

European gas market indicators of the liberalisation process 2005 – 2006

Statistics in focus

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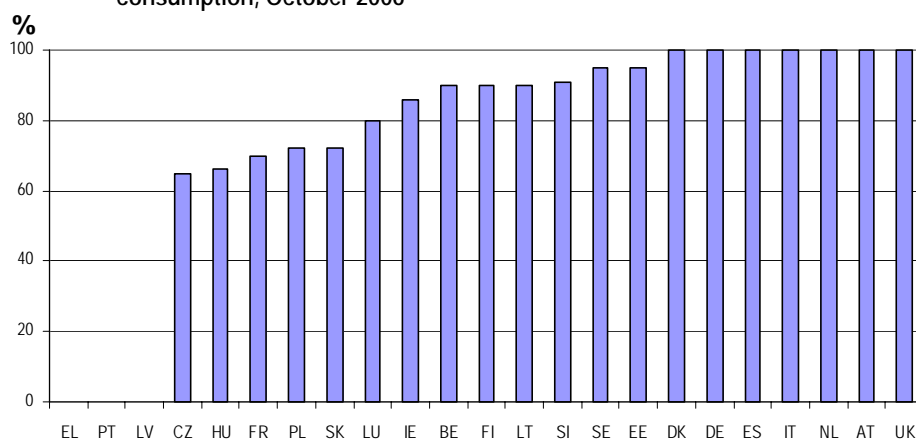
Contents

Highlights	1
Introduction	2
Production and import	2
Natural gas trade.....	4
Natural gas retailing	5

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.
- By October 2006, full market opening was declared by Denmark, Germany, Spain, Italy, the Netherlands, Austria and the United Kingdom.
- More than half (14) of the EU Member States cover their total or near total needs of natural gas through imports.
- Most gas retailers were registered in Germany and Italy followed at a considerable distance by Poland, Romania and Spain.
- Even if there are many retailers active in the market, only few are of considerable importance.
- The retail market remains in the hand of a single supplier in Latvia and Slovakia.

Figure 1: Degree of market opening: natural gas consumed by customers given the choice of their gas supplier — as percentage of total natural gas consumption, October 2006



Source: Directorate-General Energy and Transport, on the basis of information provided by Regulators/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.

Figure 1 outlines the state of progress of the liberalisation process and expresses the degree of market opening as of October 2006. 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 October 2006 full market liberalisation was completed in Denmark, Germany, Spain, Italy, the Netherlands, Austria and the United Kingdom. In certain countries the freedom to choose supplier is still limited to non-household customers. Soon (July 2007), households should have the choice of their retailers, too.

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 period 2003 to 2005.

Production and import

Most natural gas (58 % in 2005, 54% in 2004 and 53% in 2003) continues to be supplied from outside the European Union. When looking at the availability of gas in the individual Member States, it appears that Denmark and the Netherlands continue to cover their own needs entirely by indigenous production and are net exporters. That does not mean that a net exporting country does not import gas (such as the Netherlands), but the exports exceed the imports.

The United Kingdom has a high degree of 'self-sufficiency'. In 2003 this country was still a net exporter. In 2004, the UK lost this status and started to become a net importer, albeit with a low share of 2% of the total volume. In 2005, the proportion of imported gas increased to 7%. The only other country with a fairly high share of indigenous natural gas production is Romania with 70%. Poland followed with close to a third.

Table 1: National gas production and imports, by Member State, 2003-2005

Total (prim. prod. & net imports) in PJ														
	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	LV	LT	LU
2003	663	110	364	214	3 645	32	171	95	994	1 806	2 907	65	110	49
2004	677	124	338	223	3 751	36	170	102	1 160	1 850	3 066	81	109	56
2005	660	132	358	203	3 720	37	161	109	1 414	1 933	3 244	67	116	55
<i>of which, in % of total:</i>														
<i>Primary production of natural gas</i>														
2003	0%	1%	2%	>100%	20%	0%	15%	2%	1%	3%	18%	0%	0%	0%
2004	0%	10%	2%	>100%	18%	0%	19%	1%	1%	3%	16%	0%	0%	0%
2005	0%	14%	2%	>100%	18%	0%	13%	1%	0%	2%	14%	0%	0%	0%
<i>Net imports of natural gas*</i>														
2003	100%	99%	98%	exp.*	80%	100%	85%	98%	99%	97%	82%	100%	100%	100%
2004	100%	90%	98%	exp.*	82%	100%	81%	99%	99%	97%	84%	100%	100%	100%
2005	100%	86%	98%	exp.*	82%	100%	87%	99%	100%	98%	86%	100%	100%	100%

* 'exp.' indicates that the respective country is a net exporter of natural gas.

