution No. 311/2001, the AEEG introduced provisions for the implementation of the accounting and administrative unbundling of legal entities operating in the gas sector and the related publicity and reporting requirements. The unbundling obligations applicable pursuant to the AEEG Resolution is a sort of functional unbundling. In particular, the “accounting unbundling” is aimed at rendering transparent the resources dedicated to (and arising out of) each activity carried out by the gas operator (also with a view of avoiding cross-subsidies between the different activities). The “administrative unbundling” imposes the creation of separate administrative units with an autonomous management, as if each activity was carried out by separate entities. The Resolution actually in force has not been issued with a view of transposing the Directive 2003/55/EC (the “**Gas Directive**”). On the contrary, it was enacted in the framework of the transposition of the Directive 98/30/EC. Consequently, there is no exact correspondence between the concept of functional unbundling included in the Gas Directive and the concept of “administrative and accounting unbundling” contained in the unbundling provisions currently applicable in Italy.

Unlike the electricity sector, the gas liberalisation rules do not contain any specific unbundling provisions applicable to the incumbent.

The Gas Decree established a regulated access to transport, storage, LNG re-gasification and distribution infrastructures, applicable since 2000. In this respect, the Italian provisions have anticipated the Gas Directive, which requires the regulated access be mandatory as of 2004. According to the Gas Decree, AEEG must define the tariff parameters and the criteria to be followed in order to give a non-discriminatory access to the infrastructures. These parameters and criteria are mandatory for industry operators, which have to reflect them in their Codes.

However, notwithstanding the pro-competitive environment outlined by the Gas Decree, ENI retains its dominant position on the market, directly and through its subsidiaries, as stigmatised by AEEG and the Antitrust Authority. In 2003, the Law Decree No. 239 established that, starting from 1 July 2007, any company operating in electricity or NG production, import, distribution and sale (even if by means of companies belonging to the same group), as well as any State owned company (even if indirectly owned by the State) operating in the above sectors, may not hold, directly or indirectly, more than 20% of the shares of companies which own and manage electricity/gas transport national networks.

In 2004, the Marzano Law reorganized both electricity and gas sectors. Among other things, this Law supports the realization of new gas pipelines for abroad interconnection, as well as of re-gasification terminals.

The Gas Directive has not yet been officially transposed by the Italian legislator; consequently, no functional unbundling applies in Italy. The Italian Parliament has delegated the Government to transpose the Gas Directive by May 2006. Only Directive 98/30/EC has been formally transposed, so far.

Chronology	Instruments of law
❖ <u>2000</u> : Liberalisation	❖ Gas Decree 2000
❖ <u>2001</u> : Implementation of administrative and accounting unbundling	❖ AEEG Resolution No. 311/2001
❖ <u>2003</u> : Limitation of shareholdings in energy undertakings	❖ Law Decree No. 239/2003
❖ <u>2004</u> : Reorganisation of Energy sector	❖ Marzano Law 2004

TRANSMISSION

Gas transport is a regulated activity, subject to the tariffs established in accordance with the criteria set forth by the AEEG. The Gas Decree (implementing Directive 98/30/EC), in line with EU requirements, required the legal unbundling of transmission and despatching activities from all other activities, except storage ones.

Accordingly, since 1 January 2002, transmission is subject to legal unbundling from any other gas activity, except storage, where the accounting and administrative unbundling applies.

Actually, there is a gas TSO, SNAM RETE GAS, which owns and operates more than 90% of the National Transmission Grid (“**NTG**”). This major TSO is a subsidiary of ENI. It belongs to a vertically integrated Group and it is legally unbundled. The parent company plays an important role in strategic management decisions; moreover, it appoints the members of the executive boards of directors and provides many common services to the TSO, as well as to other subsidiaries. The second TSO, SGI-Società Italiana Gadotti, owns only a very small

portion of the grid. Therefore, even if Italy has experienced the legal unbundling of the transmission service, the market shows still a monopolistic structure. Access to the network is ensured by legislative and regulatory provisions and, above all, by means of the Regulator's monitoring powers, including the power to approve the TSOs' Grid Codes.

DISTRIBUTION

Gas distribution is a highly fragmented activity in Italy, mainly due to historical reasons, i.e. to the fact that gas distribution was often carried out on a Municipality basis. In 2004 in Italy there were approximately 560 distribution operators.

Prior to the enactment of the Gas Decree, distribution was integrated with sale activities. Further to the liberalisation process, distribution is a services provided at a regulated price.

Gas distribution is a public service, exclusively awarded by local authorities, by means of tendering procedures, for periods not exceeding twelve years (Article 14 of the Gas Decree). The local authorities awarding the service keep control over the carrying out of the distribution service; the relationships with the local bodies and the service provider are regulated by specific service contracts.

The DSO is chosen according to the best economic conditions offered for the service supply, the quality and security standards, the investment plans for the development, renewal and maintenance of networks and installations. These elements are an essential part of the service contract. Local bodies must start the tendering procedure no later than one year prior to the expiry of the license, in order to avoid lack of continuity in the service management. The outgoing service provider is under an obligation to continue the service supply within the limits of the ordinary administration, up to the starting date of the new license. In case the local body does not commence the tendering procedure within the above-mentioned term, the Region (also by appointment of an ad hoc officer) should start such procedure.

The awards and licenses existing at the date of entry into force of the Gas Decree shall remain into force for the duration established therein, if they have been awarded pursuant to a tendering process and, in any case, for a period not exceeding 31 December 2012 (i.e. twelve years starting from 31 December 2000 - Article 15 of the Gas Decree).

Since 1 January 2002, DSOs are subject to legal unbundling with respect to other gas activities. Small DSOs, i.e. those which carry out only distribution and sale and serve less than 100.000 end users, are subject to legal unbundling between distribution and sale since 1 January 2003.

Similar to transmission, distribution is subject to legal unbundling from other gas activities. Although no functional unbundling applies (since there has been no complete transposition of the Gas Directive in this regard), some obligations relating to the functional unbundling are established by the Ethical codes of the companies; however, these obligations are of general nature and do not refer to the unbundling of energy undertakings. Despite the great number of DSOs, the most powerful ones still belong to big vertically integrated groups of companies and, namely: ENEL, ENI and EDISON. Moreover, the large number of DSOs is not really a result of a pro-competitive environment but rather the consequence of the fact that, in most cases, each DSO operates in limited territories. However, now the trend is changing, as many distributors are taken over by large industrial undertakings and their overall number is going down: compared with 750 distributors in the late 1990s, there are now about 560. Also in this sector, the AEEG has the task to ensure non-discriminatory access to the network.

Both the DSOs analysed belong to a vertically integrated group of companies. The parent company exercises, in all cases, direction and coordination powers, therefore, even if not imposing day-to-day operation choices, it may influence the managerial choices of the subsidiaries. There are common services carried out by the parent company or by other companies of the Group on the basis of *ad hoc* service agreements. The companies analysed have no compliance programme but non-discrimination is ensured through the adoption of behavioural codes binding for all companies of the Group and their staff. Internal committees monitor the application of these behavioural codes. Both DSOs analysed are located in a separate building from the other companies of the Group.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Italy	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed? [y/n]	Partly (by legislation transposing Directive 96/92)	Electricity Decree 1999	Partly (by legislation transposing Directive 98/30)	Gas Decree 2000
Number of TSOs	1 for more than 90% of the network Approx. other 11 TSOs manage the reminder 10% of the NTS	Electricity Decree 1999 and Law Decree No. 239/2003	1 for more than 90% of the network	AEEG website
Number of DSOs	More than 39	AEEG Reports	Approximately 560	AEEG Reports
How many of these DSOs have less than 100.000 customers?	Not available	N/A	Not available	N/A
TSO Unbundling regime	Legal	Electricity Decree 1999	Legal Accounting and administrative (as regards storage)	Gas Decree 2000
DSO unbundling regime	Legal is actually facultative for all DSOs (it was mandatory for	Electricity Decree 1999	Legal	Gas Decree 2000

	DSOs with >300.000 customers) Accounting and administrative			
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	No	Electricity Decree 1999	No	Gas Decree 2000
100.000 customer exemption [y/n]	No		No	
How many DSOs are excluded [number]	N/A		N/A	
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	N/A		N/A	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	No		No	
The Regulator [name]	Autorità per l'Energia Elettrica e il Gas ("AEEG")	Law No. 481/95	Autorità per l'Energia Elettrica e il Gas ("AEEG")	Law No. 481/95
Does the regulator monitor unbundling?	Yes	Law No. 481/95	Yes	Law No. 481/95
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Law No. 481/95	Yes	Law No. 481/95
Does the regulator have the	Yes	Law No. 481/95	Yes	Law No. 481/95

power to require companies to take unbundling measures?				
Can the regulator impose remedies? [y/n]	Yes	Law No. 481/95	Yes	Law No. 481/95
Have there been any complaints and/or decisions of the regulator on unbundling?	No.		No.	

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Italy	Electricity			Gas		
	1	2	3	4	5	6
TSO or DSO?	DSO	DSO	TSO	TSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	Yes	Yes
Position company holds within the integrated undertaking	Subsidiary	Subsidiary	Subsidiary	Subsidiary Parent (with regard to the re-gasification company of the Group)	Subsidiary	Subsidiary
Legal regime governing the relation	Company law	Company law	Company law	Company law	Company law	Company law
Legally Unbundled?	Yes	Yes	Yes	Yes	Yes	Yes
Legal form chosen	PLC ¹¹	PLC	PLC	PLC	PLC	PLC
Functional unbundling	No	No	No	No	No	No
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	No	Not available	Not available	Not available	No	Not available

¹¹ Italian SPA

Management personnel of the company hold shares of related supply/generation company or division?	Not available	Not available	Not available	Not available	Not available	Not available
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	Yes HR and Organisation, Budget and Control, Regulatory, Business Development, Communication, Legal and Audit, Accounting, IT, General Services, Personnel Administration, Procurement, Insurance, Treasury	Not available	Yes Administrative, Financial, Logistical, Legal. Technical and Communication Services, Treasury	Yes General and Administrative Services, Treasury	Yes HR and Organisation, Budget and Control, Regulatory, Business Development, Communication, Legal and Audit, Accounting, IT, General Services, Personnel Administration, Procurement, Insurance, Treasury	Yes. IT, Legal, Industrial Relations, Guidelines for HR Management
Salary of management based on performance of other related supply/ generation companies or divisions?	Not available	Not available	Not available	Not available	Not available	Not available
Executive director for network department sitting on the Board of related supply/generation companies or divisions?	Not available	Not available	Not available	Not available	Not available	Not available

Board members also responsible for activities in the supply and/ or generation?	Yes	Yes	Yes	Yes	Yes	Yes
Reasons for the removal of the executive director.	Justified cause	Justified cause	Justified cause	Justified cause	Justified cause	Justified cause
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	Yes	No	No	No	Yes	Yes
Involvement in the day-to-day business of the company by other supply/generation operations?	Not available	Not available	Not available	Not available	Not available	Not available
Effective decision making rights to operate network?	Yes	Yes	Yes	Yes	Yes	Yes
Compliance programme	Yes	Yes	Yes	Yes	Yes	Yes
Rules governing access for personnel on premises?	Yes	Not available	Not available	Yes	Yes	Yes
Penalties for violation of rules?	Yes	Yes	Yes	Yes	Yes	Yes
Monitoring of compliance programme?	Yes	Yes	Yes	Yes	Yes	Yes
Separate location for network business?	Yes	Not available	No	Yes	Yes	Yes

11. POLAND

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

Poland introduced market reforms to the energy industry by passing the Energy Law Act in 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended) – referred to as “the Energy Law Act”. The next step was establishing the Energy Regulatory Authority.

This Act regulates the rules of determining national energy policy, the rules and conditions of supply and consumption of energy, fuels and heat, the rules and conditions of operation of energy companies, and indicates the authorities responsible for matters relating to energy and fuels.

In order to adjust the regulations to provisions of the Directive 2003/54/EC (The “Electricity Directive”)the Energy Law Act was amendment on May 3, 2005 (by the Act dated March 4, 2005, Journal of Laws of 2005, No 62, item 552).

There are also executive regulations to the Energy Law Act, which were, however, prepared in order to implement the previous version of the Energy Law Act and therefore require further amendments. They will stay in force until the new ones are adopted.

The provisions on the unbundling of vertically integrated energy companies have been implemented in Polish legislation by the Energy Law Act. The unbundling provisions in Polish legislation are an almost word-for-word copy of Articles 10 and 15 of the Electricity Directive.

The issue of unbundling TSOs and DSOs (electric energy as well as gas ones) is regulated in Article 9 d of the Energy Law Act. The content of it is set out below.

“1. Where the transmission system operator, distribution system operator and combined operators are part of a vertically integrated undertaking, they shall be independent in terms of its legal form, organisation and decision making from other activities not related to transmission, distribution, storage or liquefaction of gas or transmission or distribution of electric energy.

2. In order to ensure the independence of the system operators referred to in section 1, the following criteria shall jointly apply:

(1) those persons responsible for the management may not participate in company structures of the integrated electricity undertaking carrying out other activities which are not connected with electric energy or gas, or be responsible – directly or indirectly - for the day-to-day operations in the scope of performed activities other than the ones resulting from operators’ responsibilities;

(2) the persons responsible for the management of the gas system or electrical system should have a proven capability of acting independently;

(3) the operators shall have effective decision-making rights, independent from the integrated electricity undertaking, with respect to assets necessary to operate, maintain or develop the network;

(4) the management of the vertically integrated undertaking shall not give operators instructions regarding day-to-day operations, nor with respect to decisions concerning the construction or upgrading of transmission lines, unless the instructions would concern operators' actions exceeding the terms of the approved financial plan, or any equivalent document;

3. Operations taken in order to ensure the independence of the operators should facilitate the functioning of coordination mechanisms, which will ensure protection of the ownership right in the scope of supervision over the management performed by the operators and businesses carried on by them, in respect of assets, in particular regarding the manner of return on assets, approval of the annual financial plan, or any equivalent document and setting global limits on the level of indebtedness.

4. The operators shall establish a compliance programme, which sets out measures to be taken to ensure non-discriminatory treatment of system users, including specific obligations of employees to meet this objective.

5. The operators are required to provide the President of the Energy Regulatory Authority with reports containing a description of the measures taken in the previous year in accordance with the compliance programme, on or before March 31st each year.

6. The President of the Energy Regulatory Authority shall publish the reports in the Bulletin of the Energy Regulatory Authority at the operators' cost."

There is one Regulator in Poland - Prezes Urzędu Regulacji Energetyki (the President of the Energy Regulatory Authority/Polish acronym - URE) – referred to as the Regulator.

The Regulator is the central authority of governmental administration regarding energy and regulates the activities of energy companies pursuant to the Energy Law Act.

The Regulator is nominated by the Minister of Economy (The Minister of the Economy is nominated by the Prime Minister and appointed by the President of Poland) and appointed by the Prime Minister for a term of 5 years. The Prime Minister may dismiss the Regulator only in one of the circumstances defined by law. These are (1) continued inability to perform duties due to ill health (2) grave violation of duty (3) criminal conviction. Consequently, the Regulator is largely independent of governmental authorities.

In relation to unbundling, the Regulator monitors in particular the extent to which the TSOs and DSOs fulfil their tasks in accordance with the provisions of the Energy Law Act (provided in Article 9 d of the Energy Law Act, which is an almost word-for-word implementation of the relevant provisions of the Electricity Directive).

The operators are obliged to provide the Regulator with annual reports containing a description of actions taken in order to achieve the goals set out in a compliance programme. The Regulator publishes those reports in the Bulletin of the Energy Regulatory Authority.

The Regulator also approves Instructions of Transmission System Operation and Maintenance and of Distribution System Operation and Maintenance (referred to as the "Instructions") prepared by the operators, in the scope of system balancing and management of system limitations, in addition to information regarding comments by system users and the manner of dealing with them. The Instructions are also published by the Regulator in the Bulletin of the Energy Regulatory Authority.

The Regulator is the authority responsible for designating the TSOs and DSOs and the area of their activities (upon a motion of the relevant network owner).

The Regulator is also responsible for granting and withdrawing licenses for the transmission and distribution of electricity.

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>1997</u>: regulation of the energy market ❖ <u>1997</u>: appointment of the Regulator ❖ <u>2004</u>: appointment of the TSO 	<ul style="list-style-type: none"> ❖ Electricity Law Act 1997 ❖ Executive regulations ❖ Licenses

TRANSMISSION

There is only one electricity TSO in Poland – PSE-Operator S.A. Since July 2004, PSE-Operator S.A. has been in charge of managing the transmission of electricity in Poland. It operates on the basis of a decision of the Regulator.

The TSO was established by its parent company – PSE S.A. (the sole shareholder of the TSO). PSE S.A. is owned by the State Treasury, which holds 100% of shares and votes. The TSO belongs to the PSE capital group, and is therefore an affiliate. However, the TSO is legally unbundled and conducts its activities on the basis of assets leased from PSE S.A., in the form of an organised part of enterprise.

It is expected that due to the parliamentary elections in Poland which took place in September 2005, the State Treasury will become the direct sole shareholder of the TSO (as in case of the Gas TSO).

The TSO is a joint stock company (Spółka Akcyjna in Polish), and has been legally unbundled since 1 July 2004, due to the requirements of the Electricity Directive.

The TSO plays a very important role in the whole energy market. Under the provisions of the Energy Law Act, the TSO is in particular responsible for:

- security of supply through adequate transmission capacity and system reliability,
- effective conduct of grid traffic in transmission network maintaining required reliability energy supply and quality,
- operating, maintaining and overhauling the network and installations,
- ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity,
- cooperation with other electric energy system operators or energy companies with the purpose of failure-free and effective functioning of electric energy systems and coordination of their development,
- disposition of capacity of generating units interconnected to the transmission network and generating units with an available capacity equal to 50 MW or higher, interconnected to the coordinated 110 kV network,

- management of transmission capacities of connections with other electric energy systems,
- purchase of system services,
- balancing of electric energy system,
- managing energy flows in the system, taking into account exchanges with other interconnected systems,
- purchase of electric energy in order to cover transmission losses,
- supply network users and operators of other electric energy systems, with which a transmission system is interconnected, with information regarding conditions of providing electric energy transmission services, including performance of cross border exchange,
- designation of activity plans in case of system failure,
- realization of supply electric energy limitations,
- designation of regular transmission network traffic structure.

DISTRIBUTION

There are fourteen electricity DSOs in Poland. According to the information contained in the Commission's Benchmark report, in 2004, there were twenty-one DSOs operating in Poland. The difference in the numbers of DSOs is due to the fact that eight DSOs operating in Central and Northern Poland became one company – Enea S.A.

In 2006, 5 of the DSOs plan to merge, which should bring the number of DSOs down to ten.

None of the DSOs in Poland are unbundled in ownership or legal terms. As per the Energy Law Act in Poland DSOs do not need to be unbundled in legal terms until 2007, so they have not yet taken this step.

Moreover, most DSOs are unbundled in accounting rather than functional terms, i.e. distribution companies have designated or are in the process of designating branch offices or distribution departments responsible for distribution, however there is still one management board which manages both types of activities – of the main company as well as of the distribution department. Some of them, such as for example Enea S.A., consider the best future way of DSO legal unbundling – on the basis of assets leased from the parent company in the form of an organised part of the enterprise, or the unbundling of the DSO with transfer of the network to this company. DSOs are still dependent on the energy companies, and have little influence on the decisions taken in respect of managing distribution activities.

Generally, the State controls DSOs in Poland, due to the fact that most of the DSOs are still owned by the State Treasury. There are only two DSOs that are owned by commercial entities, i.e. STOEN S.A. and GZE S.A., and therefore independent of the State.

