



“The South East Europe Natural Gas Market”

**Final Version
10.02.2005**

Council of European Energy Regulators ASBL
28 rue le Titien, 1000 Bruxelles
Arrondissement judiciaire de Bruxelles
RPM 0861.035.445

ACKNOWLEDGEMENT	2
BACKGROUND	3
SCOPE OF THE REPORT	5
EXECUTIVE SUMMARY	6
DISCUSSION PAPER ON NATURAL GAS SECTOR IN SOUTH EAST EUROPE.....	8
1. GAS SUPPLY AND INFRASTRUCTURE IN THE ECSEE	9
1.1. <i>Market Size & Gas Consumption.....</i>	9
1.2. <i>Share of Natural Gas in Primary Energy</i>	11
1.3. <i>Natural gas supply</i>	12
1.4. <i>Natural gas infrastructure</i>	14
1.5. <i>Security of Gas Supply</i>	18
1.6. <i>Regional Infrastructure Developments</i>	19
2. REGULATORY FRAMEWORK IN THE ECSEE	24
2.1. <i>Regulatory Authorities</i>	24
2.2. <i>Market Opening Level.....</i>	24
2.3. <i>Unbundling of Market Activities</i>	25
2.4. <i>Transmission Tariff Structure.....</i>	25
2.5. <i>Third Party Access and Capacity Booking</i>	26
2.6. <i>Gas Release Programs</i>	26
3. CONCLUSIONS AND FURTHER DEVELOPMENTS	28
NATURAL GAS INFRASTRUCTURE	31
AUSTRIA.....	32
BOSNIA & HERZEGOVINA	33
BULGARIA	34
CROATIA	35
GREECE	36
HUNGARY	37
ITALY	38
MACEDONIA.....	39
ROMANIA.....	40
SERBIA	41
SLOVENIA	42
TURKEY.....	43
NATURAL GAS LEGAL & REGULATORY FRAMEWORK.....	44
AUSTRIA.....	45
BOSNIA AND HERZEGOVINA	46
BULGARIA	47
CROATIA	48
GREECE	49
HUNGARY	50
ITALY	51
MACEDONIA.....	52
ROMANIA.....	53
SERBIA	54
SLOVENIA	55
TURKEY.....	56

ACKNOWLEDGEMENT

The questionnaire used to gather information for this Report was prepared with the intent to extract the conditions in each country in order to have a clear idea of the gas market state of art and to compare and aggregate data concerning both South East Europe countries and the countries from the European Union who are involved in the Memorandum of Understanding for the creation of a single energy market in the South East Europe Region.

The questionnaire contained several questions and it has been necessary to circulate and monitor the material several times in order to have results as much reliable and clear results as possible.

The final version of the Report represents a very good starting point for all stakeholders involved in the process in order to understand the present situation of the gas market in South East Europe.

As chairman of the Gas Task Force of the CEER Working Group for South East Europe, I would like to thank Mr. Hasan ÖZKOÇ from EMRA very much for his hard work and coordination of the study together with the chairman, Mr. Sergio ASCARI from AEEG, Mr. Michael THOMADAKIS and Ms. Irene IACOVIDES from RAE for their work and commitment and furthermore Mr. Nazim BAYRAKTAR from EMRA and Mr. Cristian Selavardeanu from ANRGN. I am also very grateful to Mr. Dietmar Preinstorfer from CEER Secretariat for his support for the final implementation of the Report.

Finally, I would like to gratefully acknowledge the help we have received from many others whose names have not been mentioned here.

Fabio TAMBONE
Chairman of the Gas Task Force
CEER Working Group for South East Europe

BACKGROUND

The countries of South East Europe (Albania, Austria, Bulgaria, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, Greece, Hungary, Italy, Romania, Serbia and Montenegro, Slovenia and Turkey) and the European Commission, have undertaken the establishment of a regional electricity market by signing a Memorandum of Understanding in Athens in November 2002. By signing this Memorandum, the countries of the region agreed to adopt European Community Directive 2003/54/EC (Electricity Directive) and set up a structure to monitor the operation of the market.

In 2003, it was decided to extend this approach to natural gas in the framework of 2003/55/EC Directive. For that reason, another Memorandum of Understanding (MoU) was signed, which covers natural gas alongside the electricity, signed in Athens in 2003. Hence natural gas has been fully included in the Athens Process leading to the establishment of an Energy Community in South East Europe (ECSEE).

Governments of these countries are aware of the strategic location of ECSEE region, being located between energy rich countries, namely Caspian Region, Middle East, and North Africa and developed, gas importing European Union countries. The development of the natural gas industry and of its infrastructure is very important for producing regions, for European importing countries, and for ECSEE countries through which natural gas may transit.

ECSEE governments and the European Commission have recently (December 2004) achieved consensus on the principles of a legally binding Energy Community Treaty. In the related Declaration they have expressed their objective “to enhance the security of supply of the single regulatory space by providing incentives to connect to Caspian, North African and Middle East gas reserves, and to develop indigenous reserves of natural gas” as well as their determination “to create a stable regulatory and market framework capable of attracting investment in gas networks and infrastructures”. In order to achieve this objective the first step is to put the countries requirements into a regional perspective achieving the regional interconnection in infrastructure and a regional common legal framework. In the second step, this regional market is foreseen to be integrated with the EU market.

Following the 2003 MoU, the CEER Working Group for South East Europe Energy Regulation (SEEER WG) created the Natural Gas Task Force (NGTF) in February 2004. Regulators and Ministries of countries without Regulators from all signatory countries of the 2003 Athens MoU were invited to participate.

The NGTF was requested to provide the regulatory input necessary for the development of the regional natural gas market in the ECSEE region and ensure its compatibility with EU legislation. Within this context, the objective of the NGTF is:

- to assess the current status of the national gas markets of the countries of the region, with a view to prepare a report on the existing situation and the obstacles to the establishment of a regional market;

- to develop proposal related to the next steps to be taken by the WG on the optimal development of the gas market in the ECSEE region;
- to elaborate on the methodology to be used to transfer the experience gained through the development of the EU internal market to the region, particularly that of the Madrid Forum;
- to start developing a medium term view of the SEE integrated gas market harmonised with EU market.

SCOPE OF THE REPORT

The study addresses all signatory countries of the 2003 Athens MoU. Country results are occasionally aggregated in order to compare ECSEE countries belonging to the European Union (hereinafter referred to as EU ECSEE countries) and others signatories of the 2003 MoU (Non-EU ECSEE countries). In this way differences in the legal and regulatory framework, infrastructural endowments and market characteristics can be compared easier. The reason for this comparison is that EU ECSEE countries, with the partial exception of Greece, have already undertaken significant market reform triggered by EU Directives 98/30/EC and 2003/55/EC.

Data have been collected from Regulators and Ministries and where necessary from internationally available sources (mainly the International Energy Agency). There is no data for Albania and there is no natural gas infrastructure in Montenegro; hence data for Serbia and Montenegro is only related to Serbia.

In the framework of the abovementioned objectives, this report analyses the current natural gas infrastructure and regulatory framework of the ECSEE Countries, taking into account the extension of the ECSEE process to natural gas and the harmonization of the regional legislation with the Natural Gas Directive, 2003/55/EC.

The Report is mainly focused on the current natural gas infrastructures, namely transmission, distribution, storage and LNG facilities, including also new and planned infrastructures. The deliverables of the infrastructure include the demand pattern for each country, including its split by sector; supply portfolio, including indigenous production and imports, existence of long term; take-or-pay contracts, demand forecast and the possible future sources of supply and existing cross border trading activities.

Furthermore, the legal framework regarding regulatory authorities, unbundling of activities, tariffs methodology, licenses, gas release programs, dispute settlement, cross border trade, monitoring of activities and third party access are mainly considered.

This is the first market survey performed by the CEER WG SEEER, with the view to provide initial input for the forthcoming work of the WG.

The collected Data deserves further analysis; our intention is to further elaborate on the available data for forthcoming work. Taking into account that related work is undertaken by other stakeholders (WB), this report aims to provide some input for this purpose too.

At this stage the work does not fully encounter recent or anticipated evolutions in the legislative framework of the European Union (e.g. regarding the forthcoming Regulation concerning the access to gas transmission networks). Such considerations will be encountered in the future version of this report.

EXECUTIVE SUMMARY

The Report presents the status of natural gas infrastructure and legal regulatory framework respectively as of December 31st, 2003. The Report provides the main regional facts, from which an overview of the region's gas industry is outlined.

Gas markets in Austria, Hungary and Italy feature high levels of per capita consumption and low expected growth rates; hence they can be regarded as mature markets. Among Non-EU ECSEE Countries the only relatively mature gas market in the region is Romania. On the other hand per capita gas consumption in Greece and Non-EU ECSEE countries except Romania is in general far smaller which suggests a significant room for increase. Greek, Turkish, Serbian, Bulgarian and Croatian gas markets are expected to develop rapidly according to available official forecasts. In the remaining countries of the region gas consumption has either just started recently or is very little developed.

In the Non-EU ECSEE Countries, the weighted average share of gas in primary energy supply is 23.8%, which is very close to that of EU Members average (24%). However this average hides significant variances throughout the region. Hungary (42,2%), Romania (38,3%) and Italy (33,2%) have the largest share in the region. On the other hand, F.Y.R. of Macedonia (3%), Bosnia & Herzegovina (4,6%) and Greece (6,7%) have the lowest share in the region.

Natural gas is mainly used in industry and partly in power generation in the Non-EU ECSEE Countries (except in Bosnia and Herzegovina in which it is used in residential and commercial sectors). In more mature EU ECSEE Countries consumption patterns are more mixed and evenly distributed among the main consumption sectors (except for Hungary, in which gas is used mainly in residential and commercial sectors).

Most of these countries import all their natural gas only from Russia. Only EU ECSEE Countries and Turkey have diversified their sources of supply, and only Romania, Croatia and Italy have significant domestic production.

The extension of the natural gas infrastructure, as measured by length of per capita transmission and distribution networks, and accordingly the natural gas consumption is fairly low in Non-EU ECSEE Countries (except Romania) and Greece, while it is mature in Austria, Italy, Hungary and Romania.

Regarding the legal regulatory framework of the region; all the countries in the region have their respective independent Regulators (Serbia is expected to establish a regulatory authority in 2005). Most of the countries in the region have opened their markets, by completing their legal framework, creating conditions for participation of the private sector and identifying at least some eligible threshold. However, competition has been introduced into EU ECSEE Countries (except Greece) and Romania, but in all other countries current monopolistic structures still prevail.

TSOs and DSOs are in the process of legal and managerial unbundling. Accounting unbundling is foreseen for almost all activities. Access to domestic pipelines is regulated in most of the

countries in the region. However, as far as the transit network is concerned, access is in principle regulated in some countries of the region and is negotiated in others.

In most Non-EU ECSEE Countries, postage stamp methodology is being or is expected to be used for transmission. Tariffs are mostly determined and/or approved by Regulatory Authorities. However it is not yet clear whether such tariffs, as well as other features of third party access regimes in Non-EU ECSEE countries (with the exception of Romania) and in Greece, are suitable for the development of competition. In fact they are not used due to the lack of competitors.

While several pipelines physically link several ECSEE countries, their transit rights are almost entirely attributed to long term contracts for import from external sources. Only connections between Italy, Austria, Slovenia and Hungary are to some extent open to international trade between countries of the region. As a consequence, Non-EU ECSEE Countries as well as Greece have no access to each other's markets or facilities that may boost security of supply, like domestic production fields, storage plants and LNG terminals.

