

European gas market indicators of the liberalisation process 2004 – 2005

Statistics in focus

ENVIRONMENT AND
ENERGY

8/2006

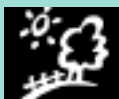
Energy

Author

John GOERTEN
Emmanuel CLEMENT

Contents

Highlights	1
Introduction	2
Production and import	2
Natural gas trade.....	4
Natural gas retailing	4



Manuscript completed on: 12.06.2006
Data extracted on: 03.05.2006
ISSN 1562-3106
Catalogue number: KS-NQ-06-008-EN-N
© European Communities, 2006

Highlights

- According to the European Gas directive, all consumers will be free to choose their gas supplier from July 2007 onwards. For industrial consumers the market has been open for several years.
- A full market opening by September 2005 was declared by Denmark, Germany, Spain, Italy, the Netherlands, Austria and the United Kingdom. Significant changes in market opening were recently registered in Lithuania, Poland and Slovakia.
- Most gas retailers were registered in Germany and Italy followed at a considerable distance by Poland and Spain.
- The retail market remains in the hand of a single supplier in Latvia and Slovakia.

Table 1: Degree of market opening as of September 2005

	Declared market opening	Eligibility threshold	Size of open market (in billion m ³)
Belgium	90%	Full ¹	11
Czech Republic	25%	not available	3
Denmark	100%	Full	5
Germany	100%	Full	82
Estonia	95%	non HH	1
Greece		no information	
Spain	100%	Full	20
France	70%	non HH	28
Ireland	86%	non HH	3
Italy	100%	Full	62
Cyprus		no significant natural gas distribution	
Latvia	0%	not available	0
Lithuania	90%	non HH	3
Luxembourg	80%	non HH	1
Hungary	66%	non HH	8
Malta		no significant natural gas distribution	
Netherlands	100%	Full	38
Austria	100%	Full	7
Poland	72%	non HH	5
Portugal		no information	
Slovenia	91%	non HH	1
Slovakia	72%	non HH	24
Finland		no information	
Sweden	95%	non HH	1
United Kingdom	100%	Full	95

1: in the Flanders region only, non-households (non-HH) in other regions.

Source: DG TREN, on the basis of information provided by Regulators in the Member States.

Introduction

The data presented in this publication are essentially based on the results of a questionnaire-based data collection aiming at monitoring competition in the gas market.

The Gas Directive 2003/55/EC is the key European legislation to establish the Internal Market for Gas. The directive had to be implemented by 1 July 2004. From July 2007 at the latest, all consumers will be free to choose their gas supplier. The current supplier should no longer be the only choice. The market for large consumers has been open for several years. For smaller commercial customers and households, market opening is rather recent or, in certain cases, not yet existent.

Table 1 outlines the state of progress of the liberalisation process and expresses the degree of market opening as of September 2005. The market opening is defined as the percentage of the total

natural gas consumed by those customers that are given the choice of their natural gas supplier (eligible consumers).

In September 2005 full market liberalisation was completed in Denmark, Germany, Spain, Italy, the Netherlands, Austria and the United Kingdom. The eligibility threshold shows that for certain countries the freedom to choose supplier is still limited to non-household customers (households should have the choice of their retailers from July 2007 onwards).

The following pages give an overview of the situation in the individual countries and notably outline number and importance of both gas producers/importers and gas retailers. It should be borne in mind that the information on the following pages refers to the reference years 2003 and 2004 (except for Table 1 on the cover page and Table 6 on page 6).

Production and import

Most natural gas continues to be supplied from outside the European Union. When looking at the availability of gas in the individual Member States, it appears that in 2004 only Denmark covered its own needs by national production; the United Kingdom has a degree of 'self-sufficiency' of 89 %, closely followed by the Netherlands where 82 % of the natural gas needs were covered by inland production. Poland was able to cover one third of its needs and five Member States around one fifth.

On the other hand, nine Member States covered the totality of their gas needs through imports and a

further five the near-totality (Czech Republic, Spain, France, Slovenia and Slovakia).