It is problematic to state whether all DSOs are already unbundled in functional terms. Although most DSOs maintain that they have set up separate departments responsible for distribution activities, that it may not fully correspond with definitions provided by the provisions of the Directive and guidelines provided for in the Note on the Unbundling Regime. In relation to unbundling, the Regulator monitors in particular the extent to which the TSOs and DSOs fulfil their tasks in accordance with the provisions of the Energy Law Act. In particular, the operators are required to provide

the Regulator with annual reports containing a description of actions taken in order to achieve the goals set out in their compliance programme. The Regulator publishes those reports in the Bulletin of the Energy Regulatory Authority. Based on the information obtained from the Energy Regulatory Authority, it is however difficult to determine the number of DSOs which are indeed unbundled in functional terms. It may however be stated that the current DSOs are indeed in the process of functional unbundling of DSOs responsible only for distribution. Please note that as the DSOs are also in the process of preparing compliance programmes, and therefore the Regulator possess insufficient information regarding the functional unbundling of DSOs.

The main actions taken by DSOs are the following:

- the following services within the vertically integrated undertaking are commonly rendered for DSO, trading and distribution: legal, finance, accounting, procurement, and security services;
- the costs of distribution and commercial activities are booked on separate accounts so that they can be used to determine distribution fee rates and energy prices;
- in case of some DSOs the parent company does not set the business plan for the company. The management and supervisory board are responsible for preparation of the plan. The scope of the parent company is limited to setting the general strategy of the capital group to which the company belongs;
- with respect to interconnection of new clients and their access to the network DSOs apply principles set forth in the provisions of the Energy Law Act and ordinances to this law. Said legal acts guarantee universal and equal access to the network. Universal principles for the compliance programme are prepared in cooperation with the Regulator;
- there is some (or in some cases no) involvement from the companies with supply and/or generation interests in the day-to-day operations of the network business;
- access for personnel on premises important for the recording, processing and storage of confidential information is determined by the provisions of the law on protection of confidential information and the law on personal data protection. On this basis, specific procedures are prepared and implemented by the DSOs. With respect to the effective informational unbundling of the DSO operations from other business most companies have implemented and apply (or are in the process of) organizational measures ensuring informational separation of the DSO activities and the related information.

The DSOs will probably fulfil the legal unbundling requirement by 1 July 2007 but it is problematic to specify dates for actual functional unbundling as this is very much work in progress.

At this point, there are no DSOs that can benefit from 100.000 customers exemption, since all the DSOs have more than 100.000 customers.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Poland introduced market reforms to the power supply industry by passing the Energy Law Act in 1997 dated April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended) – referred to as “the Energy Law Act”. The next step was establishing the Energy Regulatory Authority.

This Act regulates the rules of determining national energy policy, the rules and conditions of supply and consumption of energy, fuels and heat, the rules and conditions of operation of energy companies, and indicates the authorities responsible for matters relating to energy and fuels.

In order to adjust the regulations to provisions of the Directive 2003/55/EC (the “Gas Directive”) the Energy Law Act was amended on May 3, 2005 (by the Act dated March 4, 2005, Journal of Laws of 2005, No 62, item 552).

There are also executive regulations to the Energy Law Act, which were, however, prepared in order to implement the previous version of the Energy Law Act and therefore require further amendments. They will stay in force until the new ones are adopted.

The provisions on the unbundling of vertically integrated energy companies have been directly implemented in Polish legislation by the Energy Law Act. The unbundling provisions in Polish legislation are an almost word-for-word copy of Articles 9 and 13 of the Gas Directive.

The issue of unbundling TSOs and DSOs (electric energy as well as gas ones) is regulated in Article 9 d of the Energy Law Act. The content of it is set out below.

“1. Where the transmission system operator, distribution system operator and combined operators are part of a vertically integrated undertaking, they shall be independent in terms of its legal form, organisation and decision making from other activities not related to transmission, distribution, storage or liquefaction of gas or transmission or distribution of electric energy.

2. In order to ensure the independence of the system operators referred to in section 1, the following criteria shall jointly apply:

(1) those persons responsible for the management may not participate in company structures of the integrated electricity undertaking carrying out other activities which are not connected with electric energy or gas, or be responsible – directly or indirectly - for the day-to-day operations in the scope of performed activities other than the ones resulting from operators’ responsibilities;

(2) the persons responsible for the management of the gas system or electrical system should have a proven capability of acting independently;

(3) the operators shall have effective decision-making rights, independent from the integrated electricity undertaking, with respect to assets necessary to operate, maintain or develop the network;

(4) the management of the vertically integrated undertaking shall not give operators instructions regarding day-to-day operations, nor with respect to decisions concerning the construction or upgrading of transmission lines, unless the

instructions would concern operators' actions exceeding the terms of the approved financial plan, or any equivalent document;

3. Operations taken in order to ensure the independence of the operators should facilitate the functioning of coordination mechanisms, which will ensure protection of the ownership right in the scope of supervision over the management performed by the operators and businesses carried on by them, in respect of assets, in particular regarding the manner of return on assets, approval of the annual financial plan, or any equivalent document and setting global limits on the level of indebtedness.

4. The operators shall establish a compliance programme, which sets out measures to be taken to ensure non-discriminatory treatment of system users, including specific obligations of employees to meet this objective.

5. The operators are required to provide the President of the Energy Regulatory Authority with reports containing a description of the measures taken in the previous year in accordance with the compliance programme, on or before March 31st each year.

6. The President of the Energy Regulatory Authority shall publish the reports in the Bulletin of the Energy Regulatory Authority at the operators' cost."

Legally, the Polish gas sector may be divided into several sub-sectors (taking into account the licenses required for particular types of activities): mining, storage, transmission and distribution, and trading.

A significant majority of operations in the Polish gas sector are still performed by the largest State-controlled entity operating in the sector, i.e. PGNiG S.A. and its subsidiaries. The privatization of PGNiG S.A. is currently in progress.

Please note that, despite the Initial Public Offering of PGNiG S.A. earlier in 2005, the State Treasury holds at the moment ca. 85% of the shares of PGNiG S.A. It is anticipated that regardless of the further privatization processes the State Treasury shall hold at least 51% of the shares in PGNiG S.A.

PGNiG S.A., the state giant, is in practice responsible for a decisive portion of natural gas imports to Poland.

Some private entities do operate or are significantly advanced in attempts to operate in the natural gas trading sub-sector, including imports from third countries (primarily Russia).

Similar remarks can be made concerning exploration for and extraction of natural gas. PGNiG S.A. continues to play a central role, albeit frequently accompanied by foreign partners.

Licensed energy companies operating in the gas sector are obliged to prepare tariffs for gaseous fuels. The tariffs are to be prepared in accordance with detailed regulations contained in the Energy Law Act and in a supplementing Ordinance specifically regulating gas-related tariffs.

There is one Regulator in Poland - Prezes Urzędu Regulacji Energetyki (the President of the Energy Regulatory Authority/Polish acronym - URE) – referred to as the Regulator.

The Regulator is the central authority of governmental administration regarding energy and regulates the activities of energy companies pursuant to the Energy Law Act.

The Regulator is nominated by the Minister of Economy (The Minister of the Economy is nominated by the Prime Minister and appointed by the President of Poland) and appointed by the Prime Minister for a term of 5 years. The Prime Minister may dismiss the Regulator only in one of the circumstances defined by law. These are (1) continued inability to perform duties due to ill health (2) grave violation of duty (3) criminal conviction. Consequently, the Regulator is largely independent of governmental authorities.

In relation to unbundling, the Regulator monitors in particular the extent to which the TSOs and DSOs fulfil their tasks in accordance with the provisions of the Energy Law Act (provided in Article 9 d of the Energy Law Act, which is an almost word-for-word implementation of the relevant provisions of the Directives).

The operators are required to provide the Regulator with annual reports containing a description of actions taken in order to achieve the goals set out in their compliance programmes. The Regulator publishes those reports in the Bulletin of the Energy Regulatory Authority.

The Regulator also approves Instructions of Transmission System Operation and Maintenance and of Distribution System Operation and Maintenance (referred to as the "Instructions") prepared by the operators, in the scope of system balancing and management of system limitations, in addition to information regarding comments by system users and the manner of dealing with them. The Instructions are also published by the Regulator in the Bulletin of the Energy Regulatory Authority.

The Regulator is the authority responsible for designating the TSOs and DSOs and the area of their activities (upon a motion of the relevant network owner).

The Regulator is also responsible for granting and withdrawing licenses for the transmission and distribution of gas.

<i>Chronology</i>	<i>Instruments of law</i>
<ul style="list-style-type: none"> ❖ <u>1997</u>: regulation of the energy market ❖ <u>1997</u>: appointment of the Regulator ❖ <u>2005</u>: appointment of the TSO 	<ul style="list-style-type: none"> ❖ Electricity Law Act 1997 ❖ Executive regulations ❖ Licenses

TRANSMISSION

There is only one gas TSO in Poland - Operator Gazociągów Przesyłowych Gaz-System Sp. z o.o. (previously named PGNiG-Przesył Sp. z o.o.). It is in charge of managing the transmission of gas in Poland. It operates on the basis of a decision of the Regulator. The TSO was established by its parent company - PGNiG S.A. (it was the sole shareholder of the TSO).

Owing to the complexity of the TSO unbundling process, it ought to be presented in detail.

PGNiG-Przesył Sp. z o.o. was established on April 16, 2004. 100% of the shares were held by the parent company - Polskie Górnictwo Naftowe i Gazownictwo S.A.(referred to as "PGNiG S.A").

On 30 April 2004 part of the assets comprising movable assets necessary for the management of network traffic, as well as real estate, was contributed as an in-kind contribution to PGNiG-Przesył Sp. z o.o. This contribution did not include network assets.

On 30 June 2004 PGNiG-Przesył Sp. z o.o. obtained a license for transmission of natural gas, issued by the Regulator.

On 2 July 2004, PGNiG-Przesył Sp. z o.o. applied to the Regulator, requesting designation as a gas TSO.

There was an unsolved problem between PGNiG-Przesył Sp. z o.o. and PGNiG S.A. regarding the issue of property as well as organizational aspects of the company operating as a gas TSO. Due to the fact that the companies failed to reach agreement in the scope of de facto use by PGNiG-Przesył Sp. z o.o. of the infrastructure needed to carry on the gas TSO activities in 2004, the company was not designated a gas TSO.

On 28 April 2005, PGNiG S.A. transferred 100% shares in PGNiG-Przesył Sp. z o.o. to the Ministry of State Treasury in the form of a donation. As a result, the governmental Restructuring and Privatisation Programme of PGNiG S.A. has been gradually implemented. The transfer of shares in PGNiG-Przesył Sp. z o.o. allows the State Treasury to maintain direct control over the natural gas transmission system in Poland.

On 8 June 2005 the company name changed to Operator Gazociągów Przesyłowych Gaz-System Sp. z o.o.

Operator Gazociągów Przesyłowych Gaz-System Sp. z o.o. was designated by the Regulator as a gas TSO on 1 July 2005.

On 6 July 2005 PGNiG S.A. and TSO finally concluded a lease agreement for assets being part of the transmission system.

Therefore, it should be stated that the TSO has been legally unbundled since 1 July 2005.

The TSO plays a very important role in the whole gas market. Under the provisions of the Energy Law Act, the TSO is in particular responsible for:

- security of supply through assuring secure functioning of the network and through implementation of agreements with its users,
- effective and coordinated conduct of network traffic maintaining required reliability gas supply and quality,
- operating, maintaining and overhaul of network and installations,
- ensuring the long-term ability of the system to meet reasonable demands for the domestic and international transmission of gas, its distribution and storage, and for development of the network (including international interconnections),
- cooperation with other gas system operators or energy companies with the purpose of failure-free and effective functioning of gas systems and coordination of their development,
- disposition of capacity of gas storage facilities and liquefied natural gas facilities,

- management of gaseous fuels flows and maintaining quality parameters of those fuels in the gas system and on interconnections with other gas systems,
- provision of services necessary for the proper functioning of the gas system,
- balancing of the gas system and management of limitations in the gas system,
- supply network users and operators of other gas systems with information regarding conditions of providing gas transmission, distribution and storage services, as well as natural gas liquefaction services, including information on cooperation with interconnected gas systems,
- realization of gas supply limitations.

DISTRIBUTION

There are six gas DSOs in Poland (they were formed on the basis of previously operating branches of PGNiG S.A. S.A. - Polskie Górnictwo Naftowe i Gazownictwo SA - referred to as "PGNiG S.A."). According to the information provided for in the Commission's Benchmark report, there were 68 DSOs operating in Poland. The difference in the numbers of DSOs is due to the fact that those companies were branches of PGNiG S.A., and they have consolidated into six companies – subsidiaries of PGNiG S.A..

All six DSOs are owned by PGNiG S.A., which is controlled by the State Treasury.

It is problematic to state whether all DSOs are unbundled in functional terms. Most DSOs maintain that they have set up separate departments/branches responsible for distribution activities that may not fully correspond with definitions provided by provisions of the Directive and guidelines provided for in the Note on the Unbundling Regime.

In relation to unbundling, the Regulator monitors in particular the extent to which the TSOs and DSOs fulfil their tasks in accordance with the provisions of the Energy Law Act. In particular, the operators are required to provide the Regulator with annual reports containing a description of actions taken in order to achieve the goals set out in their compliance programme. The Regulator publishes those reports in the Bulletin of the Energy Regulatory Authority. Based on the information obtained from the Energy Regulatory Authority, it is however difficult to determine the number of DSOs which are indeed unbundled in functional terms. It may however be stated that current DSOs are indeed in the process of functional unbundling of DSOs responsible only for distribution. Please note that DSOs are also in the process of preparing compliance programmes, and therefore the Regulator possesses insufficient information regarding the functional unbundling of DSOs.

None of DSOs is already unbundled in the legal manner. Most of DSOs have designed separate departments or branches responsible for distribution activity which are still dependant on the network company. Most of DSOs maintain that they have set up separate departments responsible for distribution activities, however it may not fully correspond with definitions provided by provisions of Directive and guidelines provided for in the Note on the Unbundling Regime regarding functional unbundling.

The main actions taken by DSOs (which do not have a legal personality) are the following:

- the distribution branches/departments share the following services with other departments of the company: legal, financial, personal, IT, office management, transport, accounting and cleaning;

- shared services are usually carried out by organizational units of company branches to DSOs pursuant to certain internal legal regulations concerning cooperation between the DSO branch and the remaining branches of the company;
- only some DSOs have decision making powers in terms of fixed assets necessary to operate, maintain and/or develop the grid;
- in some cases, no particular measures have been taken to ensure that staff do not refer to their related generation or supply business in relations with customers;
- DSOs are not independent in terms of management of the enterprise;
- DSOs, operating as branches of companies do not plan and do not perform activities connected with investment decisions. The Management Board of the companies usually approve an annual financial plan, determine global indebtedness limits and the impact of such limits on individual decisions concerning construction or modernization of the grid.
- the draft compliance programmes provided *inter alia* that:
 - i. DSO employees are required to afford equal treatment to all System Users;
 - ii. The right of access to the confidential information is only vested in those DSO employees who should know the information in connection with their duties, subject to secrets of office;
 - iii. Information constituting DSO secrets shall be protected against unauthorized use thereof by third parties;
- some DSOs are governed by a proxy (appointed by the Management Boards of the companies) or by a Director of the DSO; the proxy's responsibilities include:
 - i. implementing the strategy of the company accepted by the Management Board by preparing annual and multi-annual business plans for DSO,
 - ii. making proposals, based on the needs, plans and programs of the company, regarding the directions of development for the DSO and – in consultation with relevant services of the company – creating employment plans,
 - iii. organizing operational activities of the DSO, based on the rules of internal settlements prevailing in the company,
 - iv. preparation of the balance sheet, profit and loss account, cash flow from operational activities, tax returns, in accordance with the rules of internal settlements prevailing in the company and generally applicable laws,
 - v. making operational decisions connected with the day-to-day operations of the DSO.

The DSOs will probably fulfil the legal unbundling requirement by 1 July 2007 but it is problematic to specify dates for actual functional unbundling as this is very much work in progress.

None of the DSOs will benefit from the 100.000 customers exemption and thus they will have to be unbundled.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Poland	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)
Number of TSOs	1	Urząd Regulacji Energetyki (Energy Regulatory Authority)	1	Urząd Regulacji Energetyki (Energy Regulatory Authority)
Number of DSOs	14	Urząd Regulacji Energetyki (Energy Regulatory Authority)	6	Urząd Regulacji Energetyki (Energy Regulatory Authority)
How many of these DSOs have less than 100.000 customers?	0	Urząd Regulacji Energetyki (Energy Regulatory Authority)	0	Urząd Regulacji Energetyki (Energy Regulatory Authority)
TSO Unbundling regime	Legal, Functional and Accounting	Urząd Regulacji Energetyki (Energy Regulatory Authority)	Legal, Functional and Accounting	Urząd Regulacji Energetyki (Energy Regulatory Authority)
DSO unbundling regime	Legal (as of July 2007), Functional and Accounting	Urząd Regulacji Energetyki (Energy Regulatory Authority)	Legal (as of July 2007), Functional and Accounting	Urząd Regulacji Energetyki (Energy Regulatory Authority)
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)

Country: Poland	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
100.000 customer exemption [y/n]	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)
How many DSOs are excluded [number]	0	Urząd Regulacji Energetyki (Energy Regulatory Authority)	0	Urząd Regulacji Energetyki (Energy Regulatory Authority)
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	0	Urząd Regulacji Energetyki (Energy Regulatory Authority)	0	Urząd Regulacji Energetyki (Energy Regulatory Authority)
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	Partly (currently in the process of functional unbundling)	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)	Partly (currently in the process of functional unbundling)	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)
The Regulator [name]	Prezes Urzędu Regulacji Energetyki (the President of the Energy Regulatory Authority)	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)	Prezes Urzędu Regulacji Energetyki (the President of the Energy Regulatory Authority)	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)
Does the regulator monitor unbundling?	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)
Does the regulator have powers to collect information on unbundling in a given company?	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)
Does the regulator have the power to require companies to	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003,	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003,

Country: Poland	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
take unbundling measures?		No 153, item 1504 as amended)		No 153, item 1504 as amended)
Can the regulator impose remedies? [y/n]	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)	Yes	The Energy Law Act of April 10, 1997 (Journal of Laws: of 2003, No 153, item 1504 as amended)
Have there been any complaints and/or decisions of the regulator on unbundling?	No	Urząd Regulacji Energetyki (Energy Regulatory Authority)	No	Urząd Regulacji Energetyki (Energy Regulatory Authority)

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Poland	Electricity			Gas		
	1	2	3	4	5	6
TSO or DSO?	TSO	DSO	DSO	TSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes production supply	Yes supply	Yes supply	Not anymore	Yes supply	Yes supply
Position company holds within the integrated undertaking	Subsidiary	Subsidiary	Parent	N/A	Subsidiary	Subsidiary
Legal regime governing the relation	company law, Statute	company law, Statute	company law, Statute	N/A	company law, Statute	company law, Statute
Legally Unbundled?	Yes	No	No	Yes	No	No
Legal form chosen	Joint stock company	Joint stock company	Joint stock company	LLC	LLC	LLC
Functional unbundling	Yes	In process	In process	Yes	In process	In process
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	Not available	No	No	No	No	No
Management personnel of the company hold shares of related supply/generation	Not available	No	No	No	No	No

Country: Poland	Electricity			Gas		
	1	2	3	4	5	6
company or division?						
Common services shared by TSO/DSO and related supply/ generation companies or divisions? Which ones?	Not available	Yes Legal, procurement, finance, accounting and security	Yes Legal, finance, IT and accounting	No	Yes Legal, finance, human resources, accounting, IT and office management	Yes Legal, finance, IT, office management
Salary of management based on performance of other related supply/ generation companies or divisions?	Not available	Partly	No	N/A	No	No
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	Not available	No	No	No	No	No
Board members also responsible for activities in the supply and/ or generation?	Not available	No	No	No	No	No
Reasons for the removal of the executive director.	Not available	Due to the provisions of the company law and the Statute	Due to the provisions of the company law and the Statute	Due to the provisions of the company law and the Statute	Due to the provisions of the company law and the Statute	Due to the provisions of the company law and the Statute

Country: Poland	Electricity			Gas		
	1	2	3	4	5	6
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	Not available	No	Yes	No	No	No
Involvement in the day-to-day business of the company by other supply/generation operations?	Not available	No	Yes	N/A	No	No
Effective decision making rights to operate network?	Not available	Yes	Yes	Yes	Yes	No
Compliance programme	Yes	In progress	In progress	Yes	In progress	In progress
Rules governing access for personnel on premises?	Not available	No – compliance programme is only a draft	No – compliance programme is only a draft	No data obtained	No – compliance programme is only a draft	No – compliance programme is only a draft
Penalties for violation of rules?	Not available	No – compliance programme is only a draft	No – compliance programme is only a draft	No data obtained	No – compliance programme is only a draft	No – compliance programme is only a draft
Monitoring of compliance programme?	Not available	No – compliance programme is only a draft	No – compliance programme is only a draft	Yes The Coordinating Unit,	No – compliance programme is only a draft	No – compliance programme is only a draft

Country: Poland	Electricity			Gas		
	1	2	3	4	5	6
				The Regulator		
Separate location for network business?	No – TSOs' premises under construction	Yes	Yes	Yes	Yes	Yes

12. PORTUGAL

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

The electric sector was opened up to private initiative on 1988 and since then it has suffered several changes. On the year 1991, the Portuguese government approved the Decree-Law n.º 99/91, which stated the legal principles of the generation, transmission and distribution of electricity. A few years later, the Decree-Law n.º 182/95 revoked the Decree-Law n.º 99/91 and established actual legal basis of the National Electric System (Sistema Eléctrico Nacional) and the new principles for the generation, transmission and distribution of electric energy. At the same time, it was approved the legal regimes of generation, distribution and transmission of electricity and it was created an independent national regulatory authority (Entidade Reguladora dos Serviços Energéticos – ERSE).