The current lack of usable links between Non-EU ECSEE Countries not only reduces security of supply, but also prevents the exploitation of economies of scale, since most of the national markets are fairly small. It is likely that the creation of a single market would allow for significant supply cost reductions, thereby favoring the spreading of gas access and consumption to new areas and uses. However, the development of physical links between the national gas networks and the removal of legislative barriers which currently prevent trading of gas between connected networks of neighboring countries is a very important prerequisite. In addition, environmental quality in the region would be enhanced as more polluting fuel would be substituted.

Supply cost reduction that would be triggered by the creation of the single market would also benefit existing customers, by offering to them access to new sources of supply and trading opportunities; new infrastructure would be developed and the local industry would benefit from increasing transit and consumption flows; EU countries would be offered a new substantial source of gas supply.

The Report concludes that most conditions for a single ECSEE market are not yet in place. More studies and regulatory efforts are needed for a deeper understanding of the current situation and to check and later ensure the compatibility of its regulation with a single market as it is being developed in the European Union.

SECTION I

DISCUSSION PAPER ON NATURAL GAS SECTOR IN SOUTH EAST EUROPE

1. GAS SUPPLY AND INFRASTRUCTURE IN THE ECSEE

1.1. Market Size & Gas Consumption

The total gas market of the ECSEE amounted in 2003 to about 150 billion cubic meters (bcm), of which 103.36 bcm in EU ECSEE Countries and 47.6 bcm in Non-EU ECSEE Countries. Hence, the average size of national markets of the Non-EU ECSEE countries is much smaller. With respect to consumption, Turkey and Romania are the largest markets of the Non-EU ECSEE Countries regional market, covering together 83% thereof (**Chart 1**).

In principle, current gas consumption should be compared to estimates of the potential market in order to evaluate growth perspectives. While such estimation lies beyond the scope of this Report, available information allows to compare countries and to assess their current degree of market development by means of three indicators:

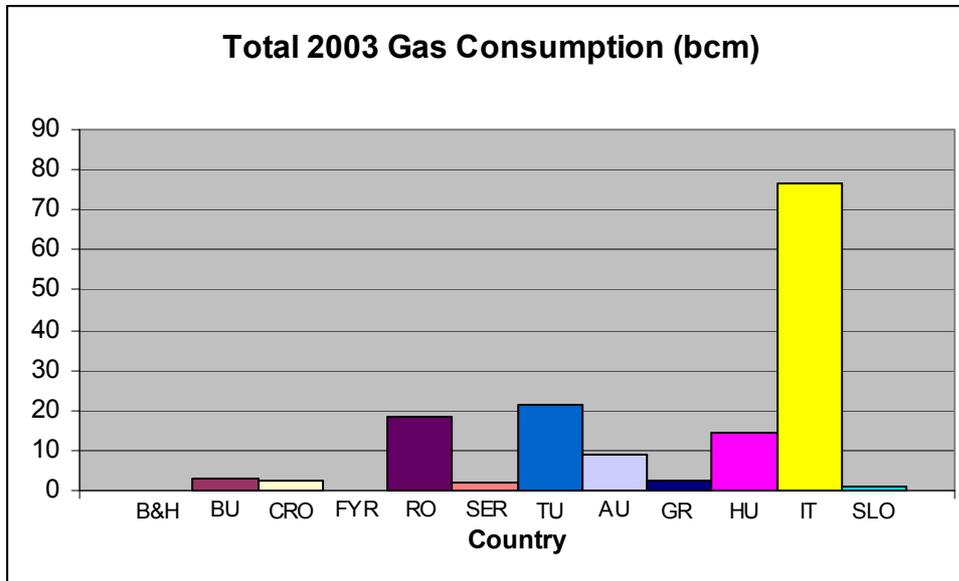
- a) per capita gas consumption;
- b) recent consumption growth rates;
- c) growth forecasts.

a) Average per capita gas consumption (**Chart 2**) is high in Hungary, Italy, Austria and Romania, intermediate in Slovenia and Croatia, and much lower in all other countries. While not all countries are necessarily expected to reach similar per capita consumption levels, due to factors like the availability of other energy sources, industry structure, population density, income levels, heating requirements and others, differences are so striking that national markets with low per capita consumption levels can clearly be regarded as non-mature.

b) The average growth rate of the last four years (1999-2003) is given in **Table 2**, sixth column. Only F.Y.R. of Macedonia, Greece and Turkey feature significant volumes and high growth rates.

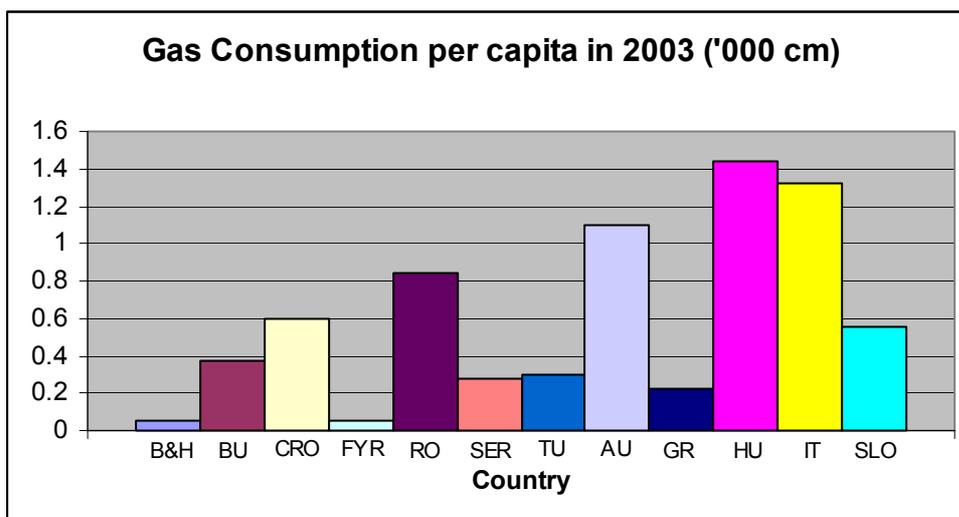
c) Expected market growth to 2005 and 2010, as given in the official forecasts of Governments, Regulators or TSO's, is provided in the second and third columns of **Table 2**. From this forecasts, Greek, Turkish, Bulgarian, Serbian & Montenegrin and Croatian gas markets can be regarded as fast developing markets where gas consumption is expected to increase rapidly and it is expected a slightly increase on the others.

Chart 1



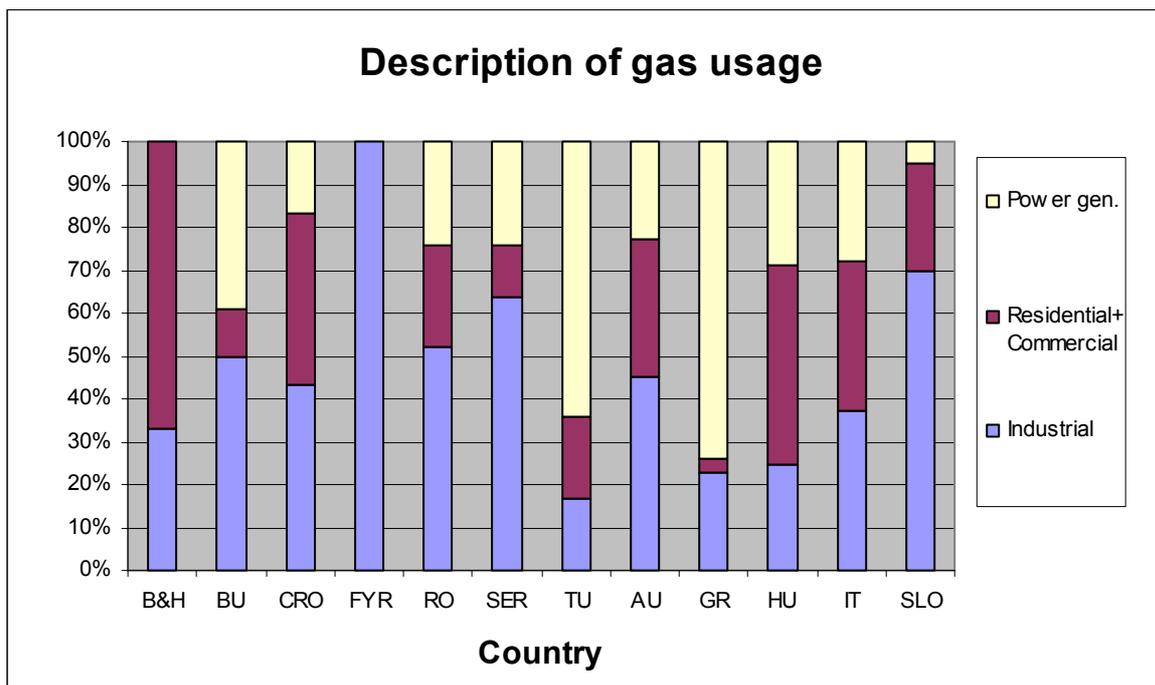
Considering all three indicators, gas markets in Austria, Hungary, Italy and Romania, which feature high levels of per capita consumption (**Chart 2**) and low recent and expected growth rates, can be regarded as mature. On the other hand, gas consumption in Greek, Turkish, Serbian & Montenegrin, Bulgarian and Croatian, gas markets may be expected to develop rapidly according to available forecasts and given the relatively low starting point, although it did not lately in Croatia and Bulgaria. In the remaining countries of the region gas consumption has either just started recently or is very little developed at present; however it is expected to increase slightly after 2005.

Chart 2



Natural gas usage patterns in the region vary (**Chart 3**). In less advanced markets the share of the residential and commercial markets is usually smaller. Turkey and Greece mainly use gas for power generation whereas in Slovenia, Bulgaria, FYROM, Romania and Serbia the share of industry exceeds 50 %. In more mature countries, consumption patterns are more mixed and evenly distributed among the main consumption sectors (e.g. Italy).