Compared to 2003 the situation has not changed much. The Netherlands raised their proportion of indigenous gas production by 8 percentage points whereas the opposite was true in the United Kingdom where natural gas imports increased by 4 % to compensate for falling production. For the remaining Member States the shift in proportions were limited to two percentage points or less.

Table 2: National gas production and imports, by Member State, 2003-2004

Total in PJ	BE	CZ	DK	DE	EE	EL	ES	FR	IE	IT	LV	LT	LU	HU
2003	689	366	335	3 928	32	92	1 002	1 842	171	2 897	65	111	49	569
2004	708	341	395	4 075	36	101	1 158	1 861	170	3 081	81	110	56	542
of which, in % of total:														
<i>National production of natural gas</i>														
2003	0	2	100	19	0	0	1	3	15	18	0	0	0	19
2004	0	2	100	17	0	0	1	3	19	16	0	0	0	20
<i>Imports of natural gas</i>														
2003	100	98	0	81	100	100	99	97	85	82	100	100	100	81
2004	100	98	0	83	100	100	99	97	81	84	100	100	100	80

Total in PJ	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	HR	RO	TR
2003	3 278	400	519	123	42	264	190	41	4 617	110	116	703	820
2004	3 493	357	562	154	42	271	184	41	4 496	124	125	674	863
of which, in % of total:													
<i>National production of natural gas</i>													
2003	74	21	32	0	0	3	0	0	93	1	66	69	3
2004	82	22	32	0	1	2	0	0	89	10	63	72	3
<i>Imports of natural gas</i>													
2003	26	79	68	100	100	97	100	100	7	99	34	31	97
2004	18	78	68	100	100	98	100	100	11	90	37	28	97

Source: Eurostat.

It does not come as a surprise that the countries with significant own production generally show a high market availability of gas. In absolute terms and expressed in energy units (Petajoule) the United

Kingdom recorded the highest value with 4 496 PJ in 2004 (-2.6 % compared to 2003). The Netherlands registered 3 493 PJ (+6.6 % compared to 2003), a high value considering the size of the country.

Table 3: Number of entities bringing gas into the country and their relative importance, 2003-2004

	BE	CZ	DK	DE	EE	EL	ES	FR	IE	IT	LV	LT	LU	HU
Total number of entities bringing gas into the country (production or imports)														
2003	4	6	3	27	2	1	12	10	:	23	1	4	2	10
2004	4	2	1	27	2	1	14	13	7	26	1	5	2	10
Number of entities dealing with at least 5% of natural gas (imported and produced)														
2003	1	1	2	5	2	1	4	1	:	4	1	3	1	4
2004	2	1	1	5	2	1	4	1	5	3	1	4	1	4

	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	HR	RO	TR
Total number of entities bringing gas into the country (production or imports)													
2003	:	5	11	1	2	1	1	1	32	2	1	4	6
2004	:	4	11	1	2	1	1	1	24	4	1	13	7
Number of entities dealing with at least 5% of natural gas (imported and produced)													
2003	:	1	1	1	1	1	1	1	6	1	1	4	1
2004	:	4	1	1	1	1	1	1	6	1	1	4	1

Source: Eurostat.

Table 3 outlines the number of entities bringing gas into the respective country, either as a national gas producer or as an importer of gas.

Often, there are very few companies bringing the gas to the market. This has an important impact on the potential for competition at supply level. Even if there are several suppliers, competition between them may be rather ineffective if they are all purchasing from the same wholesaler. The availability of external sources (in other words: the degree of network integration with neighbouring countries) notably influences the rapidity of the liberalisation process.

Table 3 shows that Germany, Italy and the United Kingdom registered respectively 27, 26 and 24 enterprises bringing gas into the country in 2004. As shown in Table 1 these three countries have reached full market liberalisation. Three new entities entered the market in France and Italy compared to a year

earlier, whereas the number was noticeably reduced in the United Kingdom (from 32 to 24). In relative terms, important decreases were also registered in the Czech Republic and Denmark.

A single enterprise remained responsible for production and/or import in Denmark, Greece, Latvia, Portugal, Slovakia, Finland and Sweden.