Total (prim. prod. & net imports) in PJ

	HU	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	HR	TR	NO
2003	569	1675	359	517	123	682	42	287	190	41	3983	113	825	248
2004	542	1708	350	560	154	674	42	299	184	41	4088	110	869	236
2005	565	1643	404	578	181	646	43	274	167	39	3945	113	1064	240

of which, in % of total:

<i>Primary production of natural gas</i>															
2003	19%	>100%	23%	33%	0%	71%	0%	3%	0%	0%	>100%	73%	3%	>100%	
2004	20%	>100%	22%	33%	0%	72%	0%	2%	0%	0%	98%	76%	3%	>100%	
2005	19%	>100%	16%	31%	0%	70%	0%	2%	0%	0%	93%	77%	3%	>100%	
<i>Net imports of natural gas*</i>															
2003	81%	exp.*	77%	67%	100%	29%	100%	97%	100%	100%	exp.*	27%	97%	exp.*	
2004	80%	exp.*	78%	67%	100%	28%	100%	98%	100%	100%	2%	24%	97%	exp.*	
2005	81%	exp.*	84%	69%	100%	30%	100%	98%	100%	100%	7%	23%	97%	exp.*	

* 'exp.' Indicates that the respective country is a net exporter of natural gas.

Source: Eurostat.

On the other hand, 14 Member States were highly dependent on gas supplies from abroad in 2005: ten Member States covered the totality of their gas needs through imports and a further four the near-totality (Czech Republic, Greece, France and Slovakia).

It does not come as a surprise that countries with significant indigenous 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 3 945 PJ in 2005 (-3.5 % compared to 2004). The Netherlands registered 3 382 PJ (-3.2 % compared to 2004), a high value considering the size of the country. For decades, industry and households have adapted their energy supply to this source of energy and the per capita consumption counts among the highest in the EU.

Table 2: Number of entities bringing gas into the country and their relative importance, 2005

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	LV	LT	LU
Total number of entities bringing gas into the country (production or imports)														
2003	4	2	6	3	27	2	:	1	12	10	23	1	4	2
2004	4	4	2	1	27	2	7	1	14	13	26	1	5	2
2005	3	4	6	1	20	2	8	1	15	13	38	1	5	2
Number of entities dealing with at least 5% of natural gas (imported and produced)														
2003	1	1	1	2	5	2	:	1	4	1	4	1	3	1
2004	2	1	1	1	5	2	5	1	4	1	3	1	4	1
2005	2	3	1	1	7	2	4	1	6	3	3	1	4	1
	HU	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	HR	MK	TR
Total number of entities bringing gas into the country (production or imports)														
2003	10	:	5	11	1	4	2	1	1	1	32	1	:	6
2004	10	:	4	11	1	13	2	1	1	1	24	1	:	7
2005	6	:	5	13	1	12	2	1	1	1	23	1	1	7
Number of entities dealing with at least 5% of natural gas (imported and produced)														
2003	4	:	1	1	1	4	1	1	1	1	6	1	:	1
2004	4	:	4	1	1	4	1	1	1	1	6	1	:	1
2005	3	:	3	1	1	4	1	1	1	1	7	1	:	1

Source: Eurostat.

Table 2 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 limited if they are all purchasing from the same wholesaler.

Table 2 shows that Germany, Italy and the United Kingdom registered 20, 38 and 23 enterprises bringing gas into the country respectively in 2005. As shown in Figure 1 these three countries have reached full market liberalisation. Nevertheless, whereas Italy's number has increased considerably between 2004 and 2005, a market consolidation seems to be taking place in Germany and the United Kingdom. The same can be said about Hungary

where the number of entities went from 10 units in 2004 to 6 in 2005. Apart from the above mentioned cases, no radical changes have been registered.

As in the previous year, a single enterprise remained responsible for production and/or import in Denmark, Greece, Latvia, Portugal, Slovakia, Finland and Sweden.

Malta and Cyprus are not listed in Table 2, as these two countries do not dispose of a significant natural gas pipeline network.

Table 2 also shows the number of enterprises that deal with at least 5 % of a country's total gas volume. The questionnaire revealed that in 2005, 11 EU Member States counted only a single major enterprise. Ireland, Lithuania and Romania registered four companies with significant market shares, Spain six and Germany and the United Kingdom seven.