Chart 3

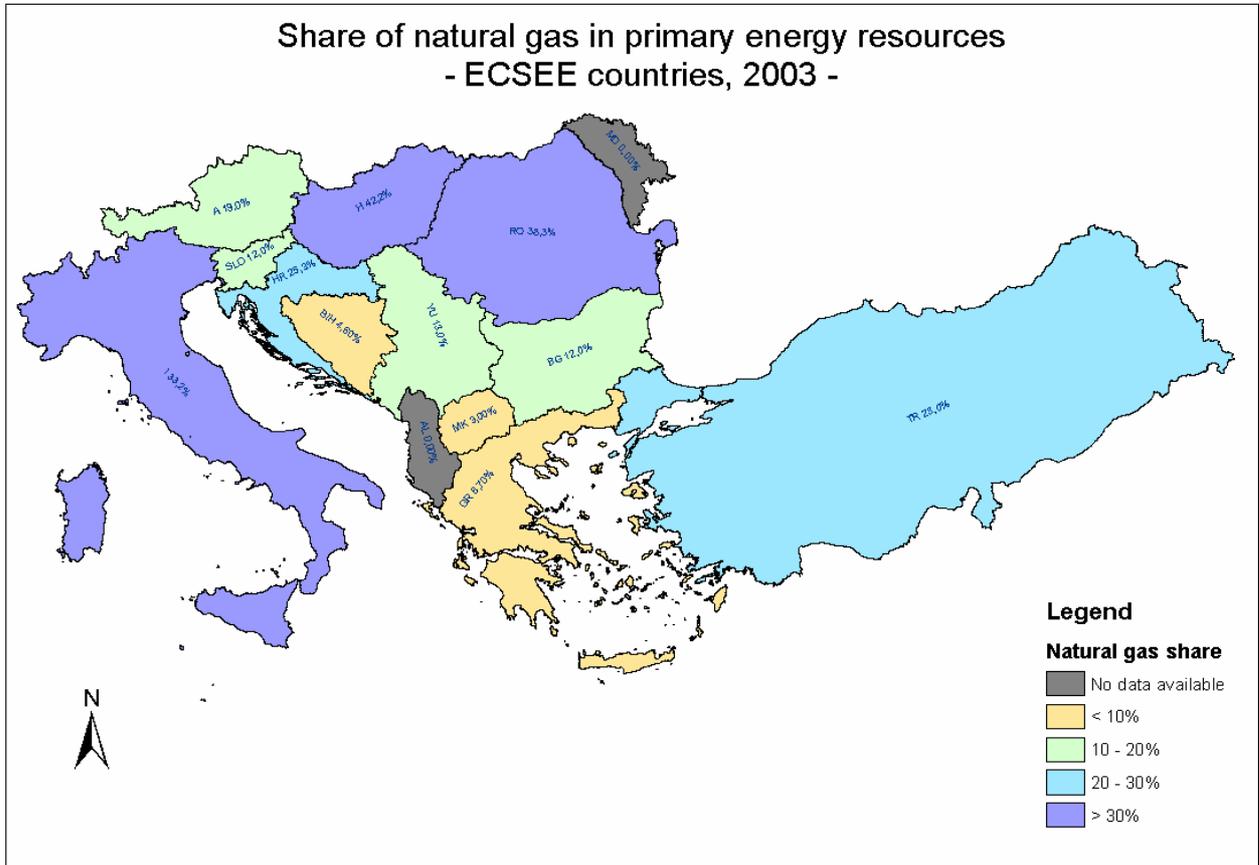


1.2. Share of Natural Gas in Primary Energy

The average share of gas in primary energy in Non-EU ECSEE Countries is 23.8%, which is very close to that of EU average (24%). However the average hides large differences within the region. Hungary (42,2%), Romania (38,3%) and Italy (33,2%) have the largest share in the region. On the other hand, F.Y.R. of Macedonia (3%), Bosnia & Herzegovina (4,6%) and Greece (6,7 %) have the lowest share in the region. The ratios in Turkey (23%) and Croatia (23.4%) are close to those of EU countries (24%). On the other hand, the average share of the EU ECSEE Countries is 29,2% which is above that of the EU as a whole (**Map 1**).

The share of gas in primary energy consumption is affected by several factors, which are related to the economics of natural gas demand as well as to the availability of natural gas supply in the country or in neighboring areas. Hence, it is hardly a reliable way of comparing countries. It can however be expected that the creation of a single market may lead to its increase, notably where it is currently very low.

Map1



1.3. Natural gas supply

The availability of several supply sources is a basic feature of an efficient, competitive and secure gas market, according to widely shared recommendations of the European Commission and the International Energy Agency. This should mean diversification of supply for companies and/or countries as appropriate. Considering, first, the gas origin by country, it is remarkable that the majority of the Non-EU ECSEE Countries import natural gas only from Russia (**Table 1**). Only Turkey has diversified sources of supply, and only Romania and Croatia have significant domestic production when compared with the other Non-EU ECSEE Countries. However, domestic production is expected to decline, especially in Romania (see country analysis in Section II) and imports are expected to proportionally increase in the near future.

The import ratio in most ECSEE Countries is more than 75% with the exception of Romania and Croatia due to their high level of domestic production (**Map 2**).

Map 2

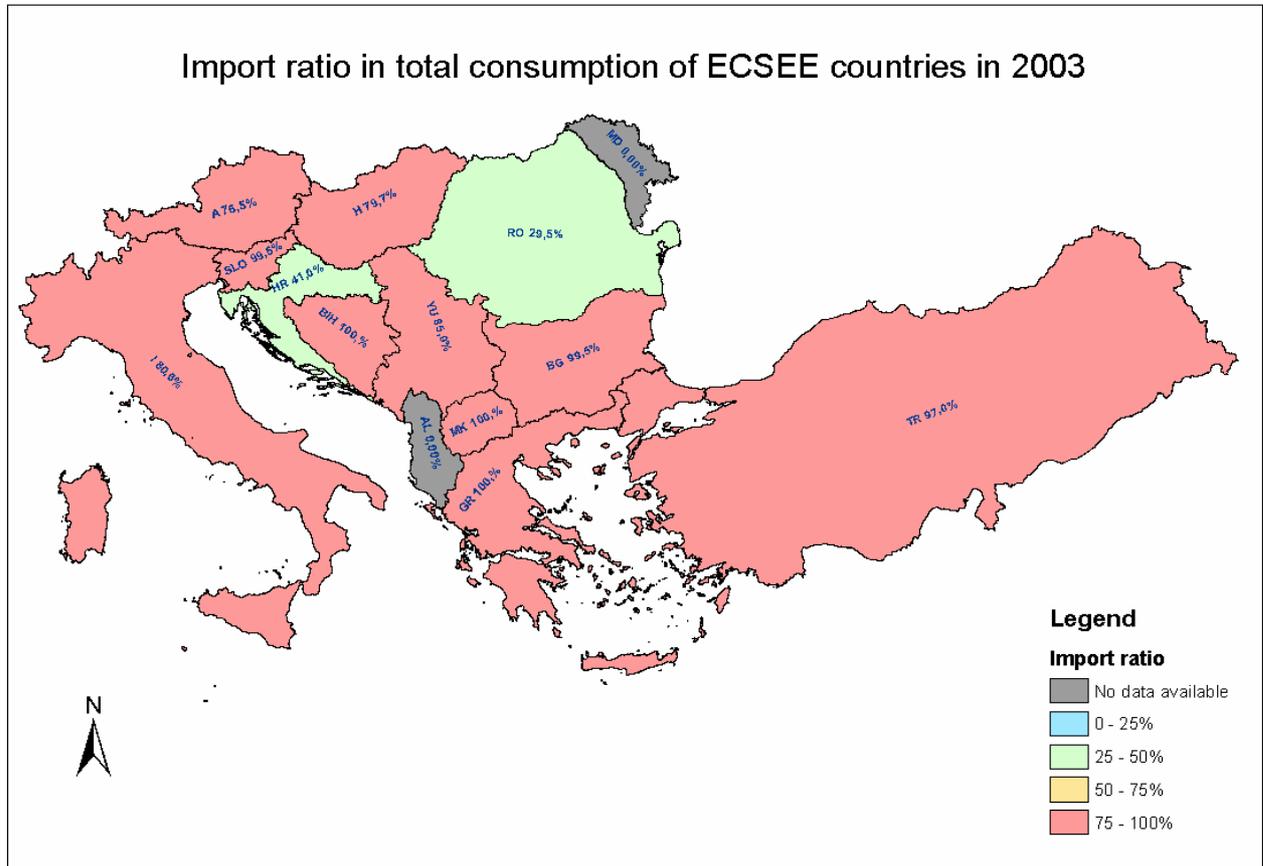


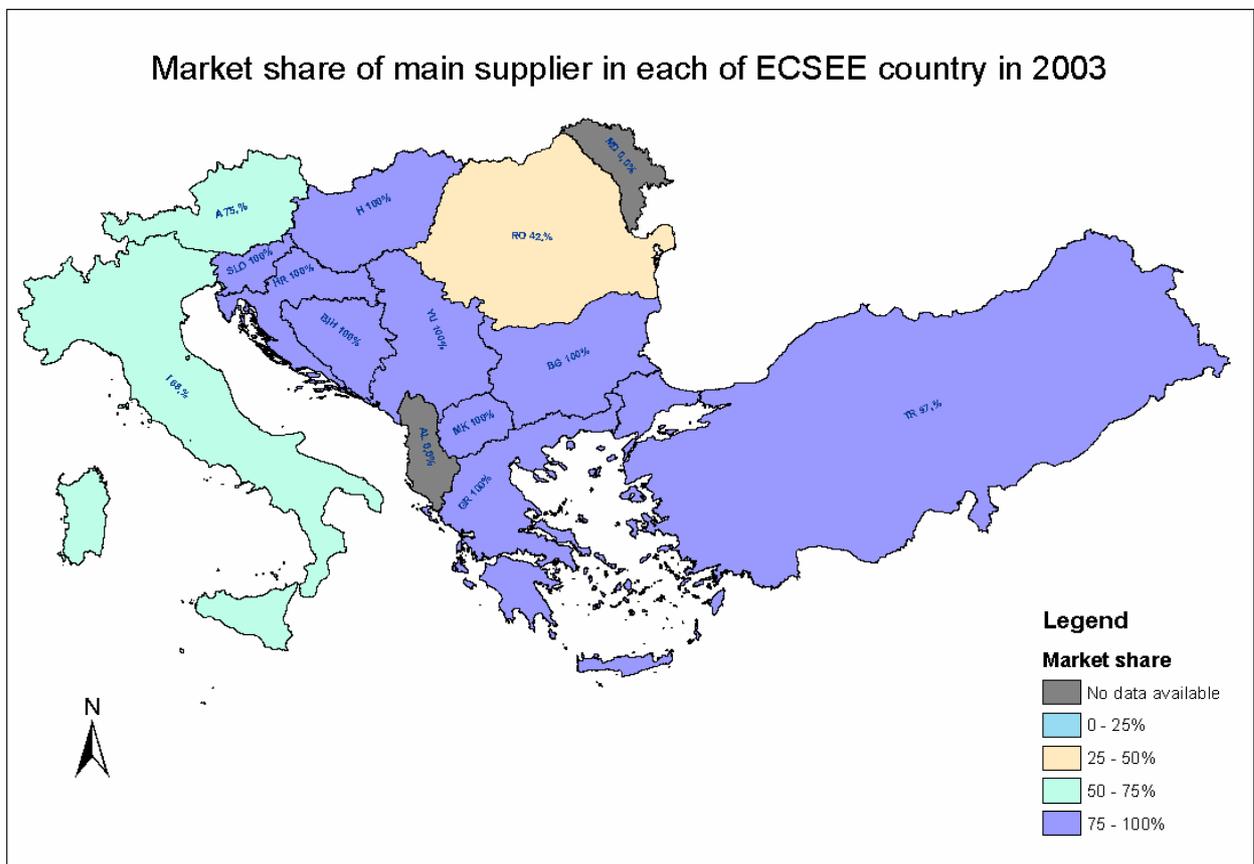
Table 1

	B&H	BU	CRO	FYR	RO	SER	TU	AU	GR	HU	IT	SLO
RUSSIAN FED.	100	100	100	100	100	100	60	76	75	88	36	59
NORWAY								14				
GERMANY								10				
ALGERIA							19		25		34	37
UKRAINE										2		
FRANCE										4		
GERMANY/AU										6		4
NORWAY											17	
TURKMENISTAN											7	
NIGERIA							5				6	
IRAN							16					
TOTAL	100											

The situation is slightly different in the EU ECSEE Countries. Most of them have already diversified their import sources.

Turning to the analysis of gas supply by companies, a very high degree of concentration can be noted in most countries. The lowest concentration is found in Romania, Italy and Austria. In most countries over 95% of supply are handled by state-owned monopolies under long term contracts, mainly from the Russian Federation (**Map 3**).

Map3



1.4. Natural gas infrastructure

Natural gas infrastructure - transmission, distribution, storage, and LNG - is relatively underdeveloped in the Region.