Table 3 also shows the number of enterprises that deal with at least 5 % of a country's total gas volume. The questionnaire revealed that in 2004, 12 countries counted only a single major enterprise. Spain, Lithuania, Hungary and Austria registered four companies with significant market shares, Germany and Ireland five and the United Kingdom six. The latter country is considered to feature a mature competitive structure. Remarkable is the situation in Austria where the number of major enterprises passed from one in 2003 to four in 2004.

Natural gas trade

In all Member States but two, the gas balance was negative in 2004. In terms of absolute quantity, the main importer of natural gas was Germany with a volume equivalent to close to 3.4 million TJ, followed by Italy (2.6 million TJ) and France (1.8 million TJ).

Denmark and the Netherlands were the only countries to generate a trade surplus. In the case of the Netherlands this surplus was substantial (1 156 000 TJ). The United Kingdom, still an important net exporter in 2003 (surplus of 327 000 TJ), became a net importer in 2004 (deficit of 68 000 TJ).

Table 4: Imports and Exports of natural gas, in TJ (GCV) – 2004

	Imports	Exports	Balance	Gross inland consumption
BE	708 260	30 971	-677 289	677 796
CZ	333 350	3 329	-330 021	362 293
DK	0	171 722	171 722	215 563
DE	3 389 857	324 436	-3 065 421	3 662 563
EE	36 032	0	-36 032	36 032
EL	101 125	0	-101 125	103 682
ES	1 144 897	0	-1 144 897	1 170 988
FR*	1 813 547	16 279	-1 797 268	1 941 653
IE	137 621	0	-137 621	169 565
IT	2 587 295	15 059	-2 572 236	3 071 203
LV	80 880	0	-80 880	61 983
LT	110 335	0	-110 335	110 335
LU	55 794	0	-55 794	55 794
HU	431 618	0	-431 618	544 853
NL	628 124	1 784 604	1 156 480	1 709 369
AT	331 352	51 847	-279 505	354 487
PL	379 467	1 753	-377 714	552 604
PT	153 733	0	-153 733	153 676
SI	41 397	0	-41 397	41 809
SK	264 166	0	-264 166	255 786
FI	183 779	0	-183 779	183 779
SE	40 509	0	-40 509	41 142
UK	478 919	410 803	-68 116	4 065 271
BG	111 128	0	-111 128	115 959
HR	46 255	22 457	-23 798	114 353
RO	191 269	0	-191 269	648 364
TR	835 565	0	-835 565	870 362

* French Gross Inland Consumption based on cumulated monthly data.
Source: Eurostat.

Natural gas retailing

By July 2007, all customers should become eligible customers, i.e. have the possibility to choose the most attractive gas supplier.

Table 5 shows the total number of gas retailers in the various Member States in 2004. It is recalled that a gas producer (or importer – see Table 2) does not necessarily have to be a retailer. Most retailers can be found in Germany; with 700 enterprises they outnumber the retailers in Italy (389, down from 412 in 2003) by a large margin. However, only one German enterprise has a market share of more than 5 % of the total quantity of gas supplied at national level whereas in Italy, five enterprises responded to this criterion.

Compared to a year earlier and among the 22 Member States for which information for both years is available, 10 registered an increase in the number of retailers, in five countries the number remained stable and in seven the number of retailers actually

decreased. It was the UK that showed a noticeable reduction, from 23 suppliers in 2003 to 15 suppliers in 2004. Conversely, Poland registered seven additional gas suppliers, Belgium an additional five and Slovenia an additional four.

The sometimes considerable number of suppliers to final customers however masks the fact that only few retailers are of considerable size (above the threshold of 5 % market share): a maximum of seven suppliers were registered in the Czech Republic, Hungary, Poland and the United Kingdom and five Member States reported only a single major supplier in 2004.

In Belgium and Lithuania, the number of major retailers was reduced by one entity. The markets of Denmark, Greece, Spain and Luxembourg saw one additional major retailer; those of Austria and the UK an additional two.

In general, it should be kept in mind that a high number of retailers and a relatively high number of enterprises that hold at least 5% of the total quantity distributed on the national market does not

necessarily mean that there is a certain degree of competition in the country. The gas market can be split by a number of regional distributors where the customer does not have the real choice of a supplier.