Natural gas trade

In all Member States but two, the gas balance was negative in 2005. 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 (2.8 million TJ) and France (1.9 million TJ).

Denmark and the Netherlands were the only countries to generate a surplus in the trade of natural gas. In the case of the Netherlands this surplus was substantial (974 180 TJ). The United Kingdom, still an important net exporter in 2003 (surplus of 327 000 TJ), became a net importer in 2004. But whereas the deficit amounted to 68 000 TJ in 2004, it increased to 277 728 TJ in 2005.

When relating the natural gas trade balance to the gross inland consumption of natural gas, it appears that Denmark in 2005 exported more (233 085 TJ) than it consumed (204 661 TJ). In other words: Denmark produced more than double the volume it needed.

In the case of the Netherlands, exports also exceeded gross inland consumption, but when considering that the Netherlands (as opposed to Denmark) is also importing natural gas, the volume of the trade balance represents close to 60% of the gross inland consumption.

Table 3: Imports and Exports of natural gas, in TJ (GCV) – 2005

	Imports	Exports	Net imports	Gross inland consumption
Belgium	689 307	29 146	660 161	656 536
Bulgaria	114 339	0	114 339	130 446
Czech Republic	353 726	3 220	350 506	358 364
Denmark	0	233 085	-233 085	204 661
Germany	3 420 663	362 714	3 057 949	3 761 430
Estonia	37 201	0	37 201	37 201
Ireland	140 007	0	140 007	161 407
Greece	108 461	0	108 461	109 487
Spain	1 406 902	0	1 406 902	1 388 345
France	1 909 328	42 642	1 866 686	1 906 503
Italy	2 798 826	15 088	2 783 738	3 286 696
Latvia	66 710	0	66 710	63 169
Lithuania	115 949	0	115 949	115 205
Luxembourg	54 820	0	54 820	54 829
Hungary	456 244	0	456 244	562 610
Netherlands	764 779	1 738 959	-974 180	1 643 265
Austria	1 470 471	1 141 353	329 118	384 417
Poland	398 547	1 667	396 880	569 149
Portugal	181 102	0	181 102	174 482
Romania	196 135	0	196 135	648 586
Slovenia	43 049	0	43 049	43 209
Slovakia	281 273	0	281 273	274 595
Finland	167 381	0	167 381	167 381
Sweden	38 679	0	38 649	39 199
United Kingdom	623 981	346 253	277 728	3 949 476
Croatia	51 345	28 959	22 686	110 576
FYROM	2 952	0	2 952	:
Turkey	1 018 466	0	1 018 466	1 060 274

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 4 shows the total number of gas retailers in the various Member States in 2003, 2004 and 2005. It is recalled that a gas producer (or importer – see Table 1) does not necessarily have to be a retailer. Most retailers can be found in Germany; with 700 enterprises they outnumber the retailers in Italy (415) 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 compared with four enterprises (2004: five) in Italy.

Compared with 2004 and among the 25 Member States for which information for both years is available, 13 registered an increase in the number of retailers, in eight countries the number remained stable and in four the number of retailers actually decreased. In the United Kingdom a noticeable reduction from 23 suppliers in 2003 to 15 suppliers in 2004 was registered. In 2005, an additional 3 retailers (total: 18) were counted. In Belgium, Estonia, Poland and Romania, a fairly significant number of competitors entered the market.

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): as in 2004, seven suppliers were registered in the Czech Republic, Hungary, Poland and the United Kingdom. Conversely, among the 700 retailers in Germany, only one has a market share of over 5%. Apart from Germany, another seven Member States reported only a single major supplier in 2005.

In Denmark and Luxembourg, the number of major retailers in 2005 was reduced by two entities compared to 2004, and by one entity in Ireland, Greece, Italy, Lithuania and Austria. Conversely, the markets of Belgium, Bulgaria, Spain, France and Romania saw one additional major retailer; that of the Netherlands an additional two. In the remaining countries, the situation didn't change.