1.4.1 Transmission

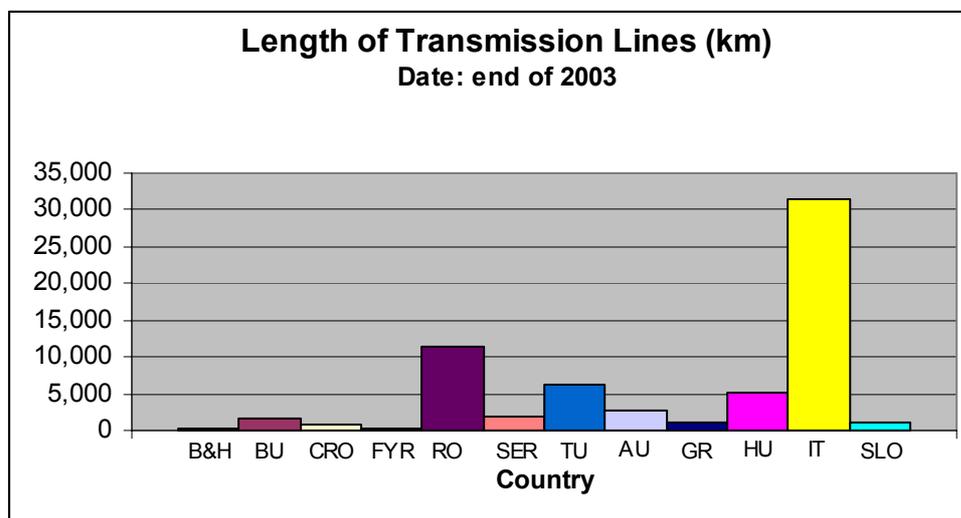
A broad indicator of the availability of basic infrastructure is per capita length of transmission and distribution pipelines, which is featured in the seventh and eighth columns of **Table 3**. It can be noticed that among Non-EU ECSEE Countries only Romania has a well developed transmission network: Its value is similar to those of more advanced countries like Hungary, Austria, Italy and Slovenia. Bulgaria, Croatia and Serbia & Montenegro have slightly developed transmission networks.¹ On the other hand, the transmission network has not been well developed in Turkey, Greece, Bosnia & Herzegovina and F.Y.R. of Macedonia.

With respect to total length of transmission pipelines, Romania and Turkey have the largest systems in Non-EU ECSEE Countries (**Chart 4**). The transmission network is owned by state companies in all countries except in Slovenia (state share is 32%) and partly in Serbia & Montenegro.

The capacity of transmission lines is reported as adequate with respect to current needs or larger especially in Romania and Bulgaria. However, considering expected growth in gas consumption and transit, new capacity is likely to be needed.

Moreover, it must be noted that access to pipelines, especially those used for international transit flows, is reserved for current rights holders. Often transit pipelines may not be used to satisfy the needs of the country they cross, and sometimes are not even connected to the domestic network (as is the case of Romania).

Chart 4



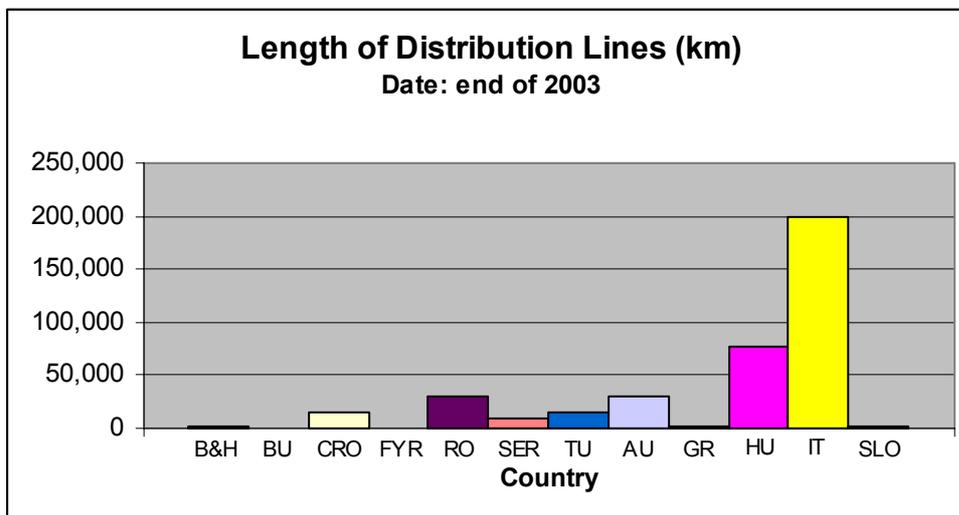
¹ Since this indicator may be affected by geographical features of the countries, another index was developed, i.e. the ratio of gas to electricity transmission lines (UCTE data). Electricity transmission is generally widespread in all countries; hence this ratio represents a good measure of gas transmission diffusion in each country. However the ratio of electricity to gas transmission lines length does not yield very different information; hence the per capita transmission line indicator is an adequate index of transmission diffusion.

1.4.2 Distribution

Distribution networks are relatively underdeveloped in the Non-EU ECSEE Countries (**Chart 5**). The distribution lines per capita index is significantly high in Croatia and Serbia & Montenegro in Non-EU ECSEE Countries. In all other Non-EU ECSEE Countries the distribution network is under fast development. Distribution companies are mostly owned by private companies. On the other hand infrastructure in Austria, Hungary and Italy is well developed.

Data on distribution lines may be hard to compare, as the definition of “transmission” and “distribution” is not the same in all countries, and the limits of local distribution also change and are not standardized particularly in Non-EU ECSEE Countries. Therefore, international comparison of these figures must be considered only as a preliminary approximation.

Chart 5



1.4.3 Storage

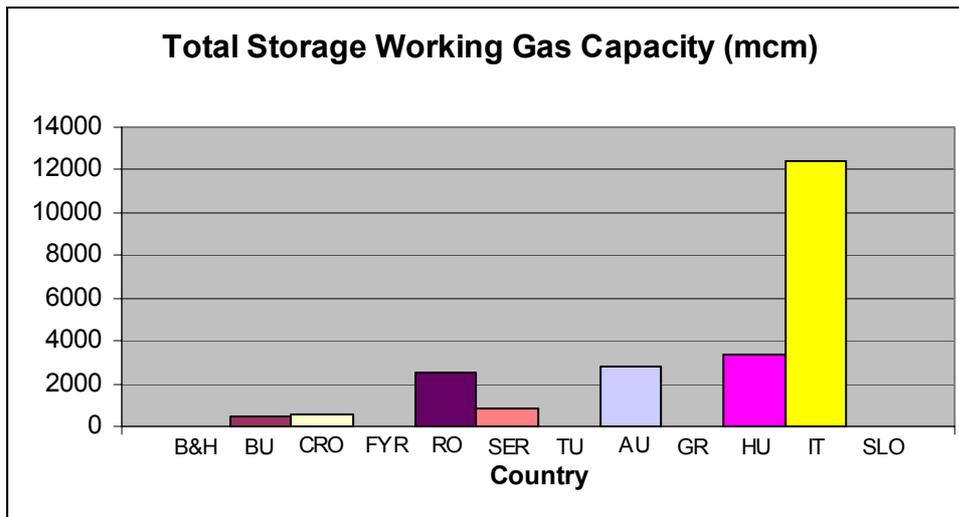
Data on gas storage availability, expressed as total working gas capacity, are provided in **Chart 6**. **Table 3** also provides the ratio of such values to total gas consumption of each country, in order to compare the availability of such service for each country.

Except in Romania, Croatia and Bulgaria there is not an adequate underground storage capacity in the Non-EU ECSEE Countries. The total ratio of storage to consumption of Non-EU ECSEE Countries is half that of EU ECSEE Countries. Further, the limited availability of international connection involves that storage capacity of one country can hardly be used as a tool to provide security of supply or load management services to other countries of the region.

However, in Turkey and Serbia, new storage capacity is under development and is expected to be in operation by 2006.

On the other hand, the underground natural gas storage working gas is rather high percentage of the annual consumption in Austria (31,7%), Hungary (23,1%) and Italy (16,3%).

Chart 6



1.4.4 LNG

Turkey, Italy and Greece have LNG terminals. Turkey has two LNG terminals, although only one is currently active and the other is ready to be in operation. The send out capacity, expressed as a percentage of yearly consumption, is given in the seventh column of **Table 2**.

From the table it can be seen that Non-EU ECSEE Countries are now in a better position than EU ECSEE Countries as LNG facilities are concerned.

However, the same problem occurs as for storage facilities: abundant capacity currently available in Greece and Turkey can hardly be used to supply consumers of other countries, due to uncertain access regimes to both LNG terminals and connecting pipelines

1.4.5 Demand and Supply Projections

By summing up official forecast provided in the Questionnaire, a conclusion might be reached that no rapid increase is estimated in the gas demand of the ECSEE countries as a whole. However the lack of available connections between the countries, which are far from representing a single market, would render a similar conclusion hardly meaningful. Some countries say they expect excess supply while in others demand is expected to be constrained by the lack of gas. In the longer term, a remarkable rise in demand is anticipated from the same sources.

The often contrasting pattern of supply and demand balances among countries of the region is indeed one of the main reasons for the creation of a single market, where countries in excess supply and those expecting excess demand may offset their positions. Such pattern also

provides part of the justification for the existing infrastructure projects linking several ECSEE countries (Sec. 1.7).

Given the lack of standardization in the determination of demand and supply forecasts, any conclusion about a regional supply outlook should be postponed to further research to be undertaken within the future ECSEE framework.

1.5. Security of Gas Supply

Security of gas supply is defined as the capability to ensure supplies of natural gas at reasonable costs, when faced to disruptions arising from natural, technical, commercial and political reasons. It is a primary and widely shared objective of natural gas policy. The main factors that, where available to a significant extent, strengthen security of supply of a country or region are:

- multiple supply sources by country;
- multiple supply sources by company;
- multiple connections to other countries;
- domestic production;
- fungible sources, notably LNG terminals;
- significant storage and linepack capacity;
- long term contracts;
- interruptible uses, e.g. in multifuel power stations and industrial plants;

The availability of such factors in the ECSEE countries, for a share of at least 10% of domestic consumption, is reported in **Table 4**.

Information is not yet available concerning actual availability of interruptible supplies. The large share of natural gas used for power generation may strengthen security of supply if this can be promptly substituted by other fuels, however further research is needed to ascertain if this is the case.

It can be noted that some security factors are found in all ECSEE countries, like long term contracts. Among Non-EU ECSEE countries, some are better endowed with some security features while others are available in other countries of the region. However, most countries in the region lack at least two of these basic securities of supply factors.