Table 5: Retailing: number of gas suppliers to final customers, 2003 – 2004

	BE	CZ	DK	DE	EE	EL	ES	FR	IE	IT	LV	LT	LU	HU
Total number of suppliers														
2003	27	14	4	701	14	1	43	31	:	412	1	7	6	14
2004	32	9	7	700	15	2	41	34	2	389	1	5	6	16
Suppliers having a share of at least 5% of the total														
2003	3	7	4	1	1	1	3	2	:	5	1	3	3	7
2004	2	7	5	1	1	2	4	2	2	5	1	2	4	7

	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	HR	RO	TR
Total number of suppliers													
2003	24	29	40	10	14	1	27	7	23	8	3	27	12
2004	25	27	47	10	18	1	30	7	15	8	27	28	19
Suppliers having a share of at least 5% of the total													
2003	4	3	7	4	2	1	1	5	5	1	3	4	3
2004	4	5	7	4	2	1	1	5	7	1	4	5	3

Source: Eurostat.

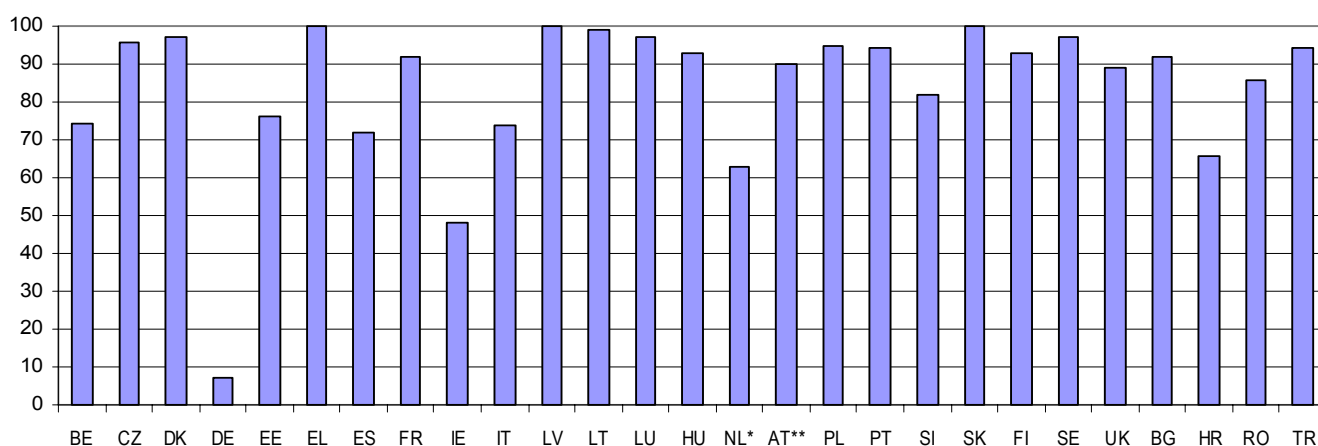
Closely linked to the information presented above, Graph 1 shows the cumulated market share of the major companies, i.e. the companies that held at least 5 % of the national gas market in 2004.

For a good understanding, the following example is given. Italy registered 389 gas retailers in 2004, 5 of which have a market share of more than 5 % (from Table 5). These 5 major Italian gas retailers together were responsible for 74 % of the total quantity distributed on the Italian market. The other 384 retailers thus shared the remaining 26 % of the market.

A different situation occurs in Germany: among the 700 retailers, often serving local or regional markets, only one is considered as a major enterprise, having a market share just above 7 %. The remaining 699 suppliers are then responsible for 93 % of the total market but none of these reach the 5 % market share threshold.

Eight smaller enterprises distributed 11 % of the gas in the United Kingdom and 30 Belgian enterprises did so for 25 % of the Belgian gas.

Graph 1: Aggregated market share of suppliers selling at least 5 % of total gas consumed, 2004 (%)



* provisional figure with limited reliability — ** minimum value
Source: Eurostat.