Following the Directive 96/92/EC of the European Parliament and of the Council, the Portuguese government has decided to review the entire legal framework referred above. The changes were approved by the Decree-Law n.º 44/97 and the Decree-Law n.º 56/97.

Since its creation, ERSE has approved specific regulations, namely the Code on Tariffs (Regulamento Tarifário), Code on Commercial Relations (Regulamento de Relações Comerciais), and the Code on the Access to Networks and Interconnections (Regulamento do Acesso às Redes e Interligações).

In respect of unbundling, although there is no primary national legislation transposing the Directive 2003/54/EC (the “Electricity Directive”), the Regulatory Authority considers some aspects of unbundling in its regulations. In fact, ERSE Codes on Tariffs (Regulamento Tarifário) and on Commercial Relations (Regulamento de Relações Comerciais) establish the separation of the accounting and the need of a Conduct Code that assures the independence of the managers of the different activities. However they do not provide for the legal separation of the distribution activities from other not related to it. In what concerns the unbundling of accounts, the ERSE Code on Tariffs (Regulamento Tarifário), establishes the obligation of the unbundling of the accounting. This Code stipulates that the companies regulated by ERSE must have detailed information that allows the analysis of the different activities in the accounting perspective. The rules for the fulfilment of the accounts are published in the Official Gazette (Despacho n.º 20361-A/2002, 17th September; Despacho n.º 5252-A/2003, 18th March; Despacho n.º 4168-A/2005, 24th February). Due to these ERSE stipulations, the companies regulated by ERSE provide accounts in a way that enables the analysis by activity.

On the 12th April, the articles of association of the national regulatory authority (ERSE) were changed by the Decree-Law n.º 97/2002.

On the beginning to the year 2005, the Council of Minister’s statement dated 27th January 2005 (point 11) approved the transposition of the Electricity Directive and mentioned that the Portuguese Government was already notified by the European Commission of the non-transposition of this Directive into national law. Due to the change of Government, the national law transposing the Electricity Directive was not published in the Official Gazette.

The new Portuguese Government decided to review all the framework legislation on electricity and has already prepared a new pack of legislation for the sector. On the 26th October 2005, the new Portuguese government issued the Resolution n.º 169/2005 (Resolução do Conselho de Ministros), stating the national strategy for the energy sector. According to this Resolution, the Portuguese government will review the national legislation on energy in order to grant a more complete liberalization of the market, among other objectives.

The new legislation will include a framework law (lei de bases) for the electricity sector and a framework law for the gas sector. These framework laws will transpose the Electricity and Gas Directives, but according to operators it will not be a word by word copy of the Directives. It is also being prepared legislation to develop the outline laws, concerning the generation, transmission, distribution and supply of electricity and gas.

Finally, regarding the organization of the market, there is only one TSO, which is not vertically integrated. In the distribution sector, there is one DSO that is vertically integrated and there are ten other very small DSOs on a local level. These DSO have less than 10.000 clients in general and were created to serve small local industries.

Chronology	Instruments of law
❖ <u>1988</u> : generation and distribution of electricity opened up to private initiative	❖ Decree-Law n.º 449/88, 10 th December
❖ <u>1991</u> : general legal principles for the generation, transmission and distribution of electric energy	❖ Decree-Law n.º 99/91, 2 nd March
❖ <u>1995</u> : revision of the basis and principles for the National Electric System	❖ Decree-Law n.º 182/95, 27 th July
❖ <u>1995</u> : new legal regime for the generation of electric energy	❖ Decree-Law n.º 183/95, 27 th July
❖ <u>1995</u> : new legal regime for the distribution of electric energy	❖ Decree-Law n.º 184/95, 27 th July
❖ <u>1995</u> : new legal regime for the transmission of electric energy	❖ Decree-Law n.º 185/95, 27 th July
❖ <u>1995</u> : creation of the National Regulatory Authority (ERSE)	❖ Decree-Law n.º 187/95, 27 th July
❖ <u>1997</u> : revision of the entire legal framework	❖ Decree-Law n.º 44/97, 20 th February
	❖ Decree-Law n.º 56/97, 14 th March
❖ <u>2002</u> : revision of the National Regulatory Authority (ERSE)	❖ Decree-Law n.º 97/2002, 12 th April
❖ <u>2002-2005</u> : rules for separation of the accounting	❖ Despacho n.º 20361-A/2002, 17 th September
	❖ Despacho n.º 5252-A/2003, 18 th March

<ul style="list-style-type: none"> ❖ <u>2005</u>: approval of the new national strategy for the energy sector 	<ul style="list-style-type: none"> ❖ Despacho n.º 4168-A/2005, 24th February ❖ Resolution n.º 169/2005, 26th October
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TRANSMISSION

The transmission system was deeply reorganised in the year 2000 under the Decree-Law 198/2000, 24th August, with a legal separation of the company responsible by the national grid electricity transmission and the companies operating in the generation and distribution of energy. At that time, the company REN - Rede Eléctrica Nacional, S.A. (REN), was separated from the group EDP and the Portuguese state took control of the company. Actually, the Portuguese State controls 70% of the share capital of the TSO.

REN is the only TSO in Portugal and only operates in the transmission area. Besides that, REN does not belong to a group of companies involved in generation or supply of energy. Due to that fact it is not vertically integrated company and the unbundling requirements are not applicable.

The Regulatory Authority also supervises REN activities.

DISTRIBUTION

In the Portuguese energy market there is only one DSO that is vertically integrated and there are ten very small DSOs. These DSO operate on a local level, have less than 10.000 clients in general and were created to serve small industries.

The DSO vertically integrated belongs to a group dedicated to the activities of generation, distribution and supply of energy. Besides that, within the same legal structure (company), the vertically integrated company has the activities of distribution and supply of electricity. In fact, regarding the supply of energy, the Portuguese market has the supply of energy in an open market regime and the supply of energy by a regulated supplier (comercializador regulado) and by a supplier of last resort (comercializador de último recurso). In what concerns the regulated supplier (comercializador regulado) and the supplier of last resort (comercializador de último recurso), the Portuguese law has appointed this vertically integrated company to assume those functions temporarily.

Considering the influence of the parent company in this DSO, the Portuguese companies' law allows the parent company to give orders to the directors of the affiliate company (arts. 491 and 503 of Portuguese Companies Code). Additionally, the parent company has a complete control of the decisions that belong to the general meeting. Notwithstanding, the possibilities of influence of the parent company are somehow limited by the fact that the distribution activity is a regulated one. The nature of the regulation covers such areas as access, tariffs and separate accounting (either from the Group either from the activities developed within the company). And the common directors of the parent company and the DSO have resigned in the DSO and were appointed new directors to this company as an anticipation of the functional unbundling.

For the practical implementation of the unbundling regime it is also relevant to note that all employees of EDP Distribuição – Energia, S.A. work exclusively for the company. They are not involved in activities such as generation of energy or the supply of electricity in a market regime. According to EDP Distribuição – Energia, S.A. representatives, the employees that are in charge of the activities of regulated supply and supply of last resort work independently from the employees that are in charge of the activities of management and operation of the distribution.

In addition, there is an in house legal service at EDP Distribuição – Energia, S.A.

The common services, provided by EDP Valor, which is an EDP group company, to the different companies of the group include accountancy, car pool, management of office spaces, cleaning, security and maintenance. Financial services are organised at EDP group level.

The main decisions on investments are taken at a group level, as the plan for investments, volume and the degree of indebtedness is approved by EDP – Energias de Portugal, S.A.. EDP Distribuição – Energia, S.A., however, is not subject to a case by case approval, and the company has the necessary power to manage the assets necessary for its operation, maintenance and development of the distribution network with no interference of the parent company.

Both companies (the DSO and the parent company) develop its activities in separate buildings.

Concerning the compliance aspects, this company does not have a formal compliance program, but has an Ethic Code that establishes the principles of confidentiality of commercially sensitive information and fair treatment of all the operators in the market. This Ethic Code does not establish any measure to enforce it and does not preview an effective monitoring and regular reporting.

There is also a Regulation on the Access to Networks and Interconnections (Regulamento de Acesso às Redes e Interligações), issued by the regulator (ERSE), that states the principle of equality of treatment in the access to network. The provisions of this regulation must be respected by this company.

In addition, the 'Code on Commercial Relations' (*Regulamento das Relações Comerciais*) establishes the obligation for the operators to identify information that should be considered confidential and how it should be treated. EDP Distribuição – Energia, S.A. representatives informed us that the company is working on the preparation of a proposal to submit to ERSE approval in the 60 days term.

The company also informed us that there are several internal procedures and rules already in place concerning this matter. These rules and procedures include matters such as: passwords granted to employees to access information; access to the information (duly limited to the work performed by the employee); cancelation of the passwords in case of change of function or in case of leaving the company; firewalls on access to the commercial system and security measures to access the databases.

Finally, ERSE representative informed us that, as yet, there have been no complaints concerning the confidentiality of the information.

In what concerns the company brand, there are some complaints by the operators. In fact, in the year 2004, the parent company launched a new brand for all the group companies without mentioning the name of each specific

company. The brand serves all the group companies and is considered by other operators as a non-unbundled instrument. The Regulatory Authority confirms the complaints and has already notified the company about this matter.

B. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Portugal	Electricity	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	No	N/A
Number of TSOs	1 (Ren – Rede Eléctrica Nacional, S.A.)	N/A
Number of DSOs	11	ERSE interview on 2005-09-09
How many of these DSOs have less than 100.000 customers?	10	ERSE interview on 2005-09-09
TSO Unbundling regime	Ownership unbundling	Decree Law 198/2000.
DSO unbundling regime	Accounting unbundling	
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	N/A	N/A
100.000 customer exemption [y/n]	N/A	N/A
How many DSOs are excluded [number]	N/A	N/A
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	N/A	N/A
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	No	
The Regulator [name]	ERSE - Entidade Reguladora dos Serviços Energéticos	Decree-Law 187/95, 27 July and Decree-Law 44/97, 20 February,

		both amended by Decree-Law 97/2002, 12 April
Does the regulator monitor unbundling?	Yes	ERSE memorandum of association (Decree-Law 97/2002, 12 April)
Does the regulator have powers to collect information on unbundling in a given company?	Yes	ERSE memorandum of association (Decree-Law 97/2002, 12 April)
Does the regulator have the power to require companies to take unbundling measures?	Yes	ERSE memorandum of association (Decree-Law 97/2002, 12 April) and ERSE Codes
Can the regulator impose remedies? [y/n]	Yes	ERSE memorandum of association (Decree-Law 97/2002, 12 April) and ERSE Code on Access to Networks and Interconnections (Regulamento de Acesso às Redes e Interligações), August 2005
Have there been any complaints and/or decisions of the regulator on unbundling?	No	Interviews with operators and ERSE representative, September 2005

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: PORTUGAL	Electricity 1
TSO or DSO? Q3	DSO
Vertically integrated in production and/or supply?	Yes
Position company holds within the integrated undertaking	Subsidiary
Legal regime governing the relation	Company Law
Legally Unbundled?	Partially, only legally unbundled as regards generation activities.
Legal form chosen	PLC
Functional unbundling	Partially
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	No (as regards the mother company active in generation) Yes (as regards supply)
Management personnel of the company hold shares of related supply/generation company or division?	N/A
Common services shared by TSO/DSO and related supply/ generation companies or divisions? Which ones?	Yes Legal, finance, accounting, office management, security.
Salary of management based on performance of other related supply/ generation companies or divisions?	No

Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	No (as regards the mother company active in generation) Yes (as regards supply)
Board members also responsible for activities in the supply and/ or generation?	No (as regards the mother company active in generation) Yes (as regards supply)
Reasons for the removal of the executive director.	Company Law
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No
Involvement in the day-to-day business of the company by other supply/generation operations?	No (as regards the mother company active in generation)
Effective decision making rights to operate network?	Yes
Compliance programme	No
Rules governing access for personnel on premises?	Some rules have been implemented regarding the access to confidential information
Penalties for violation of rules?	No
Monitoring of compliance programme?	No
Separate location for network business?	Yes

13. SLOVAK REPUBLIC

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

After the fall of communism in Czechoslovakia in 1989, and with the creation of the Slovak Republic in 1993, the Slovak state has remained in control of the electricity industry through the National Property Fund, which is a legal entity under direct control of the Slovak Parliament, the main function of which is to administer state property. The Energy Act introduced in 1998 for the first time a licensing system for the Slovak energy industry. No steps toward any form of unbundling were taken before Slovak accession to the European Union in May 2004.

The Directive 2003/54/EC (the “Electricity Directive”) was, therefore, implemented in Slovakia very recently, in 2004, via Act No. 656/2004 Coll., the Energy Act, which has for the first time introduced the concepts of unbundling of the activities of vertically integrated undertakings. The Act became effective on 1 January 2005, and it is almost a word-for word copy of the unbundling provisions of the Electricity Directive. Sections 23 and 25 of the Energy Act, providing for the unbundling obligation, merely copy the general unbundling criteria of Articles 10 and 15 of the Directive and do not lay down the concrete form of the unbundling regime of energy companies. Section 19 of the Act introduced accounting unbundling into the domestic energetic sector. The effectiveness of the unbundling provisions for distribution system operators (DSOs) has been postponed to the end of July 2007. The companies concerned are obliged to issue a program of compliance with the unbundling provisions. According to information provided by the Regulatory Office for Network Industries (RONI), none of them have submitted the reports on programs of compliance yet, which seriously limits the scope of obtainable information on the respective measures taken to date. The 100.000-customer exemption has been endorsed in Slovakia, but only for the DSOs’ unbundling regime. However, at this point it is difficult to estimate the number of DSOs that can possibly make use of this exemption since under the new Act prospective DSOs may have applied for new licenses up to the end of October 2005. However, as of today (15 November 2005), according to the information given by the RONI, no such new licenses have been granted to any of the new applicants yet because of the time consuming nature of the licensing proceedings. In any case, the three existing major DSOs have more than 100.000 customers each.

The new Energy Act, together with the Ordinance of the Government of the Slovak Republic, no. 124/2005 Coll., lay down rules for the operation of the electricity market. The licensing regime set out in the abovementioned legislation is fully in accordance with the requirements of the Electricity Directive; however, previously issued licenses—those currently held by domestic energy companies—are not in accordance with the Electricity Directive (i.e., they do not distinguish between activities such as distribution, generation, etc.). The licensing regime is operated by the Regulatory Office for Network Industries (RONI), set up by Act No. 276/2001 Coll., on Regulation in Network Industries. Also, the Ministry of Industry and Trade and the Slovak Energetic Inspection have powers with regard to monitoring the electricity industry.

Further amendments to the licensing regimes for transmission, generation, distribution and supply may in future be made by means of relevant statutory instruments.

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>1993</u>: Creation of the Slovak Republic, ownership of the relevant part of the energy industry of the Czechoslovak federation passed to the newly sovereign state. ❖ <u>1998</u>: Energy Act – establishment of the licensing regime under which the current TSO and DSOs have operated to date. ❖ <u>2004</u>: Accession of the Slovak Republic to the EU. ❖ <u>2004</u>: Energy Act – implementation of the Electricity Directive (effectiveness 2005). ❖ <u>2005</u>: An ordinance was enacted that sets the rules for the operation of the electricity market 	<ul style="list-style-type: none"> ❖ Act No. 70/1998 Coll., the Energy Act ❖ Act No. 656/2004 Coll., the Energy Act ❖ Ordinance of the Government of the Slovak Republic no. 124/2005 Coll.

TRANSMISSION

The sole transmission system operator (TSO) in the Slovak Republic is Slovenska elektrizacna prenosova sustava, a.s. Ownership of the electricity transmission system remains concentrated in the hands of the state, who is the sole owner of the TSO. The TSO does not own any electricity supply or generation interests (though it is owned by the state, which controls the major DSOs), and it neither supplies nor generates electricity.

As indicated above, due to the postponement of the effectiveness of the unbundling provisions to 2007, the TSO is currently not prohibited by law to have ownership links to generators or to suppliers, or to be itself engaged in generating or supplying electricity. However, since it is not a vertically integrated undertaking as defined in the Electricity Directive, it is not obliged to undertake any further unbundling process.

DISTRIBUTION

Being a small market, there are currently only three major DSOs in the industry, Zapadoslovenska energetika, a.s., Stredoslovenska energetika, a.s., and Vychodoslovenska energetika, a.s. This amount may change, however, as applications for new licenses have been submitted to the RONI under the new regulatory regime by 31 October 2005. However, as of today (15 November 2005), no new licenses have been granted. Pursuant to the new (2004) Energy Act, pre-2004-Act licenses shall expire 31 December 2005.

The present (old) licenses held by the DSOs do permit them also to generate electricity but, in practice, the cited DSOs generate energy only in negligible amounts. The state retains control over these DSOs by controlling a 51% share in each. The remaining shareholdings were privatized in 2002 and 2003. The other DSOs' shareholders (namely E.ON, EdF, RWE) are also active in the generation and/or supply of energy. As of the day of their effectiveness, the unbundling requirements will apply to all of these companies.

The analysis of the three DSOs clearly shows that, as of today, none have been unbundled, whether legally, functionally, or in terms of ownership. However, important steps have been taken toward unbundling, namely by changing the internal structures of the companies toward greater organizational separation of their various activities. All three DSOs say they intend to fully comply with the unbundling requirements, as stipulated in the Electricity Directive and the Energy Act, by the end of the transition period, i.e., by the end of July 2007. As there is no requirement to publish any documentation or to make publicly known the measures taken—except for compliance programs, the reports on which none of the relevant companies have published to date—it is difficult to verify such information.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

As with electricity, the state has remained in control of the gas industry through the National Property Fund. Again, the only stimulus toward unbundling was the accession of the Slovak Republic to the EU and the related requirement to implement the Directive 2003/55/EC (the “Gas Directive”). No attempts were made to promote competition in the gas industry in the past and the market structure remains monopolistic.