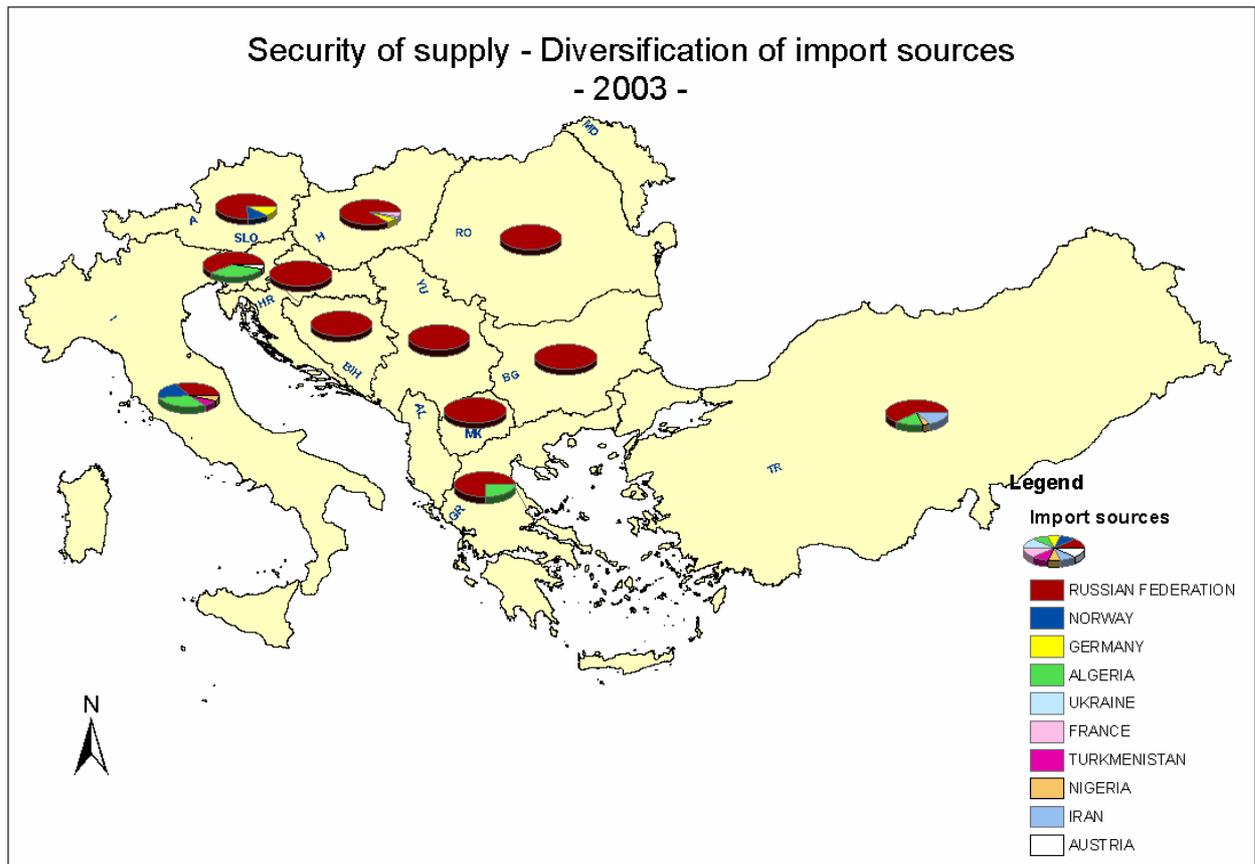
In fact, given the current situation of infrastructure interconnection, the availability of a security factor in one country may offer very limited protection to other countries of the region, not even to the neighboring countries. Major changes in legislative, regulatory and contractual framework and physical infrastructure – in other words, the creation of a single market - are required for this mutual security to be attained.

As a whole, the security of supply characteristics of Non-EU ECSEE countries fall short of those found in EU countries. The main sources of concern are probably the high dependence on imports from a single source and the uneven availability of storage facilities and LNG terminals.

Dependence on a single source is worsened by the existence of destination clauses that may limit re-routing of gas where necessary, and lack of connections (**Map 4**).

Further, the natural gas industry is controlled mainly by one company in each of the region countries with a few exceptions. Such companies are mostly state owned and often have very limited supply portfolios.

Map 4



1.6. Regional Infrastructure Developments

Countries of the region are engaged in a number of new international projects under construction or planned; namely;

- a) Turkey - Bulgaria - Romania - Hungary – Austria (Nabucco)
- b) Turkey-Greece/Bulgaria-Macedonia-Kosovo-Serbia-[via Hungary and/or Bosnia & Herzegovina, Croatia]-Austria
- c) Turkey-Greece-Italy
- d) Turkey-Greece-Macedonia-Albania-Italy

These proposals are internationally known and are in different advancement stages. Their assessment lies beyond the scope of this Report and the responsibilities of CEER.

They are mentioned here because of their strategic importance for the entire region as well as for Central and Western Europe. As a consequence of which several feasibility studies for such Projects enjoy the financial support of the European Commission.

In particular, the ECSEE region is geographically well located to become a gas transit transmission region between the mainly producing Regions of Caspian and Middle East and the mainly importing Central & Western Europe. However this role can only be fully achieved if a harmonized regulatory framework is implemented. Such framework should promote the required investments by allowing their cost recovery in a secure and economic way. These projects, if carried out, would strengthen security of supply by interconnecting countries; reduce cost of gas supply by exploiting economies of scale; increase gas availability and access in the region. The condition for a significant support from these Projects is however their connection to existing infrastructure and the availability of regulated access to at least part of their capacity, in line with criteria set out in Natural Gas Directive 2003/55/EC.

TABLE 2
NATURAL GAS INFRASTRUCTURE

<i>ECSEE Countries</i>	Market size (BCM)	Exp. Market size increase by 2005 (%)	Exp. Market size increase by 2010 (%)	Share of gas in Primary energy	Gas Consumption per capita (m ³)	Annual growth rate 1999-2003	LNG import capacity as % of consumption
Bosnia & Herzegovina	0.18	N/A	N/A	4.6%	43,3	0,6%	0%
Bulgaria	2.91	9.9	34.00	12.0%	368.5	-3,0%	0%
Croatia	2.64	2.30	25.00	23.4%	596.2	-0.3%	0%
F.Y.R. of Macedonia	0.11	N/A	N/A	3.0%	53.5	28.4%	0%
Romania	18.30	0.50	11.50	38.3%	819.4	2.2%	0%
Serbia & Montenegro	2.22	17.10	37.40	13.0%	210.9	5.8%	0%
Turkey	21.2	16.00	71.17	23.0%	297.2	14.5%	28%
Austria	8.9	10.00	21.00	19.0%	1096.6	1.6%	0%
Greece	2.4	25.00	266.00	6.7%	218.7	12.7%	107%
Hungary	14.56	-0.50	9.60	42.2%	1338.6	4.7%	0%
Italy	76.4	9.90	19.10	33.2%	1330.5	3.0%	5%
Slovenia	1.1	N/A	N/A	12%	554.4	-0.3%	0%
Non-EU ECSEE Total	47.56			23.8%	387.5		
EU ECSEE Total	103.36			29.2%	1156.5		

TABLE 3
NATURAL GAS INFRASTRUCTURE

<i>ECSEE Countries</i>	% controlled by largest company	# of TSO's	# of DSO's	% of gas from domestic production	% of gas from largest foreign country source	Storage Working gas as % of annual consumption	Transmission lines per capita	Distribution lines per capita
Bosnia & Herz.	100%	3	3	0%	100%	0.0%	48.1	245.1
Bulgaria	100%	1	34	0.5%	99.5%	15.5%	215.3	100.9
Croatia	100%	1	38	59%	41%	21.2%	238.7	3561.0
F.Y.R. of Macedonia	100%	1	1	0%	100%	0.0%	47.7	15.3
Romania	42%	1	19	70.5%	29.5%	13.7%	514.5	165.7
Serbia & Mont.	100%	3	31	15%	85%	0.0%	193.0	896.4
Turkey	97%	1	7	3%	58%	0.0%	67.3	210.3
Austria	75%	7	20	23.5%	58%	31.7%	334.9	3602.8
Greece	100%	1	3	0%	75%	0.0%	87.6	232.1
Hungary	100%	1	11	20.3%	70.4%	23.1%	507.5	7142.3
Italy	68%	2	560	17.6%	31.1%	16.3%	546.5	3619.8
Slovenia	100%	1	16	0.5%	59%	0.0%	482.9	1127.5
Non-EU ECSEE Total	76%	9	136	32%	50.1%	9%	174.2	372.8
EU ECSEE Total	75%	12	610	18%	40.3%	18%	529.8	4076.1

TABLE 4
SECURITY OF SUPPLY FEATURES

<i>Country</i>	<i>Multiple import sources</i>	<i>Multiple supply companies</i>	<i>Multiple connections to supply sources</i>	<i>Significant domestic production</i>	<i>LNG terminals</i>	<i>Significant storage and linepack capacity</i>	<i>Long term contracts</i>
Bosnia & Herzegovina	No	No	No	No	No	No	Yes
Bulgaria	No	No	Yes	No	No	Yes	Yes
Croatia	No	No	Yes	Yes	No	Yes	Yes
F.Y.R. of Macedonia	No	No	No	No	No	No	Yes
Romania	No	Yes	No	Yes	No	Yes	Yes
Serbia	No	No	No	Yes	No	No	Yes
Turkey	Yes	No	Yes	No	Yes	No	Yes
Austria	Yes	Yes	Yes	Yes	No	Yes	Yes
Greece	Yes	No	Yes	No	Yes	No	Yes
Hungary	Yes	No	Yes	No	No	Yes	Yes
Italy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Slovenia	Yes	No	Yes	No	No	No	Yes

2. LEGAL & REGULATORY FRAMEWORK IN THE ECSEE (TABLE 5)

2.1. Regulatory Authorities

All ECSEE countries have their regulatory authorities (Serbia is expected to establish it in 2005). However, the regulatory authority of Greece has no decisive authority for the gas market except for the distribution of gas in the cities.

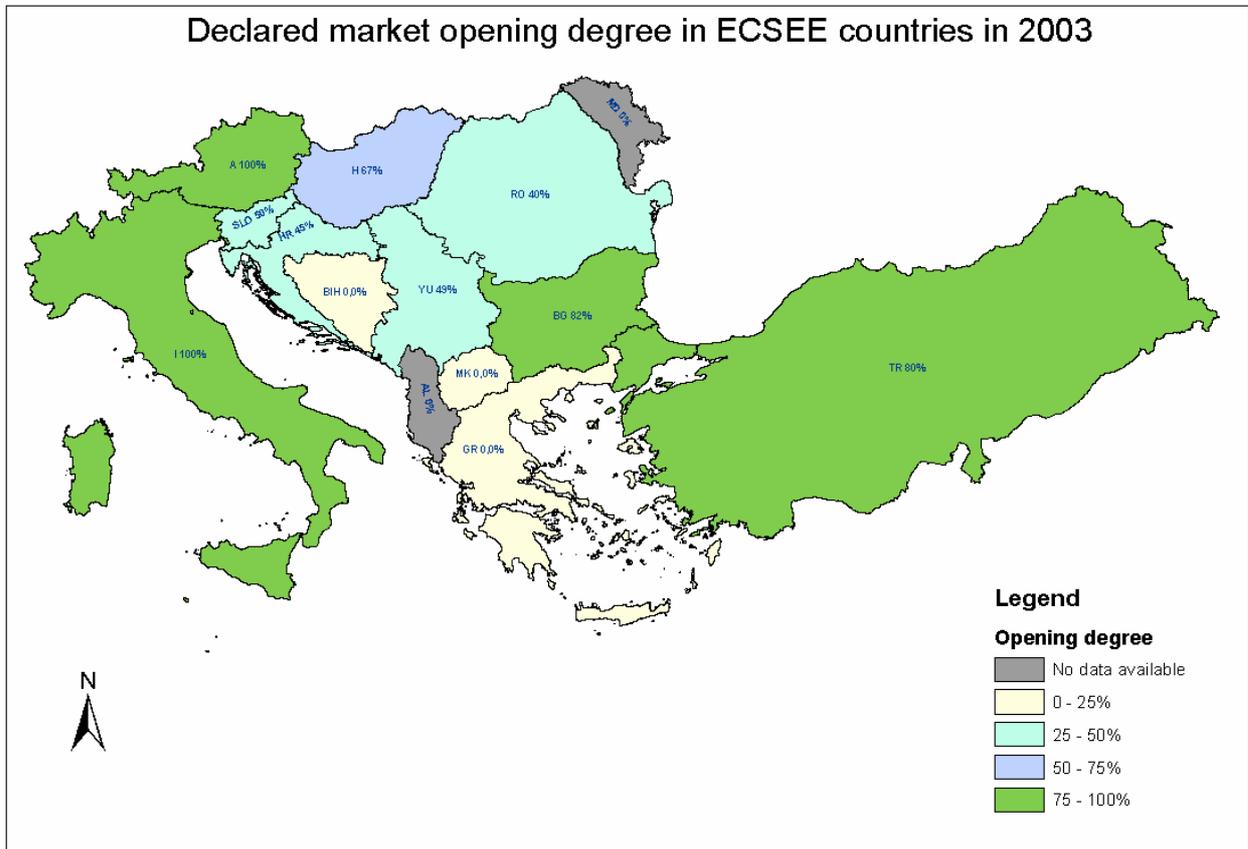
A detailed Benchmarking report of the characteristics and role of Regulatory Authorities has been recently concluded and published by the CEER SEEER Working Group addressing all issues related to both electricity and natural gas (www.ceer-eur.org).