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. Indeed, 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 4: Retailing: number of gas suppliers to final customers, 2005

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	LV	LT	LU
Total number of suppliers														
2003	27	8	14	4	701	14	:	1	43	31	412	1	7	6
2004	32	8	9	7	700	15	2	2	41	34	389	1	5	6
2005	41	11	10	5	700	23	4	4	40	36	415	1	5	6
Suppliers having a share of at least 5% of the total														
2003	3	1	7	4	1	1	:	1	3	2	5	1	3	3
2004	2	1	7	5	1	1	2	2	4	2	5	1	2	4
2005	3	2	7	3	1	1	1	1	5	3	4	1	1	2

	HU	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	HR	MK	TR
Total number of suppliers														
2003	14	24	29	40	10	27	14	1	27	7	23	3	:	12
2004	16	25	27	47	10	28	18	1	30	7	15	27	:	19
2005	16	21	28	57	11	39	17	1	30	7	18	30	1	31
Suppliers having a share of at least 5% of the total														
2003	7	4	3	7	4	4	2	1	1	5	5	3	:	3
2004	7	4	5	7	4	5	2	1	1	5	7	4	:	3
2005	7	6	4	7	4	6	2	1	1	5	7	5	:	3

Source: Eurostat.

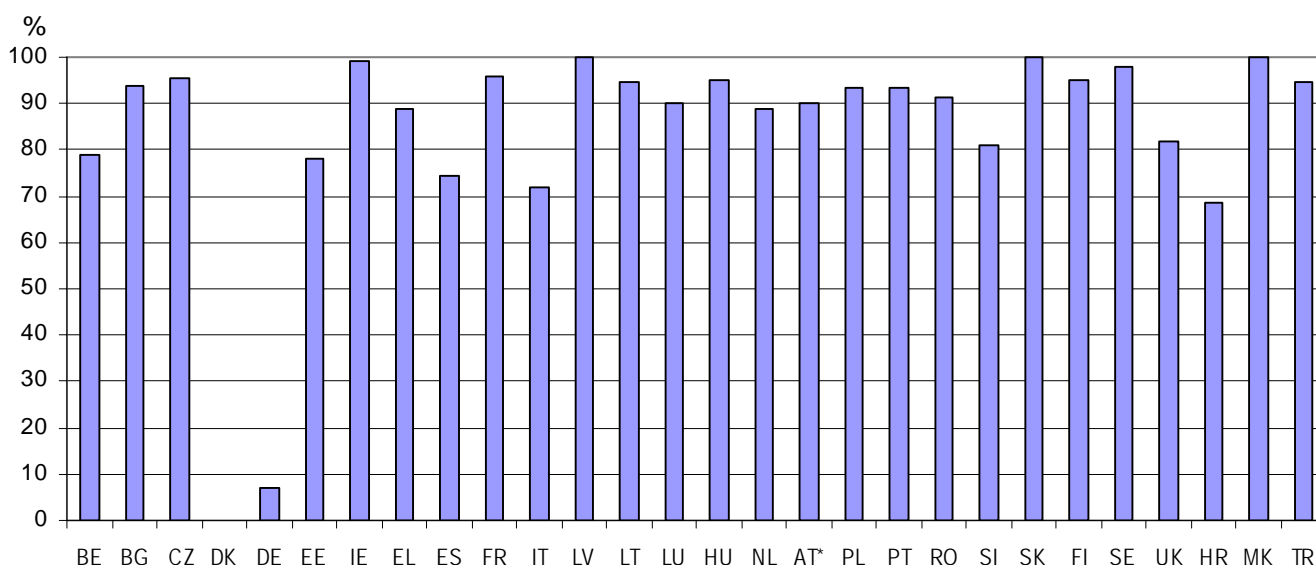
Closely linked to the information presented above, Figure 2 shows the cumulated market share of the major companies, i.e. the companies that held at least 5 % of the national gas market in 2005.

For a good understanding, the following example is given. Italy registered 415 gas retailers in 2005, four of which have a market share of more than 5 % (from Table 4). These 4 major Italian gas retailers together were responsible for 72 % of the total quantity distributed on the Italian market. The other 411 retailers thus shared the remaining 28 % 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 suppliers are then responsible for 93 % of the total market but none of these reach the 5 % market share threshold.

Eleven smaller enterprises distributed 18 % of the gas in the United Kingdom and 38 Belgian enterprises did so for 21 % of the Belgian gas.

Figure 2: Market share of suppliers selling at least 5% of total gas consumed, 2005 (%)



DK : information not available

* minimum value.

Source: Eurostat.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Country codes

EU: European Union, including the 27 Member States (EU-27): Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK).

HR : Croatia

MK: former Yugoslav Republic of Macedonia (FYROM)

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 Figure 1 on the cover page) is a questionnaire-survey launched by Eurostat and reflects the state of data availability in 2007.

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

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.

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

Further information:

Reference publications

Title [Gas and electricity market statistics data 1990-2006](#)
Catalogue No KS-76-06-289-EN-C
Price 25 EUR

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