The Gas Directive was implemented in Slovakia in 2004 via Act No. 656/2004 Coll., the Energy Act, which is almost a word-for word copy of the unbundling provisions of the Gas Directive. Sections 42 and 44 of the Energy Act, providing for the unbundling obligation of the TSOs and the DSOs, merely copy the general unbundling criteria of Articles 9 and 13 of the Gas Directive and do not lay down the particular form of the unbundling regime of the gas companies. The unbundling obligation for the DSOs has been postponed till July 2007. Section 19 of the Energy Act introduced accounting unbundling into the domestic gas sector. As regards practical implementation, pursuant to the Energy Act, there is a fine up to SKK 50,000,000.00. for the breach of the unbundling provisions. Along with the obligation to issue a compliance program, a report on compliance with the unbundling provisions shall constitute an integral part to the annual report. According to information provided by the Regulatory Office for Network Industries (RONI), none have complied with this duty, which seriously limits the scope of information on the respective measures taken until today. The 100.000-customer exemption has been endorsed in Slovakia, but only for the DSOs’ unbundling regime.

The new Energy Act lay down rules for the operation of the gas market together with the Ordinance of the Government of the Slovak Republic, no. 123/2005 Coll. Neither the Ordinance no. 123/2005 Coll. nor any other legal rule give any further detail as to the practical implementation of the directive. The interpretation of general unbundling criteria laid down by the Energy Act is generally in the hands of RONI.

The licensing regime set out in the recent legislation distinguishes between the different activities performed by the gas companies, whereas the previous regime (and thus the current licenses) did (do) not distinguish between activities such as distribution, generation, etc. The licensing regime is operated by the Regulatory Office for Network Industries (RONI), set up by the Act No. 276/2001 Coll., on Regulation in Network Industries. Consequently, Slovakia's major gas company, Slovensky plynarensky priemysel is as of today a combined TSO and DSO in the sense of the Directive (not in the sense of the Energy Act since it hold just one license). Division of the license regime constituted also a necessary condition for the practical implementation of the Directive.

<i>Chronology</i>	<i>Instruments of law</i>
<ul style="list-style-type: none"> ❖ <u>1993</u>: Establishment of the Slovak Republic, ownership of the relevant part of the gas industry of the Czechoslovak federation passed to the newly sovereign state. ❖ <u>1998</u>: Energy Act – establishment of the licensing regime under which the current TSO and DSOs have been operating to date. 	<ul style="list-style-type: none"> ❖ Act No. 70/1998 Coll., the Energy Act (void) ❖ Act No. 276/2001 Coll., on Regulation in Network Industries ❖ Act No. 656/2004 Coll., the Energy Act ❖ Ordinance of the Government of the Slovak Republic no. 123/2005 Coll.

<ul style="list-style-type: none"> ❖ <u>2001</u>: RONI was established. ❖ <u>2004</u>: Accession of the Slovak Republic to the EU. ❖ <u>2004</u>: Energy Act – implementation of the Gas Directive (effective 2005). ❖ <u>2005</u>: An ordinance was enacted that lays down rules for the operation of the gas market. 	
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TRANSMISSION

Gas transmission (as well as most of distribution) in Slovakia is operated by a single TSO, Slovensky plynarensky priemysel, a.s. The Slovak state is the majority shareholder, with 51% share in the company. The remaining 49% share is owned by Slovak Gas Holding B.V., whose shareholders are Gazprom, Gaz de France, and Ruhrgas. The TSO still holds the license pursuant to the old license system and thus his license is a combined one. It shall be liable to legal and functional unbundling, nevertheless it has not undertaken any measures to advance its compliance with the unbundling requirements, but for issuance of the program of compliance in which it sets out its future steps towards such compliance. The program has not been made public yet. It seems so, that the program merely copies the general conditions laid down in the Energy Act and that the sole TSO awaits its interpretation by RONI, since no detailed unbundling criteria have been given yet neither by RONI nor by the Government nor by any other institution. It is not clear, why the sole TSO has not undertaken any unbundling measures in spite of its liability to full legal and functional unbundling any there is no pressure on the side of RONI to make it do so. It seems so that RONI will first issue the new licenses according to the new license regime.

DISTRIBUTION

The license held by the Slovensky plynarensky priemysel is a joint license, which also allows it to distribute gas; in fact, it is the most important DSO in the country. There are approximately 50 other DSOs in Slovakia, all of whom are small, local players, and their effect on competition in the sector is negligible.

The gas sector in Slovakia has yet to be unbundled, whether legally, functionally, or in terms of ownership. However, as it follows from the analysis, the relevant company is well aware of its obligations with respect to unbundling and says it will fully comply with the unbundling requirements stipulated in the Gas Directive and the Energy Act by the end of the transition period, i.e., by the end of July 2007. (Such general obligation should also constitute a part to the not-yet-issued compliance program). As regards actions taken, the major DSO has not advanced its compliance with the unbundling provisions in any way. It is also not clear, which measures is the TSO to take in the future, since no particular intentions have been introduced to the public.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Slovakia	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes, but not in full extent and with adjusted time-limit for implementation by the companies	Energy Act	Yes, but not in full extent and with adjusted time-limit for implementation by the companies	Energy Act
Number of TSOs	1	The Regulator, October 2005	1	The Regulator, October 2005
Number of DSOs	Approx. 68	The Regulator, October 2005	Approx. 22	The Regulator, October 2005
How many of these DSOs have less than 100.000 customers?	Approx. 65	The Regulator, October 2005	Approx. 21	The Regulator, October 2005
TSO Unbundling regime	Ownership	Energy Act	Legal, functional, accounting	Energy Act
DSO unbundling regime	Legal, functional, accounting	Energy Act	Legal, functional, accounting	Energy Act
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	Yes, for both legal and functional unbundling	Energy Act	Yes, for both legal and functional unbundling	Energy Act
100.000 customer exemption [y/n]	Yes	Energy Act	Yes	Energy Act
How many DSOs are excluded [number]	Approx. 65	The Regulator, October 2005	Approx. 21	The Regulator, October 2005
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	Not available		Not available	

Unbundling by companies finalised to comply with the unbundling rules of the Directives?	No (not even compliance programs issued)	The Regulator, Companies, October 2005	No (not even compliance program issued)	The Regulator, Companies, October 2005
The Regulator [name]	Regulatory Office for Network Industries (Urad pre regulaciu sietovych odvetvi)	Energy Act	Regulatory Office for Network Industries (Urad pre regulaciu sietovych odvetvi)	Energy Act
Does the regulator monitor unbundling?	Yes	The Regulator, October 2005	yes	The Regulator, October 2005
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Energy Act	Yes	Energy Act
Does the regulator have the power to require companies to take unbundling measures?	Yes	Energy Act	Yes	Energy Act
Can the regulator impose remedies? [y/n]	Yes	Energy Act	Yes	Energy Act
Have there been any complaints and/or decisions of the regulator on unbundling?	No	The Regulator	No	The Regulator

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Slovakia	Electricity			Gas
	1	2	3	5
TSO or DSO?	DSO	DSO	DSO	TSO and DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes
Position company holds within the integrated undertaking	DSO network operated by a separate division within the company	DSO network operated by a separate division within the company	DSO network operated by a separate division within the company	TSO network and DSO networks division within the company
Legal regime governing the relation	Company Law	Commercial Code	Company Law and Articles of Association	Company Law
Legally Unbundled?	No	No	No	No
Legal form chosen	N/A	N/A	N/A	N/A
Functional unbundling	No	No	Partial	No
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	Yes	Yes	No	No
Management personnel of the company hold shares of related supply/generation company or division?	Not available	Not available	Not available	Not available
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	Legal, finance, IT, facility management, human resources, internal audit, strategy and regulatory	Accounting Controlling Treasury IT	Finance, Legal, HR, Logistics etc.), Customer Services (Billing, Call centre, Customer Offices, Receivables Management).	IT, legal, internal audit, division control, logistics, quality control, asset management, protection and crisis management, accounting,

	issues, quality and change management, accounting, logistic, communication	Legal Accommodation Transport Purchase and logistics Contact offices Call center Operations (billing and collection) Internal audit Communication Crisis management Strategy and regulation HR		control of the subsidiary companies, human resources, business-activity development.
Salary of management based on performance of other related supply/ generation companies or divisions?	Yes	Yes	Yes	Yes
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	No	No	No	No
Board members also responsible for activities in the supply and/ or generation?	Yes	Yes	Yes	Yes
Reasons for the removal of	Commercial Code	Commercial Code	Commercial Code	Commercial Code

the executive director.				
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No	No	No	No
Involvement in the day-to-day business of the company by other supply/generation operations?	Yes	Yes	No	Yes
Effective decision making rights to operate network?	Yes	Yes	Yes	Yes
Compliance programme	In progress	Yes	In progress	In progress
Rules governing access for personnel on premises?	Not available	Not available	Not available	Not available
Penalties for violation of rules?	N/A	No	N/A	N/A
Monitoring of compliance programme?	N/A	Yes	N/A	N/A
Separate location for network business?	Not available	Yes (separate floor)	Yes	No

14. SLOVENIA

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

The Energy Act which was promulgated in September 1999 was introduced to the energy market in order to modernise the energy regime in light of new development trends in the energy sector. At the same time, the Energy Act represents an important step in harmonising national legislation with that of the European Union.

The process of establishing the market began in 2000 with an initial phase of transformation into or funding of the following market players:

- transmission and distribution network operators and transmission and distribution service providers, to ensure untrammelled operation of the electricity system;
- a market operator as a legal entity to organise the market;
- the Energy Agency as an independent organisation to regulate the electricity and natural gas markets.

The Directive 2003/54/EC (the “Electricity Directive”) has been transposed into Slovenian legislation by the Act Amending the Energy Act which was published in the Official Gazette of the Republic of Slovenia No. 51/04 of 7 May 2004 and entered into force on 8 May 2004.

The electric energy market has been opening increasingly. All customers, except for households, are “eligible customers”, i.e. customers who may freely choose the supplier. Households will be free to choose the supplier on 1 July 2007.

Transmission system operators had to be legally and functionally unbundled as of 1 January 2005. Distribution system operators have to be legally and functionally unbundled by 1 July 2007.

In 2004, Slovenia revised the underlying legislation concerning the regulation of the mode of operation of the commercial public services of distribution system operators and transmission system operators with the provisions of the Act Amending the Energy Act.

In 2004, the Energy Agency of the Republic of Slovenia (Energy Agency) underwent a major restructuring. As the main regulating authority in the energy sector, the Energy Agency acquired a number of additional competencies.

Electricity transmission and electricity distribution are both licensed activities.

<i>Chronology</i>	<i>Instruments of law</i>
<ul style="list-style-type: none"> ❖ Energy Act (September 1999) ❖ Act Amending the Energy Act 2004 	<ul style="list-style-type: none"> ❖ Energy Act (September 1999) ❖ Act Amending the Energy Act 2004

TRANSMISSION

Electricity transmission in Slovenia is operated solely by ELEKTRO SLOVENIJA d.o.o., abbreviated ELES d.o.o. (a subsidiary of the Republic of Slovenia).

The Republic of Slovenia is the sole shareholder of Holding Slovenske elektrarne d.o.o. (HSE), controlling major Slovenian electricity generators. Therefore, ELES d.o.o. is not ownership unbundled. ELES d.o.o. is legally unbundled as it does not perform any other activities save transmission of electricity.

DISTRIBUTION

Legal unbundling of electricity distribution system operators is required by law to take place by 1 July 2007. Legal unbundling is not mandatory for electricity distribution system operators having less than 1.000 customers.

Electricity distribution in Slovenia is operated by five distribution system operators, of which none is subject to the "1.000 customers" exemption. All distribution system operators which are currently still performing the activity of distribution system operators as well as market activity are therefore not yet legally unbundled. Distribution system operators are in the process of preparations for legal unbundling. Slovenian distribution system operators engaged in more than one energy activity are required to keep separate accounts for each energy activity in accordance with the Slovenian Accounting Standards.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

The Energy Act and the underlying legislation distinguish between trading in natural gas and natural gas transmission over the transmission and distribution networks. On 1 January 2003 customers who consumed more than 25 million cubic meters of natural gas per year at a single consumption point, or who use gas for production of electricity, obtained the status of “Eligible customers”, (i.e. customers who may freely choose the suppliers).

In 2002 the Energy Agency identified the most important obstacles for the natural gas market operation in Slovenia. It was found that the process of liberalization and separation of the transmission and trading services will need to be more intensive. It has been established that it is of particular importance to provide transparency, which is the basis for a competitive market.

The Directive 2003/55/EC (the “Gas Directive”) has been transposed into the Slovenian legislation by the Act Amending the Energy Act which was published in the Official Gazette of the Republic of Slovenia No. 51/04 of 7 May 2004 and entered into force on 8 May 2004.

The transposition of the Gas Directive into the Energy Act has accelerated the opening up of the internal natural gas market. All customers save households are the so called “eligible customers” meaning customers who may freely choose the supplier. Households will be free to choose the supplier on 1 July 2007.

In 2004 Slovenia adjusted the underlying legislation regulating the way of operation of the commercial public services of the transmission system operator and distribution system operator with the provisions of the Act Amending the Energy Act.

Natural gas transmission and natural gas distribution are both licensed activities.

Transmission system operators had to be legally and functionally unbundled as of 1 January 2005. Distribution system operators have to be legally and functionally unbundled by 1 July 2007.

In 2004, the Energy Agency underwent a major restructuring. As the main regulating authority in the energy sector, the Agency acquired a number of additional competencies.

Natural gas transmission and natural gas distribution are both licensed activities.

<i>Chronology</i>	<i>Instruments of law</i>
<ul style="list-style-type: none"> ❖ Energy Act 1999 ❖ Act Amending the Energy Act 2004 	<ul style="list-style-type: none"> ❖ Energy Act 1999 ❖ Act Amending the Energy Act 2004

TRANSMISSION

Natural gas transmission in Slovenia is operated solely by Geoplin plinovodi d.o.o. (a subsidiary of Geoplin d.o.o., the natural gas importer). Therefore, Geoplin plinovodi d.o.o. is not ownership unbundled. Geoplin plinovodi d.o.o. is legally unbundled as it does not perform any other activities save transmission of natural gas. Geoplin plinovodi d.o.o. as the subsidiary of Geoplin d.o.o., the natural gas importer, is a vertically integrated entity, therefore, measures have been introduced to assure its functional unbundling.

DISTRIBUTION

Legal and functional unbundling of natural gas distribution system operators is legally required by 1 July 2007. As Slovenia has adopted 100.000 consumers exemption, and as none of the 17 Slovenian DSOs has more than 100.000 customers, the provisions of the Energy Act requiring legal and functional unbundling do not apply to any of the Slovenian DSOs.

All Slovenian distribution system operators may therefore carry out regulated (distribution) activity as well as non-regulated activity (supply to customers). Slovenian distribution system operators performing more than one energy activity are required to keep separate accounts for each energy activity in accordance with the Slovenian Accounting Standards.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Slovenia	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed? [y/n]	Yes, partially	Energy Act 1999 Act Amending the Energy Act 2004	Yes, partially	Energy Act 1999 Act Amending the Energy Act 2004)
Number of TSOs	1	Energy Act 1999 Act Amending the Energy Act 2004	1	Energy Act 1999 Act Amending the Energy Act 2004
Number of DSOs	5		17	
How many of these DSOs have less than 100.000 customers?	1	Energy Agency of the Republic of Slovenia	17	Energy Agency of the Republic of Slovenia
TSO Unbundling regime	Legal, functional, accounting	Energy Act 1999 Act Amending the Energy Act 2004 Benchmark report 2004.	Legal, functional, accounting	Energy Act 1999 Act Amending the Energy Act 2004 Benchmark report 2004.
DSO unbundling regime	Legal, functional, accounting	Energy Act 1999 Act Amending the Energy Act 2004 Benchmark report 2004.	Legal, functional, accounting	Benchmark report 2004.
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	Yes, legal and functional postponed for all DSOs	Energy Act 1999 Act Amending the Energy Act 2004 Underlying regulations	Yes, legal and functional postponed for all DSO's, thereafter 100.000 exemption applies for all 17 DSO's	Energy Act 1999 Act Amending the Energy Act 2004
100.000 customer exemption [y/n]	No, but 1.000 customer exception	Energy Act 1999 Act Amending the Energy Act	Yes	Energy Act 1999 Act Amending the Energy Act

		2004		2004
How many DSOs are excluded [number]	0 (due to 1.000 customers exemption)	Energy Agency of the Republic of Slovenia	17	Energy Agency of the Republic of Slovenia
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	0%		100%	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	TSO – unbundled DSOs – none unbundled	Energy Act 1999 Act Amending the Energy Act 2004	TSO – unbundled DSO's – 100.000 exemption applies	Energy Act 1999 Act Amending the Energy Act 2004
The Regulator [name]	Energy Agency of the Republic of Slovenia	Energy Act 1999 Act Amending the Energy Act 2004	Energy Agency of the Republic of Slovenia	Energy Act 1999 Act Amending the Energy Act 2004
Does the regulator monitor unbundling?	Yes	Energy Act 1999 Act Amending the Energy Act 2004	Yes	Energy Act 1999 Act Amending the Energy Act 2004
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Energy Act 1999 Act Amending the Energy Act 2004	Yes	Energy Act 1999 Act Amending the Energy Act 2004
Does the regulator have the power to require companies to take unbundling measures?	Yes	Energy Act 1999 Act Amending the Energy Act 2004	Yes	Energy Act 1999 Act Amending the Energy Act 2004
Can the regulator impose remedies? [y/n]	Yes; financial penalties, termination of licence for breach of licence conditions.	Energy Agency of the Republic of Slovenia	Yes; financial penalties, termination of licence for breach of licence conditions	Energy Agency of the Republic of Slovenia
Have there been any complaints and/or decisions	Not recorded	Energy Agency of the Republic of Slovenia	Not recorded	Energy Agency of the Republic of Slovenia

of the regulator on unbundling?				
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Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Slovenia	Electricity			Gas		
	1	2	3	4	5	6
TSO or DSO?	DSO	DSO	DSO	DSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	Yes	Yes
Position company holds within the integrated undertaking	Parent company	Parent company	Parent company	Subsidiary	Affiliate	Affiliate
Legal regime governing the relation	Company law	Company law	Company law	Company law	Company law	Company law
Legally Unbundled?	No	No	No	No	No	No
Legal form chosen	N/A	N/A	N/A	N/A	N/A	N/A
Functional unbundling	No	No	No	No	No	No
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions?	No (with respect to Hidroelektrarne Elektro Ljubljana)	No (with respect to Hidroelektrarne Elektro Maribor)	Yes (with respect to E3)	Yes (within the company)	Yes (within the company)	Yes (within the company)
Management personnel of the company hold shares of related supply/generation company or division?	Yes (some of them)	Yes	No	No.	No	No
Common services shared by TSO/DSO and related supply/ generation companies or divisions? Which ones?	Yes Legal, general and human resources services, accounting financial services, etc	Yes general and human resources services, accounting financial services, etc.	Yes, Legal, general and human resources services, accounting financial services, etc	Yes, Accounting, finance, human resource, legal, etc.	Yes, finance	Yes, IT, etc.