2.2. Market Opening Level

Despite the fact that most countries of the region have completed their legal framework, creating conditions for participation of the private sector and defined some eligible customers (**Map 5**), and thus opened their markets, it has not yet been possible to introduce competition in any of the ECSEE markets but in Romania. Monopolistic structures still prevail. On the other hand, competition has been introduced into EU ECSEE Countries (except Greece) and in Romania.

The average declared market opening calculated as in the EC Benchmarking Reports for EU Member States and weighted by market size, is 61% in ECSEE countries. This may be compared with 94% of EU ECSEE Countries. All Non-EU ECSEE Countries started to open their markets except F.Y.R. of Macedonia and Bosnia and Herzegovina. In EU ECSEE Countries, all countries opened their market except Greece. Greece is temporarily exempt from some market opening requirements of Directive 2003/55/EC due to its lack of connection to other EU markets.

Map 5



2.3. Unbundling of Market Activities

TSOs and DSOs are in the process of legal and managerial unbundling. Accounting unbundling is foreseen for almost all activities. The unbundling of activities are in most cases compatible with the 2003/55/EC Natural Gas Directive rules that envisaged the separation of supply side from the services side for the vertical integrated undertakings.

2.4. Transmission Tariff Structure

Tariffs are mostly determined and/or approved by Regulatory Authorities. However further research is needed on criteria used for tariff setting and on their actual implementation.

In most countries of the region, postage stamp methodology is being or will be used for transmission.

No country has yet adopted an entry-exit tariff structure as recommended by CEER and the Guidelines for Good Practice of the Madrid Forum. However, some countries are about to introduce such tariffs in 2005.

2.5. Third Party Access and Capacity Booking

In most countries of the region access to domestic pipelines is regulated. However, as the transit network is concerned, access is regulated in half of the countries of the region but is negotiated for the other half. For congestion management, in most countries the adopted approach is “first come first serve”.

The network code is not in place in most countries. However, there are some rules for system operators. More research is needed to ascertain actual network entry regulations in each country.

In particular, more research is needed to clarify what are the obstacles to cross border trade between countries of the Non-EU ECSEE region.

2.6 Gas Release Programs

In half of the countries of the region, gas release programs are foreseen to be conducted in order to obtain more competitive markets.

<i>ECSEE Countries</i>	Regulator	TPA	Unbundling of TSO	Unbundling of DSO	Transmission Tariff Structure	Gas Release Program	Eligibility Threshold (MCM)	Declared Market Opening (%)	Capacity booking procedure
Bosnia & Herz.	NO	Negotiated	Legal	Legal	None	NO	N/A	0%	None
Bulgaria	Ex-ante	Regulated	Management	Management	Post	NO	2	82%	1 st come 1 st Serve
Croatia	Monitoring Power	Negotiated	Legal	Legal	Post	NO	100	45%	1 st come 1 st Serve
F.Y.R. of Macedonia	Ex-ante (expected)	Regulated (expected)	Legal (expected)	Legal (expected)	To be defined	NO	N/A	0%	To be defined
Romania	Ex-ante	Regulated	Legal	Legal	Post	Comp. Policy	3	40%	1 st come 1 st Serve
Serbia & Mont.	Ex-ante (expected)	Regulated	Management(expected)	Management(expected)	To be defined	NO	50	49%	To be defined
Turkey	Ex-ante	Regulated	Legal	Legal	Entry-exit	YES	1	80%	Pro-rata
Austria	Ex-ante	Regulated	Legal	Legal	Post/ Distance	YES	0	100%	Flexible
Greece	Not decisive	N/A	NO	NO	N/A	NO	N/A	0%	N/A
Hungary	Ex-ante	Regulated	Accounts	Accounts	Post	NO	Non-Household	67%	Auction
Italy	Ex-ante	Regulated	Legal	Legal	Entry-exit	YES	0	100%	Flexible
Slovenia	Ex-ante	Regulated	Legal	Accounts	Post	YES/NO	Non-Household	90%	1 st come 1 st Serve

3. CONCLUSIONS AND FURTHER DEVELOPMENTS

Even though neither gas consumption nor production in the ECSEE Countries represent a large share of the European market, the region has strategic importance due to its being located between the rich reserves of the Middle East, North Africa, and Caspian and large consumer markets of Western Europe. Gas transit through the region would also benefit crossed countries by reducing costs of their supplies.

It has been noticed in this Report that the average size of national markets in the Non-EU ECSEE Countries and Greece is relatively small if compared with those of neighboring and other EU Member States. Since each country (with the notable exception of Romania) is almost entirely supplied by a national state company, this reduced size also applies to wholesale and transmission companies. Given the economies of scale of transportation and in supply – also related to the bargaining power of companies – it is likely that the operational framework of a regional single market would be better placed than each of the small national markets in the region, in many aspects.

Further, it has been noticed that several countries of the region are endowed with some useful security of supply features, like LNG terminals, storage facilities, multiple international interconnections and large share of power generation use. However, in the current infrastructure and regulatory situation these features may hardly be shared so as to guarantee adequate security of supply for the whole region.

It may therefore be argued that a single regional market would feature far better chances of:

- a) Negotiating for import supplies;
- b) Diversifying gas sources;
- c) Ensuring security of supply through use of storage, interconnection and LNG facilities of each country;
- d) Exploiting economies of scale in gas transportation;
- e) Matching excess supply with excess demand markets in the short and long run;
- f) Developing new long distance transmission infrastructure.

In turn the improved economics and security of gas supply in the region would bring more gas to the region, allowing participating countries to:

- a) Meet increased demand at reduced cost, thereby favoring the expansion of gas distribution and usage in the region;
- b) Increase environmental quality at local, regional and global level;
- c) Improve interconnection between ECSEE and Western Europe and security of supply for both.

These benefits of a single gas market in the ECSEE have been recognized by the signatories of the 2003 MoU, who have decided to extend the Athens process to natural gas.

This Report has found that the ECSEE natural gas market is currently made of very mixed and uneven situations. EU ECSEE Countries (with the partial exception of Greece) and Romania

have mature markets with widespread transmission and distribution infrastructure and high per capita consumption levels. They are endowed with features that strengthen their security of supply, notably diversification of supplies, plurality of supply-side companies, availability storage and viable international links. Further, they have already undertaken market opening, not only by declaring eligible of most or all customers, but also by actually introducing some degree of market competition. Access conditions to essential infrastructure are defined, although several obstacles still exist to a fully competitive market.

On the other hand, other Non-EU ECSEE countries have less than mature markets, sometimes expected to grow rapidly, with limited infrastructure. Consumption levels are particularly low in Western Balkans except Croatia. Non-EU ECSEE Countries lack some important security of supply features, are mostly dependent on a single import source and their interconnections are either not existent or reserved for current suppliers. No regional market is actually in place but only bilateral transactions for supply from producing countries.

While the gas industry in these countries is generally regulated and some customers' eligibility has been declared, almost no actual competition exists. In most cases the industry is dominated by state-owned companies, the size of which is relatively small for the European market.

While some steps have already been taken in the direction of developing a regional and competitive market, more research is needed in order to ascertain the economic conditions of such developments, and therefore the optimal timing of the regional market development. Actual regulatory conditions also require tighter monitoring as a pre-requisite for further harmonization. The CEER therefore welcomes any effort undertaken by the European Commission and by several donors in order to better analyze the economic and regulatory conditions of the gas industry in the ECSEE and is ready to contribute to such efforts.

EU Natural Gas Directive 98/30/EC established a ten year time table for breaking up gas supply monopolies, introducing TPA to gas transport networks, and enabling access of larger gas consumers to their suppliers.

EU Natural Gas Directive 2003/55/EC introduced an accelerated time table for the completion of market opening. The market will be fully open for all commercial users by July 2004. Complete market opening, including household consumers is required by July 2007.

Because of their isolated and/or newly developed gas infrastructures, ECSEE countries cannot open their markets to competition immediately. The need for new infrastructure requires a careful balancing of competition development in parallel with the new Directive and guarantees to network developers. While natural gas infrastructure should be completed and interconnected, regulatory bodies should ensure the harmonization of market access conditions and the development of a common ECSEE gas market.

In order to implement the objectives defined in the 2002 and 2003 Athens MoUs and to set up a common natural gas market and exploit its related benefits, starting from the current status of the ECSEE gas industry as outlined in the present report, more detailed studies are required. Consistently with the experience of the EU market opening after Directives 98/30/EC and 2003/55/EC, further research and regulatory effort should in particular address the following

issues, with a view to ensure their necessary harmonization and their compatibility for a common market:

1. Authorization and licensing regimes for existing and new transportation infrastructure.
2. Technical standards and other obstacles to cross border exchanges, in comparison with the EASEE-gas process in the EU.
3. Legal, fiscal and tariff barriers to cross border trade including destination clauses and other commercial restrictions.
4. Independence and responsibilities of national market regulators as well as of the regional regulatory board.
5. Stability, predictability and accountability of the regulatory framework.
6. Regulated access to transmission, distribution and (at least in the medium term) storage and LNG facilities.
7. Impact of existing and new long term contracts on competition in the region.
8. Infrastructure capacity information and allocation criteria.
9. Infrastructure financial viability under competitive conditions.
10. Implementation of cost-reflective (preferably entry-exit) pricing mechanisms of transmission
11. Economically sound fair and non discriminatory public service obligation criteria.
12. Legal and management unbundling of transmission and distribution operations.
13. Criteria for release and availability of unused capacity.
14. Promotion of gas consumption through environmentally consistent fiscal and regulatory policies.
15. Increased cooperation and trade among ECSEE countries.
16. Promotion of measures to ensure security of supply on a non-discriminatory basis.

SECTION II

NATURAL GAS INFRASTRUCTURE

AUSTRIA

Consumption	8.9 BCM						
Suppliers	The Domestic production is 2.1 BCM with a share of 23.5% in total consumption. The share of import is 76.5% and natural gas is supplied by Russian Federation (58%), Norway (11%) and Germany (7.5%).						
Transmission Lines	The length of the transmission lines is 2718 km . The transmission network has three owners. The total capacity is 1.59 MCM/h . There are seven transmission companies (joint venture and partially privately owned)						
Transit Transmission	No transit transmission.						
Distribution Lines	The length of the distribution lines 29.240 km . There are 20 distribution companies which operate the distribution lines that are partly privately owned.						
Storage Facilities	There are five storage facilities (depleted fields) with a 1.315 MCM/h withdrawal capacity.						
LNG Facilities	No LNG terminal.						
Gas in Primary Energy	Not Available						
Demand-Supply	Not Available						
Gas Usage by Major Sectors	<table border="0"> <tr> <td><u>Industry</u></td> <td><u>Residential</u></td> <td><u>Power</u></td> </tr> <tr> <td>44-45%</td> <td>32-36%</td> <td>19-23%</td> </tr> </table> <p>Natural gas is mainly used in industrial and residential sectors.</p>	<u>Industry</u>	<u>Residential</u>	<u>Power</u>	44-45%	32-36%	19-23%
<u>Industry</u>	<u>Residential</u>	<u>Power</u>					
44-45%	32-36%	19-23%					
Share of Gas in Power	19-23%						
New Projects	The major project is Nabucco project, connecting Austria and Turkey via Bulgaria, Romania and Hungary. This pipeline will provide a new gas supply route to Europe. The estimated start of operation is 2009 with a 20 BCM capacity in plateau period. In addition to this project, there are some storage and domestic pipeline projects as well.						
Country Analysis	Austria is one of the mature markets in the region. The natural gas consumption is expected to gradually increase taking into account the long term contracts and new projects in Austria. Transmission and distribution lines are well developed throughout the country The storage capabilities are high enough as well. With the new projects including new suppliers, Austria, which is currently supplying gas from three different sources, will further strengthen the security of supply in the market.						