Table 6: Gas supplier switching: cumulative switching since market opening (in % of customers)

	Large industrial users				Medium industrial / commercial				Small commercial / household			
	<5%	5 - 20%	20-50%	>50%	<5%	5 - 20%	20-50%	>50%	<5%	5 - 20%	20-50%	>50%
Belgium												
Czech Republic												
Denmark												
Germany												
Estonia												
Greece												
Spain												
France												
Ireland												
Italy												
Cyprus	not applicable				not applicable				not applicable			
Latvia												
Lithuania												
Luxembourg												
Hungary												
Malta	not applicable				not applicable				not applicable			
Netherlands												
Austria												
Poland												
Portugal												
Slovenia												
Slovakia												
Finland												
Sweden												
United Kingdom												

Note: indications include switching between affiliates of the same group of companies.
Source: DG TREN on the basis of information supplied by Regulators.

The number of customers switching is an indicator of the effectiveness of competition. In countries where they have the right to choose, gas consumers remain reluctant to exercise their right to choose. Often, competing offers are unavailable or are too similar to constitute a real choice. Dominant positions and insufficient unbundling, especially at the distribution level, seem to discourage switching apart from the fact that changing suppliers is often perceived as risky.

Table 6 outlines the proportion of users that have changed supplier since the liberalisation of the natural gas market. Apart from the fact that large industrial users have a larger incentive to change supplier as the potential cost savings can be substantial, it should be kept in mind that the legal

framework gave priority to market opening for large industrial consumers first. Hence, it comes as no surprise that the degree of supplier switching is more important among the latter than for medium and small industrial/commercial consumers as well as households. In this respect, it should be recalled that full market opening is only required by July 2007.

The United Kingdom was already mentioned having a mature competitive structure in the gas market. This is confirmed in Table 6. At least for large industrial and medium industrial/commercial consumers, significant supplier switching has taken place in Belgium, Denmark, France, Spain and Ireland. In Italy this has been the case for large industrial consumers.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Country codes

EU: European Union, including the 25 Member States (EU-25): Belgium (BE), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Greece (EL), Spain (ES), France (FR), Ireland (IE), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK).

BG : Bulgaria

HR : Croatia

RO : Romania

TR : Turkey

Symbols and abbreviations

“:” not available or confidential.

“-“ nil or not applicable.

TJ: Terajoule, or one joule $\times 10^{12}$

PJ: Petajoule, or one joule $\times 10^{15}$

GCV: Gross Calorific Value:

Definitions

Natural Gas: comprises gases, occurring in underground deposits, whether liquefied or gaseous, consisting mainly of methane. It includes both “non-associated” gas originating from fields producing hydrocarbons only in gaseous form, and “associated” gas produced in association with crude oil as well as methane recovered from coal mines (colliery gas).

Imports and Exports: Amounts of gas are considered as imported or exported when they have crossed the political boundaries of a country, whether customs clearance has been taken place or not.

Data sources

The source of all figures presented in this publication (except Table 1 on the cover page and Table 6 on page 6) is a questionnaire-survey launched by Eurostat and reflects the state of data availability as of 31 March 2006.

It is recalled that the figures are collected on a voluntary basis. The reader is also reminded that data in this publication might show differences with similar data published by other national and/or international authorities.

Ireland’s declaration excludes information referring to Premier Transmission Limited (PTL) and Isle of Man.

Table 4: Balance = exports minus imports.

Data of Table 1 and Table 6 are based on information provided by Regulators / Member States to the Commission’s Directorate General Transport and Energy.

Data as presented in this publication are not included in Eurostat’s statistical reference database NewCronos.

Further information:

Journalists can contact the media support service:

Bech Building Office A4/125
L - 2920 Luxembourg

Tel. (352) 4301 33408
Fax (352) 4301 35349

E-mail: eurostat-mediasupport@ec.europa.eu

European Statistical Data Support:

Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.

Their mission is to provide help and guidance to Internet users of European statistical data.

Contact details for this support network can be found on our Internet site: www.europa.eu.int/comm/eurostat/

A list of worldwide sales outlets is available at the:

Office for Official Publications of the European Communities.

2, rue Mercier
L - 2985 Luxembourg

URL: <http://publications.eu.int>

E-mail: info-info-opoce@ec.europa.eu