Salary of management based on performance of other related supply/ generation companies or divisions?	No	No	No	Yes	Yes	Yes
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	One manager deciding for network & supply	Two managers, the general manager is competent for network, the member competent for supply	One manager deciding for network & supply	One manager deciding for network & supply	One manager deciding for network & supply	One manager deciding for network & supply, his powers with regard to network assigned to network director
Board members also responsible for activities in the supply and/ or generation?	Yes	Yes	Yes	Yes	Yes	Yes
Reasons for the removal of the executive director.	Company law	Company law	Company law	Company law	Company law	Company law
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	Yes	Yes	Yes	No	No	No
Involvement in the day-to-day business of the company by other supply/generation operations?	No	No	No	Yes	No	No
Effective decision making rights to operate network?	Yes	Yes	Yes	Yes	Yes	Yes
Compliance programme	No	No	No	No	No	No
Rules governing access for personnel on premises?	No	No	Yes	No	No	No

Penalties for violation of rules?	N/A	N/A	Yes	N/A	N/A	N/A
Monitoring of compliance programme?	N/A	N/A	N/A	N/A	N/A	N/A
Separate location for network business?	Yes	No	Yes	No	No	No

15. SPAIN

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

The Electricity Act 54/1997 (LSE) and its developing legislation, which was aimed to implement Directive 96/92/EC, regulate the Spanish electricity sector. The basic purpose of the LSE is to grant supply at the lowest possible cost and network access. This approach moves completely away from the idea of public service, which traditionally ran through legislation in the past. The LSE guarantees supply to all those consumers nationwide who demand the service. The degree of liberalization of the Spanish market in the nineties was higher than requested by Directive 96/92/EC.

Until 1997 all electric activity was developed, under a strict regime of intense administrative intervention, by different VIUs operating in pre-defined geographical areas.

LSE established an unbundling regime of considerable intensity which included accounting and legal unbundling between “regulated” and “liberalised activities”. Regulated activities include transmission and “distribution”. Liberalized activities include generation and supply at free prices.

There is a relevant difference between the concept of “distribution ” foreseen in the Spanish legislation and the one contained in Directives 96/92/EC and 2003/54/EC. The notion used by the Spanish legislation comprises the network management as well as the supply of electricity at regulated prices set by the government according to consumer categories.

Following the enactment of Royal Decree 277/2000, which developed the provisions of LSE on “legal” unbundling the unbundling regime established in the LSE was implemented in practice by companies (the official deadline expired in December 31, 2000). However, because of the concept of distribution contained in the LSE refers to transmission activities and supply at regulated prices, in Spain one single company can legally perform both activities. Therefore the regime resulting from the enactment of LSE and Royal Decree 277/2000 lead to “partial” legal unbundling only.

New legislation has not been enacted in order to transpose Directive 2003/54/EC (the “Electricity Directive”). Therefore, while accounting and “partial legal” unbundling obligations were already implemented before the Electricity Directive was adopted, under the terms of the LSE, the rules in force do not provide for functional unbundling.

The regulator, CNE -created in 1994 as National Electricity Sector Commission and latter empowered to act both on the electricity and gas sectors-, is an independent body in charge of ensuring effective competition in the gas and electricity sectors. It is competent to grant compliance with the unbundling regime of the LSE and to solve access conflicts.

Chronology	Instruments of law
❖ <u>1997</u> : Electricity Power Act (LSE)– regulation of the sector.	❖ Electricity Power Act 54/1997
❖ <u>1999</u> : Comisión Nacional de Energía (CNE) - Royal Decree –establishment of a regulator for the electricity market.	❖ Royal Decree CNE 1339/1999
❖ <u>2000</u> : legally unbundling of generation and supply.	❖ Royal Decree 277/2000
❖ <u>2000</u> : specific regulation of transport, distribution, trading and supply.	❖ Royal Decree 1955/2000
❖ <u>2003</u> : liberalization of the electricity market.	
❖ <u>2005</u> : establishment of the Iberian Electricity Market, rationalization of costs and maximal stake for REE´s shareholders.	❖ Royal Decree Law 5/2005

TRANSMISSION

Transmission is carried out by Red Eléctrica de España (REE), which is unbundled in ownership terms¹². It was the first company in the world devoted exclusively to electricity transmission and system operation. Since its creation in 1985, it has been responsible for the transmission network and for the operation of the Spanish electricity system, ahead of recent trends towards the segregation of such activities, with transmission being seen as a separate activity from generation and distribution. The VIUs hold a stake in REE's capital, up to a maximum, that has been legally reduced step-by-step to 1% nowadays. In addition, the State holds in REE, through the public company Sociedad Estatal de Participaciones Industriales, a stake of 20%.

Until very recently, traditional Spanish utilities held and managed transmission assets. However, these assets have been consolidated in the hands of REE following a series of acquisitions (during 2002 and 2003) . REE does not have subsidiaries for the development of activities different from transmission and technical operation of the network. It holds separate accounts for each of these two activities.

DISTRIBUTION

Distribution is carried out by subsidiaries of the traditional VIUs (ENDESA, IBERDROLA, UNIÓN FENOSA, HIDROCANTÁBRICO and VIESGO-ENEL) and by small distributors. Bearing in mind that pursuant to the Spanish legislation, the distribution activity encompasses not only the operation of the network but also the supply of electricity at regulated tariffs, network neutrality is mainly achieved by means of measures aimed at increasing

¹² Account should be taken that REE still buys electricity from EdF on the basis of a long term contract, and sells electricity to the Spanish market.

the availability of information and by means of corrective measures adopted by the regulator or by the competition authorities in case of conflicts on access to the distribution networks.

The analysis of three vertically integrated DSOs shows that legal unbundling obligations have been implemented in accordance with the LSE, i.e. in a partial way considering the provisions of the Electricity Directive. As for the functional unbundling, despite the Spanish law has not transposed yet Article 15 (2) of the Electricity Directive, the DSOs examined do not hold shares of companies of the Group active in the generation or supply activities; although there is no public information pointing at the existence of internal compliance programmes, the LSE imposes the obligation to give access to the networks on a non-discriminatory, objective and transparent manner.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

The Spanish gas market is regulated by the provisions of the Hydrocarbons Act 34/1998, of 7 October (LSH). Spanish legislation is in line with the Directive 98/30/EC for the establishment of a single market in natural gas. Specific amendments are set to be made concerning unbundling obligations provided for by the LSH as a consequence of the entry into force of the Directive 2003/55/EC (the “Gas Directive”). The regulation currently in force does not establish obligations on functional unbundling.

The Gas Sector has had a late expansion in Spain due to the fact that, until the end of the 80’s, the distribution networks were only developed in large cities. From this moment, the development was supported under the legal structure of public service concessions (the gas supply was declared public service).

The LSH distinguishes between “regulated” and “liberalized” activities. Regulated activities include transmission and distribution. Liberalized activities include production /import and supply at free prices.

As it was the case in electricity, the concept of “distribution” contained in the Spanish legislation differs from the one contained in the Directives 98/30/EC and 2003/55/EC because it comprises network management as well as the supply of gas at regulated prices set by the government according to consumer categories.

Before the enactment of the LSH, an important business restructuring took place whereby the State grouped the distribution assets (including gas supply) of REPSOL (company controlled by the State and later privatized) and those of other local distribution companies (companies operating Barcelona and Madrid networks) in Gas Natural. The company holding the monopoly rights regarding gas transmission and gas imports (ENAGAS) was subsequently sold by the State to Gas Natural.

The implementation of the unbundling regime of the LSH was very unequal due to the previous legal and market structure and because the main VIU (Gas Natural) complied with its requirements by simply creating a subsidiary to trade gas (supply gas to qualified consumers), while maintaining within the holding company of the group the secondary transmission and distribution activities. This practise was followed by many of the remaining local distributors.

As a result, the implementation of the unbundling obligations was unsatisfactory and gave raise to numerous third party access conflicts. In spite these conflicts were resolved by the regulator (CNE), the Gas Natural group has successfully maintained its position in all the gas related activities (with the exception of that derived from the supply to the new CCGT, that is carried out by traders of the group together with the corresponding electricity VIUs in the majority of the cases).

Chronology	Instruments of law
❖ <u>1998</u> : Hydrocarbons Act (LSH)– regulation of the sector.	❖ Hydrocarbons Power Act 34/1998
❖ <u>1999</u> : Comisión Nacional de Energía (CNE) - Royal Decree –establishment of a regulator for the electricity market.	❖ Royal Decree CNE 1339/1999
❖ <u>2000</u> : Changes in the unbundling regime and establishing first steps of ENGAS (main TSO) ownership unbundling.	❖ Royal Decree-Law 6/2000.
❖ <u>2001</u> : regulation of the access of third parties to the gas facilities and establishment of an economic integrated system of natural gas.	❖ Royal Decree 949/2001
❖ <u>2002</u> : specific regulation of transport, distribution, trading, supply and facilities authorization process.	❖ Royal Decree 1434/2002
❖ <u>2003</u> : New rules reducing the maximum participation in ENAGAS capital to 5% and eliminating voting rights for the temporary excess (transition period to reduce the participation by January 1, 2007)	❖ Law 62/2003

TRANSMISSION

There are 6 Gas TSOs in Spain. ENAGAS, the main TSO, is ownership unbundled, in theory¹³. Pursuant to the LSH, as amended by Act 62/2003, electricity and gas operators holding a stake in ENAGAS's share capital are obliged to reduce its stake to 5% in 2007 at the latest. ENAGAS does not have subsidiaries for the development of liberalised activities. It holds separate accounts for transmission and network operation activities.

As for the remaining TSOs operating transmission networks in Spain, their activity is limited to certain geographic areas (NATURGAS) or they manage secondary transmission facilities not considered “networks” within the meaning of Spanish legislation (Gas Natural).

DISTRIBUTION

Gas distribution is carried out by a number of gas and electricity VIUs. Gas Natural, the main Gas DSO in Spain and parent company of the Gas Natural Group, holds over 80% of the gas distribution market. As mentioned, the Spanish legislation includes, within the distribution concept, supply of gas at regulated tariffs along with

¹³ Account should be taken that ENAGAS is also directly active in the supply of gas at regulated tariffs.

distribution grid operation. LSH developments try to achieve network neutrality through measures oriented to increase the information available rather than by changing the structure of the VIUs. The 100.000 customers exemption has not been endorsed in Spain.

The analysis of two vertically integrated DSOs shows that legal unbundling obligations have been implemented in accordance with the LSE, i.e. in a partial way, considering the provisions of the Gas Directive. As for the functional unbundling, according to the available information, no measures have been adopted by the DSOs examined.

With the hostile takeover of Endesa, the corporate restructuring of Gas Natural Group is currently in progress. The parent company is in the process of transferring its transmission and distribution activities to subsidiaries not active in the supply at free prices and import/production of gas.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives.

Country: Spain	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	No ¹⁴	Act 54/1997 (LSE) Royal Decree 277/2000 Royal Decree 1955/2000	No ¹⁵	Act 34/1998 (LSH) Royal Decree 949/2001 Royal Decree 1434/2002
Number of TSOs	1	Art. 35-38 LSE	6	Art. 66-71 LSH
Number of DSOs	320	Art 39-43 LSE	25	Art. 72-78 LSH
How many of these DSOs have less than 100.000 customers?	Not available	N/A	Independent companies ¹⁶ : 2 Total: 19	N/A
TSO Unbundling regime	Ownership	14 LSE	Ownership (main TSO) / legal and accounting unbundling (other TSOs)	63 LSH
DSO unbundling regime	Accounting and partial legal unbundling	14 LSE	Accounting and partial legal unbundling	63 LSH
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	No	14 LSE Royal Decree 277/2000	No	63 LSH
100.000 customer exemption	No	N/A	No	N/A

¹⁴ Based on the concept of distribution of the Directive, the Spanish legislation establishes the separate accounting but does not, however, establish full legal or the functional unbundling for distributors.

¹⁵ Based on the concept of distribution of the Directive, the Spanish legislation establishes the separate accounting but does not, however, establish full legal or the functional unbundling for distributors.

¹⁶ Companies that do not belong to a group of companies with more distribution companies.

[y/n]				
How many DSOs are excluded [number]	N/A	N/A	N/A	N/A
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	N/A	N/A	N/A	N/A
Unbundling by companies finalised to comply with the unbundling rules of the Directives?¹⁷	No	14 LSE	No	63 LSH
The Regulator [name]	CNE (Comisión Nacional de Energía)	Royal Decree 1339/1999	CNE (Comisión Nacional de Energía)	Royal Decree 1339/1999
Does the regulator monitor unbundling?	Yes	LSH	Yes	LSH
Does the regulator have powers to collect information on unbundling in a given company?	Yes	LSH Additional Provision 11	Yes	LSH Additional Provision 11
Does the regulator have the power to require companies to take unbundling measures?	Yes, but limited to what is established by legislation	LSH Additional Provision 11	Yes, but limited to what is established by legislation	LSH Additional Provision 11
Can the regulator impose remedies? [y/n]	Yes	LSH Additional Provision 11	Yes	LSH Additional Provision 11
Have there been any	Yes	i.e. CNE decision march 31,	Yes	i.e. CNE decision (dated

¹⁷ This aims to assess the general situation in the State regarding the practical transposition of unbundling. "Finalized" in this context refers to complying with the *current* obligations. Thus, in cases in which there is an exemption or a postponement until 2007, the process may nonetheless still be considered finalized.

complaints and/or decisions of the regulator on unbundling?		2005 on TPA conflict		February 4, 2005) and many TPA conflicts
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Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies¹⁸

Country: Spain	Electricity			Gas		
	1	2	3	4	5	6
TSO or DSO?	DSO	DSO	DSO	TSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	Yes	Yes, regional gas distributor with supply activities through its subsidiary.
Position company holds within the integrated undertaking	Subsidiary / holding of the distribution companies of the group.	Subsidiary	Subsidiary / holding of other companies	Subsidiary	Holding company of the Group	Holding company of the Group
Legal regime governing the relation	Law 2/1995.	Royal Decree Law 1564/1989.	Royal Decree Law 1564/1989.	Royal Decree Law 1564/1989.	Royal Decree Law 1564/1989.	Royal Decree Law 1564/1989.
Legally Unbundled?	Yes ¹⁹	Yes ²⁰	Yes ²¹	Yes	Yes ²²	Yes ²³
Legal form chosen	LLC	PLC	PLC	PLC	PLC	PLC
Functional unbundling	No	No	No	No	No	No
Management of company directly or indirectly involved	N/A	N/A	N/A	N/A	N/A	N/A

¹⁸ You can relate these for clarity to the questions of Part II as indicated, for example if something corresponds to question 6 of Part II it will be written as Q6.

¹⁹ Spanish concept of distribution includes supply to some consumers (according to tariff)

²⁰ Spanish concept of distribution includes supply to some consumers (according to tariff)

²¹ Spanish concept of distribution includes supply to some consumers (according to tariff)

²² We cannot assure this issue, because it is not possible to confirm that GAS NATURAL SDG does not manages basic transmission assets.

²³ Spanish concept of distribution includes supply to some consumers (according to tariff)

in day-to-day operation of other related supply/generation companies of the group or divisions ?						
Management personnel of the company hold shares of related supply/generation company or division?	N/A	N/A	N/A	N/A	N/A	N/A
Common services shared by TSO/DSO and related supply/generation companies or divisions? Which ones?	N/A	N/A	N/A	N/A	N/A	N/A
Salary of management based on performance of other related supply/ generation companies or divisions?	N/A	N/A	N/A	N/A	N/A	N/A
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	N/A	N/A	N/A	N/A	N/A	N/A
Board members also responsible for activities in the supply and/ or generation?	N/A	N/A	N/A	N/A	N/A	N/A
Reasons for the removal of the executive director.	The General Meeting may remove and replace	The General Meeting may remove and	The General Meeting may remove and replace directors at	The General Meeting may remove and replace directors at	The General Meeting may remove and replace	The General Meeting may remove and replace directors at any

	directors at any moment.	replace directors at any moment.	any moment.	any moment.	directors at any moment.	moment
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No	No	No	No	Yes	Yes
Involvement in the day-to-day business of the company by other supply/generation operations?	Not directly	Not directly	Not directly	Not directly	Yes	Yes
Effective decision making rights to operate network?	Indirectly	Indirectly	Indirectly	Yes	Indirectly	Yes
Compliance programme	N/A	N/A	N/A	N/A	N/A	N/A
Rules governing access for personnel on premises?	N/A	N/A	N/A	N/A	N/A	N/A
Penalties for violation of rules?	N/A	N/A	N/A	N/A	N/A	N/A
Monitoring of compliance programme?	N/A	N/A	N/A	N/A	N/A	N/A
Separate location for network business?	Yes	N/A	N/A	No	No	No

16. SWEDEN

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive²⁴

The Swedish electricity market consists of many independent players. These are:

- electricity generators
- network owners
- the system operator (Svenska Kraftnät)
- electricity consumers
- electricity traders in the role of electricity suppliers and/or balance providers
- marketplaces, primarily the power exchange Nord Pool.

The work of restructuring the electricity market commenced in January 1992 when the generation and supply of electricity was separated from the network operation on a national level. Svenska Kraftnät, the TSO, was established and made responsible for the national grid. Svenska Kraftnät is an independent public service company and is also the *System Operator* under the Electricity Act. This entails having the overall responsibility for electrical plants working together in an operationally reliable way so that a state of balance between the production and consumption of electricity can be maintained throughout the country.

In the spring of 1992, the Parliament adopted targets and strategies for an electricity market reform whose objective was to increase competition on the electricity market.

The Electricity Legislation Commission (ELC) put forward a proposal for new electricity legislation in the spring of 1993. Among other things, this dealt with the supervision of the network operation and rules for network tariffs. In the spring of 1994, the Parliament decided that a new system of rules for the electricity market would come into force. Following the general election in the same year, however, the reform was postponed. The reason for this was to give the already appointed Energy Commission the opportunity to first carry out an impact analysis of the new rules on the electricity market.

In the autumn of 1995, it was decided that the new legislation – along with certain additions – would come into force on 1 January 1996. The new system of rules made it possible to generate and trade electricity in a competitive environment. The network operation – which is a natural monopoly – has to be regulated and supervised by the authorities. The possibility to supervise the network operation is central to the electricity market being able to work well, as well as preventing the network companies from abusing their monopoly position. The Swedish Energy Agency (Sw: “Statens Energimyndighet” or “STEM”) is the regulator, and is responsible for this supervision. STEM must ensure that the network tariffs are reasonable and that the network operation does not subsidise other activities. A separate licence – the supply concession – was initially introduced. Companies obtaining such a concession – the supply concessionaires – were obligated to supply electricity to consumers not wishing to change supplier.

²⁴ The information in the following 8 paragraphs is from Svenska Kraftnät, “The Swedish Electricity Market and the Role of Svenska Kraftnät”.

In the autumn of 1997, the Swedish Parliament adopted a new Electricity Act (1997:857), which came into force on 1 January 1998. This was primarily a matter of editorial modernization of the 1902 Electricity Act. No great changes were made to the provisions introduced during the electricity market reform a few years previously. In addition, the separate Electricity Trading Act was incorporated into the new Electricity Act.

During the autumn of 1998, the Parliament adopted adjustments to the Electricity Act in accordance with the European Parliament's and the European Council's Directive 96/92/EC on the internal electricity market.

In October 1999, the Parliament decided to abolish the requirement for hourly meters for the majority of consumers, and introduce profile-settlement of consumption instead. The system of supply concessions was abolished at the same time. This had the effect of making it financially viable also for small-scale consumers to buy electricity on the open market. The legislative changes came into force on 1 November 1999.

Therefore, while the TSO was unbundled in ownership terms in 1992, DSOs were unbundled in legal terms in 1996, when legal persons carrying on generation and/or supply could not also be active in distribution. By January 1998 the legal unbundling requirement was expressly set out in the new Electricity Act²⁵.