BOSNIA & HERZEGOVINA

Consumption	0.18 BCM			
Suppliers	No Domestic production. The supplier is Russian Federation (100%) .			
Transmission Lines	The length of the transmission lines is around 200 km , with a 16" diameter. The operating pressure is 35 bars while the design pressure is 50 bars . There are three transmission companies which operate the current transmission network. The total capacity is 1.5 MCM/day and available capacity is around 3.0 MCM/day .			
Transit Transmission	No transit transmission.			
Distribution Lines	The length of the distribution lines is 1020 km . There are three distribution companies which operate the distribution lines in two cities.			
Storage Facilities	No storage facility.			
LNG Facilities	No LNG terminal.			
Gas in Primary Energy	2003 4.6%	2005 8%	2010 12%	2015 20%
Demand-Supply	The supply quantity will cover the demand in 2005. The existing transmission capacity will be fully used by 2010.			
Gas Usage by Sectors	Industry 33%	Residential 59%	Commercial 8%	
Share of Gas in Power	0%			
New Projects	A new transmission line which has a length of 100 km is planned to be constructed. The total capacity will be 1.0-1.5 BCM/year .			
Country Analysis	The natural gas consumption in Bosnia & Herzegovina is currently very low. The transmission lines are developed very slightly. Distribution lines are not developed in the country, except for in two cities. The country has no reserves and storage capabilities. The share of natural gas in primary energy is currently very low. However, it is expected to relatively increase in long term period. Natural gas is currently used mainly in residential and industry. In long term, a significant growth in gas demand is expected.			

BULGARIA

Consumption	2.912 BCM			
Suppliers	The Domestic production is 0.002 BCM with share of 0.5% . The share of import is 99.5% and all is supplied by Russian Federation.			
Transmission Lines	The length of the transmission lines is 1700 km. with a 20-40 inches diameter, and operating pressure is 5,4 Mpa . The state is owner of the transmission network. The total capacity is 7 BCM/year.			
Transit Transmission	The length of the transit transmission lines is 945 km. with a 27-40 inches diameter, and operating pressure is 5.4 Mpa . The transit transmission lines are owned by state. The total capacity is 18 BCM/year .			
Distribution Lines	The length of the distribution lines is 797 km. There are 32 municipal distribution companies which operate the distribution lines that are owned by private and joint venture companies. The share of demand connected to distribution system is 5.05% of the total consumption.			
Storage Facilities	There is a storage facility (depleted field) with a 0.45 BCM/year working capacity.			
LNG Facilities	No LNG terminal.			
Gas in Primary Energy	12%			
Demand-Supply	<u>2005</u> 3.2 BCM	<u>2010</u> 3.9 BCM	<u>2015</u> 4.6 BCM	
Gas Usage by Sectors	<u>Industry</u> 50%	<u>Power</u> 39%	<u>Residential</u> 5 %	<u>Commercial</u> 6%
	Natural gas is mainly used for industry and power generation.			
Share of Gas in Power	39%			
New Projects	The major new project is Nabucco project. This pipeline will provide a new gas supply route to Europe through Bulgaria. The estimated start of operation is 2009 with a 20-25 BCM capacity in plateau period. In addition there are some small projects regarding new storage facilities as well.			
Country Analysis	The natural gas market in Bulgaria is undergoing and accelerated development process. The current natural gas consumption is said to be high compared to the countries of the Region. Natural gas consumption is expected to slightly increase taking into account the long term contracts and demand-supply balance. Industry and power are the main sectors for gas usage. The natural gas is supplied by Russian Federation currently. An extensive programme of gasification is envisaged for residential sector for near future.			

CROATIA

Consumption	2.64 BCM				
Suppliers	The share of Domestic production is 59% The share of import is 41% and all is supplied by Russian Federation .				
Transmission Lines	The length of the transmission lines is 760 km . with a total capacity of 1.2 BCM/year . The transmission lines are owned by state.				
Transit Transmission	No transit transmission.				
Distribution Lines	The length of the distribution lines is 15768 km . There are 38 distribution companies which operate the distribution lines which are owned by private, joint venture and municipal companies. The share of consumption by distribution companies is 44% in total consumption.				
Storage Facilities	There is one storage facility (depleted field) with a 558 MCM/year working capacity.				
LNG Facilities	No LNG terminal.				
Gas in Primary Energy	<u>2003</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>
	25.3%	26 %	28.6%	27%	27.6%
Demand-Supply	<u>2005</u>	<u>2010</u>	<u>2015</u>		
	Balanced	0.6 BCM	1.0 BCM		
Gas Usage by Major Sectors	<u>Industry</u>	<u>Residential</u>	<u>Power</u>	<u>Fertilizer</u>	
	26.7%	31.8%	16.6%	16.8%	
	Natural gas is mainly used in industry and residential sectors.				
Share of Gas in Power	23.4%				
New Projects	Two new transmission pipelines are planned. The first pipeline will be through Italy with a 192 km. length and 1.5 BCM/year capacity . The second one will be through Hungary with a 108 km length and 1.5 BCM/year capacities . In addition, an underground gas storage is planned for near future.				
Country Analysis	Croatia uses mainly her domestic production. The proved gas reserves are one of the largest in the region. However, the proven reserves are limited and production is expected to decline in the long term. The import quantity is supplied by Russian Federation. Natural gas infrastructures are well developed in the eastern part of the country. The transmission and distribution lines are well developed in the said region. However, the rest of the country, mainly the south suffers a lack of gas. The share of distribution in total consumption is relatively high in the northern part of the country and the activities are proceeding rapidly. It is expected that the use of gas in power generation will increase in near future. In addition it is intended to extend the gas network to non-gasified areas especially along the Adriatic coast. The natural gas in primary energy will slightly increase as well in the future.				

GREECE

Consumption	2.413 BCM			
Suppliers	No Domestic production. The import share is 100% and supplied by Russian Federation (75%) and Algeria (25%)			
Transmission Lines	The length of the transmission lines is 512 km. and total capacity is 379,800 and 293,000 (LNG) m3/h. There is only one Transmission Company which is owned by state.			
Transit Transmission	No transit Transmission			
Distribution Lines	The length of the distribution lines is 2547 km. There are 3 distribution companies operating the distribution lines.			
Storage Facilities	No storage facility			
LNG Facilities	One LNG terminal with two storage tanks and each with a capacity of 65,000 m3 and with a total working capacity of 600,000 m3/h.			
Gas in Primary Energy	<u>2003</u> 6.7%	<u>2005</u> 13,2 %	<u>2010</u> 17,1%	<u>2015</u> 20,4%
Demand-Supply	<u>2005</u> 3 BCM	<u>2010</u> 6,4 BCM	<u>2015</u> 7,3 BCM	
Gas Usage by Sectors	<u>Industry</u> 17 %	<u>Power</u> 74 %	<u>Chemical</u> 6 %	<u>Commercial</u> 3 %
	Natural gas is used mainly in power.			
Share of Gas in Power	10,9 %			
New Projects	The two priority projects underway are the Interconnector Turkey-Greece (supply of 750 MCM/year) and the increasing of the gasifying capacity of the Revithoussa LNG terminal from the current 270 cubic metres of LNG per hour to 1000 cubic metres of LNG per hour. In addition, feasibility study for an interconnector between Greece and Italy was launched in March 2004 and it is expected to be finalised by the end of 2004.			
Country Analysis	The natural gas usage in Greece is currently very low. However, Greece has a potential to transform her current market into fast developing one, taking into account the new projects and well placed geographical location in the Region. The transmission and distribution lines currently are not well developed throughout the country. However the existing LNG terminal is an advantage for diversification of the sources and ensuring security of supply. Gas consumption is expected to increase by more than double by the year 2015. The share of natural gas use in primary energy will also sharply increase and reach triple of its current level.			

HUNGARY

Consumption	14.56 BCM												
Suppliers	Domestic production is 2.95 BCM with a share of 20% in total consumption. The import share is 80% and supplied by Russian Federation (88%), Ukraine (2%), France (4%) and Germany (6%) .												
Transmission Lines	The length of the transmission lines is 5197 km . The total capacity is 97.3 MCM/day and available capacity is 3.46 MCM/day . There is only one transmission company which is owned by MOL Hungarian Oil and Gas plc..												
Transit Transmission	The length of the transit transmission lines is 323 km . The transit transmission is owned by the above mentioned transmission company, the subsidiary of MOL Hungarian Oil and Gas Plc. The total capacity is 11.8 MCM/nap.												
Distribution Lines	The length of the distribution lines is 77678 km . There are 11 distribution companies operate the distribution lines which are owned by private and public companies.												
Storage Facilities	There are five storage facilities (depleted fields) with a total 3.360 BCM/year working capacity.												
LNG Facilities	No LNG terminal.												
Gas in Primary Energy	42.2%												
Demand-Supply	<table border="1"> <thead> <tr> <th><u>2005</u></th> <th><u>2010</u></th> <th><u>2015</u></th> </tr> </thead> <tbody> <tr> <td>14.49 BCM</td> <td>15.97 BCM</td> <td>17.51 BCM</td> </tr> </tbody> </table>	<u>2005</u>	<u>2010</u>	<u>2015</u>	14.49 BCM	15.97 BCM	17.51 BCM						
<u>2005</u>	<u>2010</u>	<u>2015</u>											
14.49 BCM	15.97 BCM	17.51 BCM											
Gas Usage by Sectors	<table border="1"> <thead> <tr> <th><u>Industry</u></th> <th><u>Residential</u></th> <th><u>Power</u></th> <th><u>Mining</u></th> <th><u>Agriculture</u></th> <th><u>Commercial</u></th> </tr> </thead> <tbody> <tr> <td>21.8%</td> <td>33.6%</td> <td>28.8%</td> <td>1%</td> <td>1.64%</td> <td>13.08%</td> </tr> </tbody> </table> <p>Natural gas is mainly used in industry, residential and power sectors</p>	<u>Industry</u>	<u>Residential</u>	<u>Power</u>	<u>Mining</u>	<u>Agriculture</u>	<u>Commercial</u>	21.8%	33.6%	28.8%	1%	1.64%	13.08%
<u>Industry</u>	<u>Residential</u>	<u>Power</u>	<u>Mining</u>	<u>Agriculture</u>	<u>Commercial</u>								
21.8%	33.6%	28.8%	1%	1.64%	13.08%								
Share of Gas in Power	38.43%												
New Projects	The building of a third cross border transmission entry point is planned. The realization of the project would result connection between the Hungarian and the Slovakian natural gas system. The storage capacity will be increased with a 9 Million m³/day withdrawal capacity and, working gas capacity with 600 Million m ³ during the next five years. Another major project is Nabucco project, which connecting Hungary and Turkey via Bulgaria and Romania. This pipeline will provide a new gas supply route to Hungary and Europe.												
Country Analysis	Natural gas consumption is fairly high in Hungary. Hungary is one of the mature markets in the region. Domestic production is also high comparing the region countries. However the proven reservoirs are limited and it is expected a decrease in the production for near future. Hungary has a highly developed transmission and distribution lines throughout country. The storage capacity is also one of the highest in the region. The share of the natural gas in the primary energy and power is the highest in the region. Gas demand is expected to reach 17 BCM by 2015 and mostly driven by rising demand in the power generation and residential sectors. The supply and demand is in balance till the 2015. In addition Hungary is also expected to increase storage capacity as well.												