The Electricity Act has as of July 1st 2005 been amended inter alia concerning functional unbundling to comply with Directive 2003/54/EC. Under the Electricity Act, Chapter 3, Article 1 b, a DSO with no less than 100.000 customers needs to be functionally unbundled so that a board member, a Managing director or a person authorized to sign for the company may not, at the same time, be board member, a Managing Director or a person authorized to sign for the company in a generation/ supply company. According to the preparatory works the requirements for functional unbundling – independent organization and decision making as set out in the minimum criteria in art 15 (2) a-d of the directive – has been interpreted as a prohibition for board members in a DSO to be board members of a related generation/ supply company or for any board member to be involved in day-to-day operation of such a company, i.e. to be managing director or a person authorized to sign for the company.²⁶

All DSOs are, however, without exemption (i.e. even DSOs with less than 100.000 customers), obliged to establish a compliance programme.²⁷ According to the preparatory works, there is always a risk of subsidizing and undue exchange of information in companies that benefit from the 100.000 customer exemption and that the competition in a longer perspective will be reduced and therefore, it is important that the DSOs work actively with securing that they, in all respects, act in an objective and non-discriminative way²⁸, something that is achieved through the obligation to establish a compliance programme. The Regulator works now on guidelines for the content and structure of the compliance programme.

Chronology	Instruments of law
❖ <u>1992</u> The TSO was separated from the generation/ supply business. Adoption of	❖ SFS 1994:617 Lag om ändring i lagen (1902:1 s 71), innefattande vissa bestämmelser om

²⁵ Between 1996 and 1998 this followed indirectly from the Electricity Trade Act.

²⁶ Government Bill 2004/05:62, Implementation of the directive on common rules for the internal markets in electricity and natural gas, etc. p 73.

²⁷ The Electricity Act, Chapter 3, Article 17.

²⁸ Government Bill 2004/05:62, Implementation of the directive on common rules for the internal markets in electricity and natural gas, etc. p 78.

<p>targets and strategies for an electricity market reform.</p> <ul style="list-style-type: none"> ❖ <u>1996</u> The DSOs were legally unbundled and have to disclose the distribution business from any other business ❖ <u>1998</u> Adoption of the new Electricity Act ❖ <u>1998</u> The Directive 96/92/EC is considered fully implemented by some final amendments to the Electricity Act ❖ <u>2005</u> The DSOs were functionally unbundled, the 100.000 customer exemption was adopted in a modified way (implementation of the Electricity Directive) 	<p>elektriska anläggningar</p> <ul style="list-style-type: none"> ❖ SFS 1994:618 Lag om handel med el m.m. ❖ SFS 1997:857 Ellag (the Electricity Act) ❖ SFS 1998:1651 Lag om ändring i ellagen (1997:857) ❖ SFS 2005:404 Lag om ändring i ellagen (1997:857)
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TRANSMISSION

Sweden only has one TSO and that is Svenska Kraftnät. Svenska Kraftnät is unbundled in ownership terms and is not controlled, as defined in art 3(2) of the Merger Regulation No. 139/2004, directly or indirectly by a supply/generation company. Svenska Kraftnät is an independent public service company which is, from a formal point of view part of the State. Svenska Kraftnät manages and operates the national grid and overseas links. The grid encompasses the country's 400 and 220 kV (kilovolt) power lines²⁹.

Svenska Kraftnät administers the shares of Svenska Kraftnät Gasturbiner AB (a generation company with the main purpose of handling incidents and problems within the national grid), a state owned company and appoints the board of directors.³⁰ Whilst strictly speaking Svenska Kraftnät is a vertically integrated undertaking as it controls a generation company, it is not a fully-fledged competitor as the main purpose of the generator is to handle emergencies within the national grid.

DISTRIBUTION

Sweden has a large number of DSOs (175), and of these only six have more than 100.000 customers. However, these six have 60% of all customers according to Svensk Energi³¹. Because Sweden has adopted the 100.000 customers exemption, 169 DSOs do not have to be unbundled in functional terms. All of the DSOs are legally unbundled since 1 January 1996 and in functional terms, the six affected DSOs have been unbundled since 1 July 2005. The exemption has been adopted with a modification and therefore every DSO is obliged to adopt a compliance programme. According to the Regulator it is not possible to get information on how many DSOs have already adopted a compliance programme or how many of the six DSOs that do not benefit from the exemption are already sufficiently unbundled in functional terms. The information will be available during the autumn of 2006.

The sample companies selected for the study are all limited liability companies governed by general company law. As regards the companies' positions within their groups, all of them are subsidiaries. They are all legally

²⁹ According to Svenska Kraftnät, "The Swedish Electricity Market and the Role of Svenska Kraftnät".

³⁰ Government Bill 2004/05:62, Implementation of the directive on common rules for the internal markets in electricity and natural gas, etc p. 49

³¹ Svensk Energi is a trade organisation for generation, supply and distribution companies on the Swedish market.

unbundled and two of them are also unbundled in functional terms. The third company benefits from the 100.000 customer exemption. They all have effective decision-making rights in respect of assets necessary to operate, maintain and develop their network. Finally, two of them have started to prepare a compliance programme, the third will do that shortly. All three wait for instructions to be issued by the authorities.

Generally speaking, the sample companies, the other DSOs and the TSO seem to be well aware of the provisions in the Electricity Act, and the amendments made due to the Electricity Directive. They have carried out changes and adjustments accordingly, although some details remain to be effectuated in order to fully comply with the new provisions of the Electricity Act. The comprehensive conclusion is therefore that the Swedish electricity operators were well prepared for the unbundling regime and that they, with some exceptions, comply well with the new requirements.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive³²

Natural gas has only been used as an energy source since 1985 in Sweden. Last year (2004) around 10 TWh – corresponding to around 2% of Sweden's total energy supply – was used. In the approximately 30 municipalities where natural gas is used, gas accounts for about 20 % of the total energy consumption. There are around 55.000 natural gas customers in Sweden.

There are no Swedish sources of natural gas and the gas used in Sweden is imported from Denmark and fields in the North Sea. The imported natural gas, which comes from the Danish Tyra and Harald Fields in the North Sea, enters into Sweden through a pipeline to Klagshamn south of Malmö, which consequently is the connection with the continental system. From there on the natural gas system expands on the west coast of the southern part of Sweden with around 650 km of transmission pipeline and about 3.000 km of distribution pipeline.

There are eight Swedish natural gas companies, of which two are TSOs and the rest DSOs. Since there are only 55.000 natural gas customers at present, none of these have more than 100.000 customers.

In Sweden, the natural gas market has gradually been opened up to competition. As of 1 July 2005, all non-household customers will be entitled to choose their supplier and not later than July 2007 the entire market will be opened to competition.

The first step towards a deregulated market in Sweden was taken in August 2000, when the Natural Gas Act (SFS 2000:599) was promulgated based on the Directive 98/30/EC. The Natural Gas Act establishes which customers are entitled to choose their gas supplier. Market liberalisation in 2000 applied to users with a consumption exceeding 25 million Nm³ per year as well as power and CHP power producers regardless of consumption volume. On 1 August 2003 this threshold was lowered to 15 million Nm³.

With the adoption of the Directive 2003/55/EC (the "Gas Directive") in June 2003, various adjustments and amendments to the Swedish regulations were required. Consequently, the Government submitted a bill (Government Bill 2004/05:62, Implementation of the directive on common rules for the internal markets in electricity and natural gas, etc.) to the Parliament to implement the common regulations for the internal natural gas market in Sweden. The new Natural Gas Act (NGA) (2005:403) entered into force on 1 July 2005 ("NGA").

The unbundling provisions of the Directive have been transposed to the NGA, with the exception of the functional unbundling provisions in respect of DSOs due to the fact that the Swedish gas market at present only consists of approximately 55.000 customers. The legislator has considered the requirements for functional unbundling – independent organisation and decision-making as set out in the minimum criteria in article 15 a-c of the gas directive – to be met by a prohibition in the NGA for board members in a TSO to be board members of a related generation/ supply company or for any board member to be involved in day-to-day operation of such a company, i.e. to be managing director or a person authorized to sign for the company.

The Swedish Energy Agency (Sw: "Statens Energimyndighet" or "STEM") has the supervisory function for the entire natural gas market in Sweden. Furthermore, STEM issues licences (Sw: "koncession"). A licence is not

³² The main source of information used for this section is "Natural Gas Market Report 2005:1" issued by the Swedish Energy Agency.

required for DSOs. STEM is responsible for monitoring the observance of the NGA and of the further regulations and conditions that have been published in accordance with NGA. In order to fulfil its supervisory obligations, STEM may request information and the disclosure of documents, and may also impose the necessary injunctions to ensure compliance with the NGA and with the regulations/conditions announced in accordance with the NGA. Such an injunction may be combined with the imposition of a conditional fine.

Chronology	Instruments of law
<ul style="list-style-type: none"> ❖ <u>2000</u>: the Natural Gas Act – customers using more than 25 million Nm³ per year become eligible to choose their supplier. ❖ <u>2003</u>: threshold lowered to 15 million Nm³ ❖ <u>2005</u>: transposition of unbundling provisions of the Gas Directive; all non-household customers become eligible to choose their supplier. 	<ul style="list-style-type: none"> ❖ the Natural Gas Act (SFS 2000:599) ❖ Amendment to the Natural Gas Act (SFS 2000:599), SFS 2002:654 ❖ NGA (SFS 2005:403)

TRANSMISSION

There are at present two TSOs on the Swedish natural gas market.

The first, Nova Naturgas AB, is unbundled in ownership, legal and functional terms since the company sold its entire trading operation (Nova Supply) to the Danish operator Dong Naturgas A/S and has thereafter only been involved in network operations.

The other TSO, E.ON Gas Sverige AB, formerly Sydkraft Gas AB, is a member of the larger Sydkraft Group with around 45 operating companies including sales. Since E.ON Gas Sverige AB is a member of the Sydkraft Group and since the group is also engaged in the sales of gas, this TSO cannot be considered unbundled in ownership terms. The company is however unbundled in legal terms. The supply and network operations are placed in separate companies since 1 April 1999. E.ON Gas Sverige AB has, according to available sources, no overlapping activities with the supply part of the group. Consequently, it appears that E.ON Gas Sverige AB meets the above-mentioned requirements in the NGA regarding functional unbundling.

DISTRIBUTION

Of the seven DSOs in Sweden, six are still vertically integrated and belong to groups of companies also active in the operations of supply of natural gas. All seven DSOs meet the requirement of legal unbundling set out in chapter 3, article 2, paragraph 1, NGA, which states that the supply and the network operation are to be legally separated. Since the Swedish gas market at present only includes approximately 55.000 customers, the functional unbundling provisions of the Gas Directive (Article 13(2) have not, with the exception of 13(2) d) (compliance programme), been implemented in Sweden.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: Sweden	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes – however not in the sense that the provisions in the Electricity Act are word-for-word copies of the provisions of the Directive on Electricity	SFS 2005:404	Yes – however not in the sense that the provisions in the Electricity Act are word-for-word copies of the provisions of the Directive on Gas	SFS 2005:403
Number of TSOs	1		2	
Number of DSOs	175		7	
How many of these DSOs have less than 100.000 customers?	169		None	
TSO Unbundling regime	Legal, Functional and Accounting	Chapter 3 art 1, chapter 3 art 1 b, chapter 3 art 2-5 of the Electricity Act	Legal, Functional and Accounting	Chapter 3, art 2 (paragraph 1: legal, paragraph 2: functional), chapter 3, art 9 (compliance programme), chapter 3, art 3 (accounting) NGA
DSO unbundling regime	Legal, Functional and Accounting	Chapter 3 art 1, chapter 3 art 1 b, chapter 3 art 2-5 of the Electricity Act	Legal and Accounting	Chapter 3, art 2, paragraph 1 (legal), chapter 3, art 9 (compliance programme), chapter 3, art 3 (accounting) NGA
Postponement until 1 July 2007 of legal unbundling for	No		No	

larger DSOs?				
100.000 customer exemption [y/n]	Yes	Chapter 3 art 1 b of the Electricity Act	No	
How many DSOs are excluded [number]	169		N/A	
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	40 % ± 1 %	Svensk Energi, October 2005	N/A	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	Yes, concerning the legal and accounting unbundling, not possible to answer regarding the unbundling in functional terms.		Yes	
The Regulator [name]	Statens Energimyndighet (STEM)		Statens Energimyndighet (STEM)	
Does the regulator monitor unbundling?	Yes		Yes	Chapter 10, art 1 NGA
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Chapter 12 art 2 of the Electricity Act	Yes	Chapter 10, art 2 NGA
Does the regulator have the power to require companies to take unbundling measures?	Yes	Chapter 12 art 3 and art 7-8 of the Electricity Act	Yes	Chapter 10, art 3 NGA
Can the regulator impose remedies? [y/n]	Yes	Chapter 12 art 3 and art 7-8 of the Electricity Act	Yes	Chapter 10, art 3 NGA

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: Sweden	Electricity			Gas		
	1	2	3	4	5	6
TSO or DSO?	DSO	DSO	DSO	TSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	Yes (supply)	Yes (supply)
Position company holds within the integrated undertaking	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Parent	Parent
Legal regime governing the relation	Company Law	Company Law	Company Law	Company Law	Company Law	Company Law
Legally Unbundled?	Yes	Yes	Yes	Yes	Yes	Yes
Legal form chosen	Separate Company/Limited liability Company	Separate Company/Limited liability Company	Separate Company/Limited liability Company	Separate Company/Limited Liability Company	Separate Company/Limited Liability Company	Separate Company/Limited Liability Company
Functional unbundling	N/A	Yes	Yes	Yes	N/A	N/A
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	Yes	No	No	Yes	N/A	N/A
Management personnel of the company hold shares of related supply/generation company or division?	No	No	No	No	N/A	N/A

Common services shared by TSO/DSO and related supply/ generation companies or divisions? Which ones?	Yes (IT, accounting, cleaning and customer service)	Yes (IT, accounting, accommodation, education, customer service, billing and back offices)	No	Yes (legal, IT and accommodation)	N/A	N/A
Salary of management based on performance of other related supply/ generation companies or divisions?	Yes	No	Yes	No (bonus programme has been adopted)	N/A	N/A
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	Yes	No	No	No	N/A	N/A
Board members also responsible for activities in the supply and/ or generation?	Yes	No	No	Yes	N/A	N/A
Reasons for the removal of the executive director.	Annual election	Annual election	Annual election	Annual election	N/A	N/A
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	N	No	No	No	N/A	N/A
Involvement in the day-to-	Yes	No	No	No	N/A	N/A

day business of the company by other supply/generation operations?						
Effective decision making rights to operate network?	Yes	Yes	Yes	Yes	N/A	N/A
Compliance programme	Under preparation	Under preparation	Under preparation	Under preparation	No	No
Rules governing access for personnel on premises?	N/A	Yes	Yes	No	N/A	N/A
Penalties for violation of rules?	N/A	N/A	Yes	No	N/A	N/A
Monitoring of compliance programme?	N/A	N/A	Yes (managing director)	No	N/A	N/A
Separate location for network business?	Yes	Yes	Yes	Yes	N/A	N/A

17. THE NETHERLANDS

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

In 1998 the electricity industry in the Netherlands was fully reorganised by the Electricity Act 1998 (*Elektriciteitswet* 1998 or "Electricity Act"). The aim of the Electricity Act was to liberalise the Dutch electricity market by making the generation and supply of electricity more competitive. The Electricity Act imposed a legal unbundling requirement.

The Electricity Act requires each vertically integrated company involved in distribution to appoint a grid manager to manage its network. The grid manager has to be a separate legal entity. No supplier, generator or trader may be appointed a grid manager. The consent of the Minister of Economic Affairs to the appointment of a grid manager is required under art. 10 of the Electricity Act and the Policy Rule on the Appointment of Grid Managers (*Beleidsregel aanwijzing netbeheerders*).

The Electricity Act was in effect before the Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC (the "Electricity Directive") entered into force. Many of the unbundling provisions in the Electricity Directive had already been provided for in the Electricity Act and thus were already in effect. Dutch lawmakers implemented the other provisions of the Electricity Directive by introducing an amending act to the Electricity Act. Thus, even though the amending act was not a word-for-word copy of the Electricity Directive, the substantive requirements set out in the Electricity Directive are being met in the Netherlands. In addition to implementing the Electricity Directive, this amending act contains rules on tightening the regulator's control over the DSOs in order to ensure DSO independence from others within the same group.

The regulator is the Office of Energy Regulation (in Dutch: "Directie Toezicht Energie" or "DTe"). The DTe started its operations on 1 August 1998. On 1 July 2005, the DTe became part of the Netherlands Competition Authority (in Dutch: "Nederlandse Mededingingsautoriteit" or "NMa"). All powers formerly held by the DTe are now held by the board of directors of the NMa, which is now responsible for both energy regulation and the enforcement of competition law. The DTe has the general task of carrying out activities relating to the implementation of the Electricity Act and supervising compliance with the Electricity Act and its secondary regulations.

In order to ensure compliance with the Electricity Act, the board of directors of the NMa has the power to impose a binding instruction. Further, the board of directors of the NMa can issue an order accompanied by a periodic payment penalty for non-compliance (*last onder dwangsom*) and/or impose a fine if the unbundling provisions in the Electricity Act are not complied with. Furthermore, the board of directors of the NMa is also tasked with acting as a dispute settlement authority. In addition, the Minister of Economic Affairs has the power to withdraw his or her consent to the appointment of a grid manager and to appoint another grid manager if compliance with the unbundling requirements is no longer guaranteed.

Chronology	Legal instruments
<ul style="list-style-type: none"> ❖ <u>1998</u>: Electricity Act ❖ <u>1999</u>: Amendment of Electricity Act <ul style="list-style-type: none"> - more detailed grid management rules ❖ <u>1999</u>: Policy Rule on the Appointment of Grid Managers ❖ <u>2000</u>: Amendment of Electricity Act <ul style="list-style-type: none"> - amendments required by the Gas Act ❖ <u>2001</u>: Amendment of Electricity Act <ul style="list-style-type: none"> - rules on the termination of the association agreement of the electricity production industry and on the shareholding of the grid manager of the national high-voltage grid ❖ <u>2003</u>: Amendment of Electricity Act <ul style="list-style-type: none"> - rules on temporarily prohibiting the privatisation of grid managers ❖ <u>2004</u>: Amendment of Electricity Act <ul style="list-style-type: none"> - implementation of the Electricity Directive and rules to tighten supervision on grid management 	<ul style="list-style-type: none"> ❖ Electricity Act 1998 ❖ Policy Rule on the Appointment of Grid Managers 1999

TRANSMISSION

Electricity transmission in the Netherlands is carried out solely by TenneT B.V. TenneT is appointed as the grid manager of the high voltage net. TenneT has been unbundled in ownership terms since October 2001. The State owns 100% of the shares in TenneT. Before that, TenneT was legally unbundled on 1 August 1998.

The management and the majority of the executive board of TenneT may not have a direct or indirect association with a producer, supplier or a shareholder of the company. The appointment of the members of the executive board requires the approval of the Minister of Economic Affairs.

TenneT may not supply goods or services that result in competition between TenneT and third parties, unless this relates to carrying out activities in respect of the operation of the high voltage grid. Further, affiliates of TenneT may not carry out activities that do or may endanger the operation of the high voltage net by the designated TSO, TenneT. TenneT has no generation or supply affiliates.

DISTRIBUTION

There are 11 DSOs in the Netherlands. Five of these DSOs have fewer than 100.000 customers. The 100.000 customers exemption has not been endorsed in the Netherlands.

Two DSOs will be unbundled in ownership terms: Intergas Netbeheer B.V. and NRE Netwerk B.V. Moreover, the Minister of Economic Affairs has tabled a bill on ownership unbundling of the DSOs. This bill is referred to in Dutch as *Wijziging van de Elektriciteitswet 1998 en van de Gaswet in verband met nadere regels omtrent een onafhankelijk netbeheer, Kamerstuk nr. 30 212*. If this bill is enacted, all DSOs will have to be ownership unbundled on and after 1 January 2008. Ownership unbundling is still a much debated subject in the Netherlands.

The Electricity Act requires vertically integrated companies involved in distribution activities to appoint a grid manager to manage its network. This grid manager has to be a separate legal entity. No supplier, generator or trader may be appointed as a grid manager. The consent of the Minister of Economic Affairs to the appointment of a grid manager is required.

Further, in order to ensure the independence of the DSO, the Electricity Act and the Policy Rule on the Appointment of Grid Managers imposes the following obligations on DSOs that are part of a vertically integrated undertaking:

- No producer, supplier or trader is to be appointed a grid manager.
- The articles of association of a grid manager must include:
 - a. a provision for the appointment of a supervisory board;
 - b. a provision setting down that the members of the executive board and the majority of the members of the supervisory board must not have any direct or indirect affiliation to a producer, supplier or shareholder of the grid manager;
 - c. a provision setting down that major policy decisions as meant in articles 164 or 274 of the Dutch Civil code (*Burgerlijk Wetboek*) of the executive board of the legal entity require the approval of the supervisory board; and
 - d. a provision that the shareholders of the grid manager must refrain from any involvement in the performance of the duties assigned to the grid manager.
- The DSO must keep separate accounts for the duties assigned to the DSO.
- The DSO must have sufficient financial means to make the necessary investments in the grid.
- The DSO must not give a group company preferential treatment over others with which the group company is in competition and must not grant the group company privileges other than those that are customary in normal business practice.
- The DSO must draw up a discrimination prevention regulation
- The DSO must not enter into new cross-border leases and other forms of group financing unless this is done for its own public tasks.

There are around 45 suppliers. Of these, 37 suppliers are licensed by the regulator, DTe, to supply electricity to customers with a connection to the grid with a maximum transmission value of 3*80A. Most of the important operators in the industry each belong to a group of companies also active in the generation and/or supply of electricity.

The analysis of three vertically integrated DSOs confirmed the implementation of the unbundling requirements as contemplated in the Electricity Directive. As a result of the appointment of grid managers by the Minister of Economic Affairs and ongoing monitoring on the part of the regulator, companies have quite consistently complied with the legal and functional unbundling requirements.

All vertically integrated DSOs are legally unbundled and are operated through a separate subsidiary insulated from the competitive aspects of the market. Those responsible for the management of the DSO are not involved in the day-to-day operation of other operations (such as generation or supply). While there are certain services that are provided to the whole group by a central division, these common services tend to be invoicing, call centres, and general and technical services. In some cases the executive directors of the network company sit on the board of the group, but in no case are they responsible for activities in the competitive segments of the market (i.e. generation and supply). In addition, companies with supply and/or generation interests have no involvement in the day-to-day operations of the network business. Each has a compliance program to ensure that

independence between the operations is maintained. Each also has rules governing access of personnel to the premises and penalties for violating those rules. The compliance program is regularly monitored by the companies themselves, but also by the regulator, to whom they must report annually. One DSO looked at was located mostly in a separate location from the supply and/or generation related companies. Each DSO has located the network operations in a separate part of the shared office premises.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

In 2000 a new Gas Act (*Gaswet 2000* or "Gas Act") provided for the step-by-step liberalisation of the gas sector in the Netherlands. The goal was to secure the non-discriminatory provision of transport and storage services and to facilitate regulatory oversight of those operations

The Gas Act requires each integrated distribution company to appoint a grid manager to manage the network. The grid manager has to be a separate legal entity. No supplier, generator or trader may be appointed a grid manager. The consent of the Minister of Economic Affairs to the appointment of a grid manager is required under art. 10 of the Gas Act and the Policy Rule on the Appointment of Gas Grid Managers (*Beleidsregel aanwijzing netbeheerders gas*).

The Gas Act was in effect before the Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC (the "Gas Directive") entered into force. Many of the unbundling provisions in the Gas Directive had already been provided for in the Gas Act and thus were already in effect. Dutch lawmakers implemented the other provisions of the Gas Directive by amending the Gas Act by means of an amending act. Thus, even though the amending act was not a word-for-word copy of the Gas Directive, the substantive requirements set out in the Gas Directive are being met in the Netherlands. In addition to implementing the Gas Directive, this amending act contains rules on tightening the regulator's control over the DSOs in order to ensure DSO independence from others within the same group.

The regulator is the Office of Energy Regulation (in Dutch: "Directie Toezicht Energie" or "DTe"). The DTe started its operations on 1 August 1998. On 1 July 2005, the DTe became part of the Netherlands Competition Authority (in Dutch: "Nederlandse Mededingingsautoriteit" or "NMa"). All powers formerly held by the DTe are now held by the board of directors of the NMa, which is now responsible for both energy regulation and the enforcement of competition law. The DTe has the general task of carrying out activities relating to the implementation of the Gas Act and supervising compliance with the Gas Act and its secondary regulations.

In order to ensure compliance with the Gas Act, the board of directors of the NMa has the power to impose a binding instruction. Further, the board of directors of the NMa can issue an order accompanied by a periodic payment penalty for non-compliance (*last onder dwangsom*) and/or impose a fine if the unbundling provisions in the Gas Act are not complied with. Furthermore, the board of directors of NMa is also tasked with acting as a dispute settlement authority. In addition, the Minister of Economic Affairs has the power to withdraw his or her consent to the appointment of a grid manager and to appoint another grid manager if compliance with the unbundling requirements is no longer guaranteed.

<i>Chronology</i>	<i>Legal instruments</i>
<ul style="list-style-type: none"> ❖ <u>2000</u>: Gas Act ❖ <u>2000</u>: Policy Rule on the Appointment of Gas Grid Managers ❖ <u>2001</u>: Amendment of Gas Act <ul style="list-style-type: none"> - rules on the termination of the association agreement of the gas production industry and on the shareholding 	<ul style="list-style-type: none"> ❖ Gas Act ❖ Policy Rule on the Appointment of Gas Grid Managers

of the grid manager of the national gas grid	
❖ <u>2003</u> : Amendment of Gas Act - rules on temporarily prohibiting the privatisation of grid managers	
❖ <u>2004</u> : Amendment of Gas Act - implementation of the Directive and rules to tighten the supervision on grid management	

TRANSMISSION

Gas is an important source of energy in the Netherlands because of the large natural gas reserves in the Groningen field. Dubbed the "*Gasgebouw*", the gas infrastructure in the Netherlands has been developed and operating in the Netherlands since the early 1960s. N.V. Nederlandse Gasunie, the company that operates the transmission grid, was created as a joint venture owned by the Dutch State Mines (40%), the Dutch State directly (10%), Exxon (25%) and Shell (25%).

When the Gas Act entered into force in 2000, N.V. Nederlandse Gasunie administratively separated the operation of its transmission system from the conduct of its trading activities. On 1 August 2004, N.V. Nederlandse Gasunie was legally unbundled. The TSO was Gas Transport Services B.V. On 1 July 2005, N.V. Nederlandse Gasunie was split into two autonomous companies and the TSO was unbundled in ownership terms. Since then, N.V. Nederlandse Gasunie has been carrying out the duties of the TSO. The State owns 100% of the shares in the TSO. N.V. Nederlandse Gasunie has no generation or supply affiliates.

The management and the majority of the executive board of the TSO may have no direct or indirect association with a producer, supplier or shareholder of such company. The appointment of the members of the executive board requires the approval of the Minister of Economic Affairs.

The TSO may not supply goods or services that result in competition between the TSO and third parties unless this relates to carrying out activities in respect of the operation of the grid. Further, affiliates of the TSO may not carry out activities that do or may endanger the operation of the transmission system by the TSO.

DISTRIBUTION

The Gas Act entered into force on 10 August 2000. The Gas Act requires each integrated distribution company to appoint a grid manager for the management of its network. This grid manager has to be a separate legal entity. Suppliers, generators and traders may not be appointed a grid manager. The consent of the Minister of Economic Affairs to the appointment of a grid manager is required.

Further, in order to ensure the independence of the DSO, the Gas Act and the Policy Rules on the Appointment of Gas Grid Managers impose obligations on DSOs that are part of a vertical integrated undertaking:

- The articles of association of the DSO must include:
 - a. a provision for the appointment of a supervisory board;
 - b. a provision setting down that the members of the executive board and the majority of the members of the supervisory board must not have any direct or indirect affiliation to a producer, supplier or shareholder of the grid manager;

- c. a provision setting down that major policy decisions as meant in articles 164 or 274 of the Dutch Civil code (*Burgerlijk Wetboek*) of the executive board of the legal entity require the approval of the supervisory board; and
- d. a provision that the shareholders of the grid manager must refrain from any involvement in the performance of the duties assigned to the grid manager.
 - The DSO must keep separate accounts for the duties assigned to the DSO.
 - The DSO must have sufficient financial means to make the necessary investments in the grid.
 - The DSO must not give a group company preferential treatment over others with which the group company is in competition or grant the group company privileges other than those that are customary in normal business practice.
 - The DSO must draw up a discrimination prevention regulation.

There are 15 DSOs, six of which have less than 100.000 customers. There are around 35 suppliers. Of these, 28 suppliers are licensed by the regulator, DTe, to supply gas to customers with an expected yearly consumption of less than 170.000 m³ gas. Most of the important operators in the industry each belong to a group of companies that is also active in the generation and/or supply of electricity.

An analysis of three vertically integrated DSOs confirmed that the unbundling requirements contemplated in the Gas Directive have been implemented. As a result of the appointment of grid managers by the Minister of Economic Affairs and the ongoing monitoring on the part of the regulators, companies have quite consistently complied with the legal and functional unbundling requirements.

All vertically integrated DSOs are legally unbundled and are operated through a separate subsidiary insulated from the competitive aspects of the market. Those responsible for the management of the DSO are not involved in the day-to-day operation of other operations (such as generation or supply). While there are certain services that are provided to the whole group by a central division, these common services tend to be invoicing, call centres, and general and technical services. The executive directors of the network company are not responsible for activities in the competitive segments of the market (i.e. generation and supply). In addition, companies with supply and/or generation interests have no involvement in the day-to-day operations of the network business. Each has a compliance program to ensure that independence between the operations is maintained. Each also has rules governing access of personnel to the premises and penalties for violating those rules. The compliance program is regularly monitored by the companies themselves, but also by the regulator, to whom they must report annually. One DSO examined was located in a location separate from the supply and/or generation related companies.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: The Netherlands	Electricity	Relevant provision - source & date	Gas	Relevant provision - source & date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed?	Yes	<p>The Directive was implemented by an amendment to the Electricity Act (<i>Elektriciteitswet 1998</i>). The amendment was published in the Bulletin of Acts and Decrees 2004, no. 328</p> <p>Art. 10 and 15 of the Directive are implemented in art. 11, 11a and 11b of the Electricity Act.</p> <p>The option mentioned in art. 17 of the Directive has not been implemented.</p> <p>Art. 19 of the Directive is implemented in art. 43 and 86(1) of the Electricity Act</p>	Yes	<p>The Directive was implemented by an amendment to the Gas Act (<i>Gaswet 2000</i>). The amendment was published in the Bulletin of Acts and Decrees 2004, no. 328</p> <p>Art. 9 and 13 of the Directive are implemented in art. 3, 3a, 3c and 7 of the Gas Act.</p> <p>Art. 15 of the Directive is implemented as part of the system provided for in the Gas Act.</p> <p>Art. 17 of the Directive is implemented in art. 32 of the Gas Act.</p>
Number of TSOs	1	N/A	1	N/A
Number of DSOs	11	N/A	15	N/A
How many of these DSOs have less than 100.000	5	N/A	6	N/A

customers?				
TSO Unbundling regime	Ownership unbundled. The law requires legal, functional and accounting unbundling.	Art. 10 and 15 of the Directive are implemented in art. 11, 11a and 11b of the Electricity Act. Art. 19 of the Directive is implemented in art. 43 and 86(1) of the Electricity Act	Ownership unbundled. The law requires legal, functional and accounting unbundling.	Art. 9 and 13 of the Directive are implemented in art. 3, 3a, 3c and 7 of the Gas Act. Art. 17 of the Directive is implemented in art. 32 of the Gas Act.
DSO unbundling regime	Legal, Functional and Accounting	Provisions on legal unbundling: art. 10(3) and 11(1) of the Electricity Act Provisions on functional and financial independence of the grid manager: art. 11, 11b and 12 of the Electricity Act Art. 19 of the Directive is implemented in art. 43 and 86(1) of the Electricity Act	Legal, Functional and Accounting	Provisions on legal unbundling: art. 2(1), 3(1) and 3(3) of the Gas Act Provisions on functional and financial independence of the grid manager: art. 3 and 3c of the Gas Act Art. 17 of the Directive is implemented in art. 32 of the Gas Act.
Postponement until 1 July 2007 of legal unbundling for larger DSOs?	No	N/A	No	N/A
100.000 customer exemption [y/n]	No	N/A	No	N/A
How many DSOs are excluded [number]	0	N/A	0	N/A
Share (%) of customers not benefiting from unbundling as	N/A	N/A	N/A	N/A

a result of 100.000 customer rule				
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	Yes, all companies comply with the unbundling rules of the Electricity Directive	N/A	Yes, all companies comply with the unbundling rules of the Gas Directive	N/A
The Regulator [name]	Office of Energy Regulation (DTe)	Not available	Office of Energy Regulation (DTe)	Not available
Does the regulator monitor unbundling?	Yes	Not available	Yes	Not available
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Art. 7 of the Electricity Act	Yes	Art. 34 of the Gas Act
Does the regulator have the power to require companies to take unbundling measures?	Yes	By imposing a binding instruction: art. 5(5) of the Electricity Act By imposing an order: art. 77h of the Electricity Act By imposing a fine: art. 77i of the Electricity Act	Yes	By imposing a binding instruction: art. 60c of the Gas Act By imposing an order: art. 60 ac Gas Act By imposing a fine: art. 60ad Gas Act
Can the regulator impose remedies? [y/n]	Yes	By imposing a binding instruction: art. 5(5) of the Electricity Act By imposing an order: art. 77h of	Yes	By imposing a binding instruction: art. 60c of the Gas Act By imposing an order: art. 60ac

		<p>the Electricity Act</p> <p>By imposing a fine: art. 77i of the Electricity Act</p> <p>Dispute settlement: art. 51 of the Electricity Act</p>		<p>of the Gas Act</p> <p>By imposing a fine: art. 60ad of the Gas Act</p> <p>Dispute settlement: art. 19 of the Gas Act</p>
<p>Have there been any complaints and/or decisions of the regulator on unbundling?</p>	No	N/A	No	N/A

Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: The Netherlands	Electricity			Gas		
	1	2	3	4	5	6
TSO or DSO?	DSO	DSO	DSO	DSO	DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	Yes	Yes
Position company holds within the integrated undertaking	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary
Legal regime governing the relation	Electricity Act; art. of association; the Dutch Civil Code	Electricity Act; art. of association	Electricity Act; art. of association	Gas Act; art. of association; the Dutch Civil Code	Gas Act; art. of association	Gas Act; art. of association
Legally Unbundled?	Yes	Yes	Yes	Yes	Yes	Yes
Legal form chosen	LLC	PLC	LLC	LLC	PLC	LLC
Functional unbundling	Yes	Yes	Yes	Yes	Yes	Yes
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions?	Not available	Not available	Not available	Not available	Not available	Not available
Management personnel of the company hold shares of related supply/generation	No	No	No	No	No	No

company or division?						
Common services shared by TSO/DSO and related supply/ generation companies or divisions? Which ones?	Yes, invoicing.	Yes, call centre, invoicing, accounting, automation, general and technical services	Yes, invoicing, customer contract, IT, accommodations, cleaning	Yes, invoicing.	Yes, call centre, invoicing, accounting, automation, general and technical services	Yes, accommodations, cleaning, HRM, various other services.
Salary of management based on performance of other related supply/ generation companies or divisions?	Yes	Yes	Yes	Yes	Yes	No
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	No	No	No	No	No	No
Board members also responsible for activities in the supply and/ or generation?	No	No	No	No	No	No
Reasons for the removal of the executive director.	General meeting of shareholders can dismiss directors at any time.	General meeting of shareholders can dismiss directors under art. 2:132 and 2:134 of Dutch Civil Code.	General meeting of shareholders can dismiss directors at any time.	General meeting of shareholders can dismiss directors at any time.	General meeting of shareholders can dismiss directors under art. 2:132 and 2:134 of Dutch Civil Code.	General meeting of shareholders can dismiss directors at any time.
Company holding shares of the holding company of the	No	No	No	No	No	No

Group or of related supply/generation companies of the Group?						
Involvement in the day-to-day business of the company by other supply/generation operations?	No	No	No	No	No	No
Effective decision making rights to operate network?	No	Yes	Yes	No	No	Yes
Compliance programme	Yes	Yes	Yes	Yes	Yes	Yes
Rules governing access for personnel on premises?	Yes	Yes	Yes	Yes	Yes	Yes
Penalties for violation of rules?	Yes	Yes	Yes	Yes	Yes	Yes
Monitoring of compliance programme?	Yes	Yes	Yes	Yes	Yes	Yes
Separate location for network business?	Mostly	No	No	Mostly	No	Yes

18. UK

A. Electricity: Overview of the legal and practical implementation of the unbundling provisions of the Electricity Directive

There are two separate regimes in the UK: one covering Great Britain (GB) and one for Northern Ireland.

Great Britain

The electricity industry was fully reorganised in the 1990s in GB under the Electricity Act 1989 with a view to privatisation and the creation of competition in electricity generation and supply. At privatisation, distribution and supply were carried out by the regional electricity companies. It was not until the Utilities Act 2000 that the legal separation of distribution and supply (with a separate licensing regime for each) was required. Electricity transmission and electricity distribution are both licensed activities.

The Directive 2003/54/EC (the “Electricity Directive”) has, therefore, been implemented in GB through the licensing regime. The licence conditions reflect the concerns and rationale behind the Directive. Licences are issued by Ofgem³³ and companies are required to comply with the licence conditions. As such, the licence conditions are not a word for word copy of the unbundling provisions of the Electricity Directive, however, the substantive requirements in the UK are met. The 100.000 customer exemption has not been endorsed in GB, and in any case it would have been inapplicable, as none of the DSOs has less than 100.000 customers.

Significant changes have been made to the regulatory and ownership structure of the electricity industry and the industry has been the subject of substantial merger and acquisition activity. The Energy Act 2004 made some further changes to the energy industry in GB.

The Energy Act 2004 enabled the BETTA (British Electricity Trading and Transmission Arrangements) reforms, whose objective is to introduce a common set of rules for access to the transmission network, and a system operator, for the whole of Great Britain independent of generation and supply.

BETTA introduced a single GB-wide set of arrangements for trading energy and for access to and use of the transmission system, which came into effect on 1 April 2005. The arrangements apply to England, Wales and Scotland.

The Secretary of State for Trade and Industry exercised its powers under the Energy Act 2004 to amend the transmission, generation, distribution and supply licenses, to give effect to these changes and to establish a single code governing contractual and other arrangements between operators.

<i>Chronology</i>	<i>Instruments of law</i>
❖ <u>1990</u> : Electricity Act 1989 – privatisation	❖ Electricity Act 1989
❖ <u>2000</u> : Utilities Act – separation of distribution and supply with separate licensing regime for	❖ Utilities Act 2000
	❖ Energy Act 2004

³³ The Office of Gas and Electricity Market (Ofgem) is the administrative body supporting the regulator in Great Britain, the Gas and Electricity Market Authority (GEMA).

<p>each</p> <ul style="list-style-type: none"> ❖ <u>2001</u>: NETA (New Electricity Trading Arrangements) – single code for contractual arrangements for use of transmission system to enable competition in generation and supply ❖ <u>2004</u>: Energy Act – enabled BETTA reforms ❖ <u>2005</u>: BETTA (British Electricity Trading and Transmission Arrangements) - commons set of rules for access to transmission network and GB system operator (Scottish Power (SP) and Scottish and Southern Energy (SSE) no longer operate the transmission systems for Scotland). 	<ul style="list-style-type: none"> ❖ Licences
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TRANSMISSION

As a result of the BETTA reforms, electricity transmission in Great Britain is *operated* solely by the National Grid Electricity Transmission plc (a subsidiary of National Grid plc), the GB system operator. Ownership of the transmission system, however, remains fragmented (National Grid for England and Wales, and Scottish Power (SP) and Scottish and Southern Energy (SSE) for Scotland). Therefore, while in terms of *ownership* there are three TSOs in GB, in terms of *operation* there is only one, NGET.

NGET has no generation or supply affiliates, and is prevented by licence from having any.

The reforms ensure that the transmission system operator has no incentive towards favouring its own upstream or downstream business, and that those seeking access to the system will be able to obtain it on non-discriminatory terms.

The electricity transmission licence conditions require unbundling in functional terms. Amongst others the conditions require:

- ❖ Condition B6(1): The system operator not to own any electricity supply or generation interests.
- ❖ Condition B6: Restriction on activity and financial ring fencing. The licensee may only conduct transmission business. It may also not hold or acquire shares or other investments of any kind (except as provided in the provision).
- ❖ Special Condition E: requires non-discrimination in the provision of use of interconnectors. Special Condition G: prohibits preferential or discriminatory behaviour as between transmission licensees. Condition D5: Prohibition on engaging in preferential or discriminatory behaviour; licensee to maintain records of compliance.
- ❖ Special Condition I: Restrictions on use of information deriving from the EnMo business Special Condition M. Restrictions on the use of certain information.
- ❖ Special Condition I: Obligations on licensee to deliver evidence of compliance and in case where confidential information comes to the possession of the licensee it shall ensure it is treated as confidential.

- ❖ Special Condition N: Appointment of compliance officer. The licensee is required to procure the compliance officer with the staff, premises, equipment, facilities and other resources; and ensure he/she has such access to the licensee's premises, systems, information and documentation as he/she might reasonably expect to fulfil his/her tasks. As soon as is reasonably practicable following each annual report of the compliance officer, the licensee shall produce a report. The compliance officer must report annually to the directors of the licensee, and then produce a report as to compliance and implementation of the practices detailing the number and nature of complaints, the outcome of investigation and any remedial action taken. A copy of the report shall be submitted to the Authority and to any person who requests a copy.

The independent operation of TSOs is perceived as paramount in GB. It is felt that in the absence of ownership links to generators or to suppliers, TSOs have no incentive to discriminate between market participants. It is for this reason that the BETTA reforms extending the independent operation of TSOs to Scotland (where previously there had been two VIUs *operating* the transmission systems as well as having generation and supply interests) are seen as an important development; *operational* decisions now are taken by a strictly independent TSO.

Our analysis of sample companies for electricity included NGET, despite it not being vertically integrated, as the only TSO *operator* for electricity. Despite SSE and SP having *ownership* interests in TSOs, the operation is conducted by NGET through a separate company so as to ensure the complete independence from the competitive businesses. Hence, the operation of the TSO for GB is conducted through a separate company with no supply or generation interests, and with no involvement in the day-to-day operation of the business from other operations. There are effective decision-making rights in respect of the assets necessary to operate, maintain and develop the network and there is regular monitoring of compliance from Ofgem/GEMA.

DISTRIBUTION

As regards distribution (like other activities), in order to be able to distribute electricity in GB, a distribution network operator must hold a licence. There are 14 authorised areas in GB, which, following a number of mergers and acquisitions since 1990, are held by seven different groups (licences are held by separate companies).

In the case of DSOs, while again the main concern is whether there is any risk of discrimination in the area of operational decision-making, the commercial impact on the market is perceived as being smaller. Nonetheless, maintaining separation between the network business and the competitive market business is seen as important, and for this reason, there are strict regulations to ensure competition is not distorted.

DSOs are regulated by Ofgem/ GEMA to protect consumers from potential abuse of their monopoly power. Regulation is done through licence conditions, and through price controls which are set every five years. Separation is most important in the case of management, information, operation and prices.

DSOs are a licensed activity under the Electricity Act. The Utilities Act requires distribution and supply to be legally separated. In addition, the licences require managerial and operational independence to prevent suppliers' or shippers' access to confidential information and to ensure competition. In summary, in the distribution licence:

- ❖ Standard Condition 39 requires full managerial and operational independence of distribution business and restricts the disclosure of confidential information.
- ❖ Standard Condition 40 outlines the terms of appointment of a compliance officer; the licensee is required to procure the compliance officer with the staff, premises, equipment, facilities and other resources, and ensure he has such access to the licensee's premises, systems, information and documentation as he

might reasonably expect to fulfil his tasks. Companies are required to produce a statement of compliance that is reviewed by Ofgem annually.

- ❖ Condition 41 prohibits cross-subsidies.
- ❖ Condition 43 sets out the terms for financial ring-fencing.
- ❖ DSOs also have the obligation to ensure that they do not restrict, prevent or distort competition in the supply of electricity or gas or the shipping of gas or the generation of electricity. (Standard Condition 39(3)).

There are around 80 licensed suppliers and 80 generators in GB, 66 of which are independent of DSOs (Benchmark Report). Most big distribution operators in the industry belong to a Group of companies, active also in generation and/or supply of electricity. For example, SP, SSE, EdF, E.ON, Aquila and MidAmerican Energy, are subsidiaries of Groups active in distribution, generation and supply of electricity. The unbundling requirements, however, apply to all of the companies, as GB has not endorsed the 100.000 customer exemption, and in any case not DSO has less than 100.000 customers.

The analysis of four vertically integrated DSOs (EdF, Scottish Power, SSE and E.ON) confirmed the implementation of the unbundling requirements as contemplated in the Electricity Directive. Due to the specific licence conditions and the ongoing monitoring on the part of the regulators, companies have consistently complied with the legal and functional unbundling requirements.

All vertically integrated DSOs are legally unbundled and the operations are done through a subsidiary separate company, insulated from the competitive segments of the market. Those responsible for the management of the DSO are not involved in the day-to-day operation of other operations (such as generation or supply). While there are certain common services covering the Group, they tend to cover legal, IT, HR, corporate pensions and finance areas. In some of the cases the executive directors for the network company sit on the Board of the Group, but in no case are they responsible for the activities in the competitive segments of the market (i.e. generation and supply). In addition, there is no involvement from the companies with supply and/or generation interests in the day-to-day operations of the network business. There is a compliance programme in all cases to ensure that independence between the operations is maintained, rules governing access of personnel on premises and penalties for violations for those rules. The compliance programme is regularly monitored by the companies themselves, and also from the regulator, to whom they annually report. All DSOs examined were also located in a separate location from the supply and/or generation subsidiary companies.

Northern Ireland

As regards Northern Ireland, the Department of Enterprise, Trade, and Investment (DETI) consulted in January 2005 on the implementation of the Electricity Directive. In August 2005, the Electricity Order 1992 (Amendment) Regulations (Northern Ireland) 2005 came into effect to implement the Electricity Directive.

Electricity transmission system operation in Northern Ireland is conducted by the System Operator, Northern Ireland Ltd (SONI). SONI is a subsidiary of Northern Ireland Electricity plc (NIE) which belongs to the Viridian Group of companies. NIE is "vertically integrated", that is, in addition to its transmission and distribution activities, it operates as an electricity supplier in Northern Ireland. However, SONI is legally unbundled from the supply activities by virtue of being a separate subsidiary of NIE. Functional unbundling is achieved through the separate management of SONI and through licence conditions enforced by NIAER that underpin its independence. A separate licence for SONI, under powers contained in the Energy (Northern Ireland) Order 2003 is being drafted.

Electricity distribution system operation in Northern Ireland is conducted by NIE's network business (NIE Infrastructure). Distribution is functionally unbundled from supply activities through separation of the management structure – again underpinned by licence conditions – which ensures that NIE Infrastructure management has no direct or indirect role in the operation of supply activities. Arrangements for the legal unbundling of distribution are being developed.

B. Gas: Overview of the legal and practical implementation of the unbundling provisions of the Gas Directive

Until the introduction of the Gas Act 1986 transportation, shipment and supply of gas in the UK was done by the state-owned British Gas Corporation. The Gas Act privatised British Gas, which was at the time vertically integrated and a monopoly gas supplier. In 1991, further to an effort of the OFT to increase competition in the industry, the supply and transportation business were accounted for separately. In 1995 British Gas transportation and storage operations were put into separate companies. Ownership separation however, did not occur until 1996 when British Gas was demerged into its transportation and supply operations, to form BG plc and Centrica respectively.

The Gas Act 1995 introduced a new licensing framework in the gas industry. Liberalisation of the gas market was completed in January 1998. The Utilities Act 2000 made further changes to the industry so as to facilitate further competition and introduce wider consumer, social and environmental concerns.

The Gas Act and the Utilities Act establish gas transport as a licensed activity. There is a separate licensing regime for each of gas transporters, shippers and suppliers. As a result, all gas transporters must hold a gas transporter (GT) licence.

The Gas Act provides that a licensee cannot hold both a gas transporter and a shipper and/or supplier licence. (Gas Act 1986 section 7(3) “A licence shall not be granted [for gas transporters] to a person who is the holder of a licence under section 7A below [gas supplier and shipper]”). This is so as to ensure that suppliers and shippers are given access to gas on non-discriminatory terms. It is possible, however, to have a separate ring-fenced company holding a licence for transport within a Group of companies, which includes a company licensed to supply/ and or ship. The GT licence contains standard conditions, an important one being the establishment of a network code to govern the relation between the shippers and the transporter.

Therefore, the substantive requirements of the unbundling provisions of the Directive 2003/55/EC (the “Gas Directive”) are met through the general framework and legal separation required by the Gas Act (1986 and 1995), and through the standard licence conditions imposed by Ofgem to ensure functional independence of the various operations. The Gas Act establishes gas transportation (transmission and distribution) as a licensed activity not to be held by a licensee of a gas shipping or supply. The requirements of the unbundling regime are met through the Transporters’ Licence and the Network Code. The GT licence requires transporters to create a network code to govern the relation of the transporter with the suppliers and shippers and ensure open and non-discriminatory access to the network. All network operators need to comply with the unbundling requirements, as GB has not endorsed the 100.000 customer rule and in any case no DSO has less than 100.000 customers.

<i>Chronology</i>	<i>Instruments of law</i>
❖ <u>1986</u> : Gas Act – privatisation	❖ Gas Act 1986
❖ <u>1991</u> : OFT tries to increase competition – separate accounting for supply and transport	❖ Gas Act 1995
❖ <u>1995</u> : Gas Act – new licensing framework, transport and storage put in separate companies	❖ Utilities Act 2000
❖ <u>1996</u> : British Gas demerged - ownership	❖ Energy Act 2004
	❖ Licences

separation of transport (BG plc) and supply (Centrica) operations	
❖ <u>1998</u> : Liberalisation completed	
❖ <u>2000</u> : Utilities Act – further changes to increase competition	
❖ <u>2005</u> : National Grid sells four (of the eight) distribution networks	

TRANSMISSION

As in the case of electricity, so in gas the independent operation of TSOs is perceived as paramount. It is felt that in the absence of ownership links with the users of the gas transmission network TSOs have no incentive to discriminate between market participants.

There is one gas TSO, Transco, a subsidiary of National Grid plc, which owns and operates the National Transmission System. As in the case of electricity, the gas licence is held by a separate company (Transco) within the group. Transco is not a vertically integrated company and no group companies, subsidiaries or affiliates have any supply and/or generation interests.

DISTRIBUTION

There are eight distribution networks in GB, which until recently were all owned and operated by Transco, a subsidiary of National Grid plc. In June 2005, however, NGT sold four distribution networks, two of which were acquired by SSE. SSE is the only gas network operator to be part of a Group that has interests in gas supply and/or generation, and hence to be a vertically integrated undertaking. None of the DSOs has less than 100.000 customers.

In the case of DSOs, while again the main concern is whether there is any risk of discrimination in operational decision-making, the commercial impact on the market is perceived as being smaller than in the case of TSOs. Nonetheless, maintaining separation between the network business and the competitive market business is seen as important, and for this reason, there are strict regulations to ensure competition is not distorted.

Similarly to the case of electricity, in gas, regulation is effected through licence conditions, and through price controls which are set every five years. Separation is most important in the case of management, information, operation and prices.

The gas transporters' licence consists of Standard Licence conditions that require unbundling in functional terms. Amongst other, the SLC requires that:

- ❖ the branding of the network business is fully independent from the branding of other activities (such as supply and trading) (Standard Special Condition A33: restriction on use of information and independence of transportation business);
- ❖ there are financial ring-fence conditions and specific regulatory accounts conditions (Standard Special Condition A30: Regulatory Accounts);
- ❖ there is a prohibition on cross-subsidies (Standard Special Condition A35: Prohibition of Cross Subsidies);

- ❖ there is a compliance officer restricting the use of certain information and ensuring the independence of the transportation business (Standard Special Condition A34: Appointment of Compliance Officer);
- ❖ as regards common costs (and the like) that there is no cross subsidy between entities and that they enter agreements on an arms' length basis (Standard Special Condition A33: Restriction on Use of Information and Independence of the Transportation Business).

Our analysis of sample companies for gas included Transco, despite the fact that Transco is not strictly vertically integrated, as the only TSO for gas, and also included SSE, the only DSO in gas to be a VIU. Our study suggests that like in electricity, in gas the implementation of the unbundling provisions of the Gas Directive has been complete and there are many measures in place which are regularly monitored to ensure the independence of the network from the competitive businesses. The network operation is carried out through a separate subsidiary company that is legally and functionally unbundled. Those responsible for the management of the company are not involved in the day-to-day operation of other operations and vice-versa. While some senior personnel of the network department sit on the Board of the Group, the DSO Board members are not responsible for supply and/or generation activities. A compliance system is in place and there are penalties for violation of the rules and regular monitoring both from the company itself and the regulator. The network business is also separately located from the supply business.

Northern Ireland

In Northern Ireland, DETI is currently consulting on the implementation of the unbundling regime which is due to take effect at the beginning of 2006. There is hence, currently, no legal and functional unbundling requirement. No companies from Northern Ireland were part of our sample.

C. Summary tables

Overview of the Legal Implementation of the Electricity and Gas Directives

Country: UK	Electricity	Relevant provision/ source and date	Gas	Relevant provision/ source and date
Have the unbundling provisions of the Directives on Electricity and Gas been transposed? [y/n]	Yes	Electricity Act 1989 Utilities Act 2000 Licences (Distribution Licences)	Yes	Gas Act 1986, 1995 Utilities Act 2000 Licences (Gas Transporters licence; National Transmission System (NTS) operator licence)
Number of TSOs	1 TSO operated by NGC but owned by NGC in England and Wales and SP and SSE in Scotland. ³⁴	BETTA reforms April 2005 establishing NGC as transmission system operator for GB.	1	
Number of DSOs	14		4 (plus 14 IGTs)	
How many of these DSOs have less than 100.000 customers?	0		0	
TSO Unbundling regime	Legal and functional (Ownership in terms of operation)	Ibid; as per Benchmark report 2005.	Ownership	Ibid; as per Benchmark report 2005.
DSO unbundling regime	Legal and functional.	Benchmark report 2005.	Ownership until SSE got 2 distribution networks (DNs) in June 2005. Now legal and functional.	In view of the changes involving SSE the findings of the Benchmark report have changed.
Postponement until 1 July 2007 of legal unbundling for	No		No	

³⁴ National Grid Company (NGC), Scottish Power (SP), Scottish and Southern Energy (SSE)

larger DSOs?				
100.000 customer exemption [y/n]	No		No	
How many DSOs are excluded [number]	N/A		N/A	
Share (%) of customers not benefiting from unbundling as a result of 100.000 customer rule	N/A		N/A	
Unbundling by companies finalised to comply with the unbundling rules of the Directives?	Yes		Yes	
The Regulator [name]	Ofgem		Ofgem	
Does the regulator monitor unbundling?	Yes	Licences and competition law.	Yes	Licences and competition law.
Does the regulator have powers to collect information on unbundling in a given company?	Yes	Licences/ competition law.	Yes	Licences/ competition law.
Does the regulator have the power to require companies to take unbundling measures?	Yes	Licences	Yes	Licences
Can the regulator impose remedies? [y/n]	Yes; financial penalties for breach of licence conditions. Competition law remedies (civil and criminal).		Yes; financial penalties for breach of licence conditions. Competition law remedies (civil and criminal).	
Have there been any complaints and/or decisions	Not recorded		Not recorded	

of the regulator on unbundling?				
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Overview of the Practical Implementation of the Electricity and Gas Directives in the Sample Companies

Country: UK	Electricity						Gas	
	1	2	3	4	5	6(a)	6(b)	7
TSO or DSO?	DSO	DSO	TSO/DSO	TSO/DSO	DSO	TSO	TSO/DSO	DSO
Vertically integrated in production and/or supply?	Yes	Yes	Yes	Yes	No	No	No	Yes
Position company holds within the integrated undertaking	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary	Subsidiary
Legal regime governing the relation	Company law	Company law	Company law	Company law	Company law	N/A	N/A	Company law
Legally Unbundled?	Yes	Yes	Yes	Yes	N/A ³⁵	N/A	N/A	Yes
Legal form chosen	PLC	PLC	LLC, PLC	LLC	N/A	N/A	N/A	LLC
Functional unbundling	Yes	Yes	Yes	Yes	N/A	N/A	N/A	Yes
Management of company directly or indirectly involved in day-to-day operation of other related supply/generation companies of the group or divisions ?	No	No	No	No	N/A	No.	No.	No
Management personnel of the company hold shares of related supply/generation company or division?	N/A	No. Some staff have shares in the Group	Opportunity to participate in share purchase scheme in quoted plc	No	N/A	N/A	N/A	Of Group
Common services shared by	Yes	Yes	Yes	Yes	N/A	N/A	No.	No

³⁵ N/A in this context refers to Not Applicable as the company is not a vertically integrated undertaking and so these requirements do not apply to it.

TSO/DSO and related supply/ generation companies or divisions? Which ones?	Legal, facilities, property, corporate pensions etc	IT, HR, legal and finance	Finance, HR, Procurement, Corporate pensions	Legal, IT, finance				
Salary of management based on performance of other related supply/ generation companies or divisions?	Yes Partly- bonus	Yes Of company as a whole	Yes	Yes Bonus	Yes Partly	N/A	N/A	Yes
Executive director for network department sitting on the Board of related supply/ generation companies or divisions?	2/3 directors	Yes	Recent organisation restructuring so yet to be confirmed.	No Company's board comprises of non-executive directors	Yes Some senior personnel	N/A	N/A	Yes Some senior personnel
Board members also responsible for activities in the supply and/ or generation?	No	No Board members responsible for the group as a whole but no management roles	No	No	N/A	N/A	N/A	No
Reasons for the removal of the executive director.	Articles of association	Articles of association	Code of conduct	Resolution of shareholders	Company law	N/A	N/A	Resolution of shareholders
Company holding shares of the holding company of the Group or of related supply/generation companies of the Group?	No	No	No	No	N/A	N/A	N/A	No

Involvement in the day-to-day business of the company by other supply/generation operations?	No	No	No	No	N/A	No	No.	No
Effective decision making rights to operate network?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Compliance programme	Yes	Yes	Yes	Yes	N/A	Yes.	Yes.	Yes
Rules governing access for personnel on premises?	Yes	Yes	Yes	Yes	N/A	N/A	Yes. Transporters Licence A33.	Yes
Penalties for violation of rules?	Yes	Yes	Yes	Yes	N/A	N/A	N/A	Yes
Monitoring of compliance programme?	Yes	Yes	Yes	Yes	N/A	Yes.	Yes.	Yes
Separate location for network business?	Yes	Yes	Yes	Yes	No	N/A	N/A	Yes