ITALY

Consumption	76.4 BCM		
Suppliers	The share of domestic production is 17.6% The share of import is 80.6% and that of storage is 1.7%. Natural gas is supplied by Russian Federation (36%), Netherlands (17%), Algeria (34%), Nigeria (6%), and Norway (7%).		
Transmission Lines	The length of the transmission lines is 31380 km. with a capacity of 237.9 MCM/day (imports only). The most part of the transmission network is owned by state and minor part by private companies.		
Transit Transmission	No transit transmission		
Distribution Lines	The length of the distribution lines is Km. 560 distribution companies operate the distribution networks.		
Storage Facilities	There are 9 storage facilities (depleted fields) with a total 12.42 BCM/year working capacity.		
LNG Facilities	There is one LNG terminal with a send out capacity of 11.5 M Sm³ and 100.000 m³ storage capacities.		
Gas in Primary Energy	33.2%		
Demand-Supply	<u>2006</u> 84 BCM	<u>2010</u> 90-92 BCM	<u>2015</u> 101-103 BCM
Gas Usage by Major Sectors	<u>Industry</u> 28.5%	<u>Residential & Commercial</u> 26.4%	<u>Power</u> 21.6
	Natural gas is equivalently used in industry, residential and power sectors.		
Share of Gas in Power	37.6%		
New Projects	There are three new projects. First one is Green Stream, through a off shore pipeline from Libya to Sicily with a capacity of 8 BCM/year . Second one is Rogivo LNG Terminal with a capacity of 4.6 BCM/year . Third one is the Brindisi LNG Terminal with a capacity of 8 BCM/year .		
Country Analysis	Italy is one of the largest and mature markets not only in the region but also in Europe as well. The natural gas consumption is quite high. Domestic production is one of the largest one in the region as well. Italy has a highly developed transmission and distribution lines throughout country. The lengths of the transmission and distribution lines and storage capacity are also the highest in Region. Almost all country is gasified through different import sources. The gas consumption is equivalently distributed in sectors mainly in industry, residential and power. The share of the natural gas in power is expected to be slightly increased for near future. The supply and demand is in balance currently and will be in balance for future as well. The future demand is expected to be used in power sector mainly.		

MACEDONIA

Consumption	110 MCM
Suppliers	No domestic production. The natural gas is supplied by Russian Federation (100%) .
Transmission Lines	The length of the transmission lines is 98 km. with capacity of 8 million m³ . The available capacities is 1.2 million m³ .
Transit Transmission	No transit transmission.
Distribution Lines	No distribution.
Storage Facilities	No storage facility.
LNG Facilities	No LNG terminal.
Gas in Primary Energy	3%
Demand-Supply	Not Available
Gas Usage by Sectors	Natural gas is used only for industrial customers.
Share of Gas in Power	Not Available (it is planed)
New Projects	Three new transmission pipeline projects are planed. The first one is 101 km. length with a capacity of 400 million m ³ . The second one is 65 km. with a capacity of 100 million m ³ and the last one is 25 km. with a capacity of 400 million m ³ .
Country Analysis	The natural gas consumption is quite low. The natural gas infrastructure has not been developed throughout country yet. Natural gas is currently used only by industrial customers. The distribution activities have not started yet too. Macedonia has no storage capacity as well. The natural gas share in primary energy is also very low. It is expected to increase natural gas usage mainly in power and residential sector in near future. The share of gas in primary energy is expected to gradually increase in long term period. The natural gas transmission lines will be slightly developed with the realization of those three new transmission pipelines.

ROMANIA

Consumption	18,3 BCM		
Suppliers	Domestic production is 12.9 BCM with a share of 70.5% . The import share is 29.5% and natural gas is supplied by Russian Federation.		
Transmission Lines	The length of the transmission lines is 11490 km. with a total capacity of 30 BCM/year . The network is owned by state.		
Transit Transmission	There are three transit transmission lines having a total length of 500 km. with a total capacity of 28 BCM/year . The pipeline has been fully booked. The owner of the transit transmission network is state.		
Distribution Lines	The length of the distribution lines is 30700 km. There are 19 distribution companies which operate the distribution lines in the northern and southern of Romania. The biggest two companies have a share of %90. The share of demand connected to distribution system is 50% of the total consumption.		
Storage Facilities	There are seven storage facilities (depleted fields) with a total 2.5 BCM/year working capacity.		
LNG Facilities	No LNG terminal.		
Gas in Primary Energy	38.32%		
Demand-Supply	<u>2005</u> 18.4 BCM	<u>2010</u> 20.4 BCM	
Gas Usage by Major Sectors	<u>Industry</u> 52.2%	<u>Residential & Commercial</u> 18.5%	<u>Power</u> 24.18%
	Natural gas is mainly used in industry.		
Share of Gas in Power	23%		
New Projects	The major project is Nabucco; This pipeline will provide a new gas supply route to Romania and Europe. The estimated start of operation is 2009 with a capacity of 20-25 BCM in plateau period.		
Country Analysis	Romania has the one of the largest and mature markets in the Region. Despite the gas production decline, Romania is still one of the important producers in Region and Europe as well. It is expected to increase the import share and decrease in the domestic production gradually until 2015. Romania has a highly developed transmission and distribution lines throughout country. The size of the transmission and distribution and capacity of storage are one of the largest in the Region. Almost all the country is gasified and share of gas in primary energy is quite high with 38,32%. The supply is expected to slightly increase in parallel with demand. The share of natural gas use in power is one of the largest in the region.		

SERBIA

Consumption	2.22 BCM			
Suppliers	Domestic production is 0.4 BCM with a share of 15% . The import share is 85% and gas is supplied by Russian Federation.			
Transmission Lines	The length of the transmission lines is around 2032 km. with a total capacity of 5.3 BCM/year.			
Transit Transmission	The length of the transit transmission is 300 km. with a total capacity of 0.76 BCM/year. Bosnia & Herzegovina is supplied via this transit transmission line.			
Distribution Lines	The length of the distribution lines is around 9400 km. There are 31 distribution companies which operate the distribution network that are owned by state and private companies.			
Storage Facilities	A storage field is under construction with a capacity of 0.8 BCM/year.			
LNG Facilities	No LNG terminal.			
Gas in Primary Energy	<u>2003</u> 13%	<u>2005</u> 15%	<u>2010</u> 18%	<u>2015</u> 20%
Demand-Supply	<u>2005</u> 2.6 BCM	<u>2010</u> 3.05 BCM	<u>2015</u> 3.45 BCM	
Gas Usage by Sectors	<u>Industry</u> 61%	<u>District heating</u> 23%	<u>Residential</u> 12%	<u>Other</u> 4%
	Natural gas is mainly used in industry.			
Share of Gas in Power	2%			
New Projects	There are two transmission pipelines under construction and four are planned. However these projects are small base projects (15km-75 km.).			
Country Analysis	<p>The natural gas usage is relatively low in Serbia. The domestic production is relatively low too. However, Serbia has one of the countries that have natural gas reservoirs in the region. The natural gas infrastructure including transmission and distribution lines are not well developed throughout country. The transmission lines have currently quite excess available capacity. However, it is not expected to be used available capacity until 2015. Natural gas is currently used mainly in industry. The share of gas in primary energy is slightly high and it is expected to relatively increase in near future. Despite the transmission lines are not well developed, the distribution lines are slightly developed. 31 Distribution companies have been involved into distribution activities. The gas consumption is expected to slightly increase for the near future. The share of gas in power is quite low.</p>			

SLOVENIA

Consumption	1.1 BCM		
Suppliers	Domestic production is less than 0,5% . Natural gas is supplied by Russian Federation 59%, Algeria %37% and Austria 4%.		
Transmission Lines	The length of the transmission lines is 958 km . There is one TSO and mainly owned by private companies and share of state is 32%.		
Transit Transmission	The length of the transit transmission is 958 km .		
Distribution Lines	The length of the distribution lines is 2237 km . The distribution regions are subdivided into 50 geographical areas. There are 16 DSO and mainly owned by municipalities and some of them are private.		
Storage Facilities	No storage facility.		
LNG Facilities	No LNG terminal.		
Gas in Primary Energy	<u>2003</u> 12%	<u>2005</u> 15%	
Demand-Supply	Demand and supply are in balanced for 2005.		
Gas Usage by Sectors	<u>Industry</u> 70%	<u>Power</u> 5%	<u>Residential</u> 20%
	Natural gas is mainly used in industry.		
Share of Gas in Power	NA		
New Projects	New major infrastructures are planed for 2008 to prevent bottle necks in transmission pipelines.		
Country Analysis	The natural gas usage is slightly high in Slovenia. The domestic production is almost negligible. However, the natural gas is supplied from three different sources. The natural gas infrastructure including transmission and distribution lines are also slightly developed throughout country. Natural gas is currently used mainly in industry. The share of gas in primary energy is slightly low. The share of gas in power generation is quite low.		

TURKEY

Consumption	21.2 BCM			
Suppliers	Domestic production is 0.615 BCM with a share of 3 % . The import share is 97% and gas is currently supplied by Russian Fed. (58%), Algeria (LNG, 18%), Iran (16%) and Nigeria (LNG, 5%). Azerbaijan and Turkmenistan are the other suppliers.			
Transmission Lines	The length of the transmission lines is around 6000 km . (including, upstream pipelines and loop lines) and total capacity is around 35.300 MCM/day . The network is owned by state (except upstream lines).			
Transit Transmission	No transit transmission.			
Distribution Lines	The length of the distribution lines is around 15000 km . There are currently 7 distribution companies which operate the existing network. 17 distribution companies have been granted license and they have started to construct their infrastructures. Except 3 companies, the remaining are private companies.			
Storage Facilities	A depleted field storage facility is under construction with a 1.3 BCM working capacity and will be in operation by 2005 and another facility is planed in the Salt Lake (salt dome) with a 1 BCM capacity.			
LNG Facilities	There are two LNG terminals ; one with a capacity of 5.2 BCM/year and the other with that of 6 BCM/year .			
Gas in Primary Energy	23%			
Demand-Supply		<u>2005</u>	<u>2010</u>	<u>2015</u>
	Demand	24.5 BCM	36.4 BCM	38.1 BCM
	Supply	31.9 BCM	51.0 BCM	40.7 BCM
Gas Usage by Sectors	Power	Commercial	Industrial	Fertilizer
	64.5 %	18.85%	14.39%	2.24%
	Natural gas is mainly used in power.			
Share of Gas in Power	46%			
New Projects	Azerbaijan and Turkmenistan projects are ongoing projects and it is expected to supply gas from these countries by 2006. Interconnector between Turkey and Greece and Nabucco projects will provide a new gas supply route to Europe through Turkey.			
Country Analysis	Turkey has one of the largest markets in the region regarding gas consumption. However, the transmission and distribution lines are not very well developed. Domestic production is quite low. On the other hand, the gas is supplied by different sources. Turkey currently has no storage capacity. However, there are two storage projects, one is under construction and one is planned. The length of the distribution lines is expected to sharply increase throughout country with the completion of ongoing constructions. The natural gas share in primary energy is almost the same with the average of the EU countries. The share of gas in power is quite high and is one of the largest in Europe. The share of gas in primary energy and power is expected to further increase in the near future. Turkey with the two LNG terminals and different supply sources has a high flexibility.			

SECTION III

NATURAL GAS LEGAL & REGULATORY FRAMEWORK

AUSTRIA

Regulatory Authority	YES (2002)
Market Opening	100% , all customers are eligible. Natural gas market has been opened to competition since 2002.
Unbundling	Legal unbundling is required for national TSO's and DSO's with more than 50,000 customers. Accounting and operational unbundling is required for all DSO's and national TSO's.
Monitoring of Security of Supply	No competences.
Licensing Code	YES
Network Code and Approval Authority	YES , Regulatory Authority.
Tariffs for Third Party	Postage stamp and distance related for Transit.
Transit Transmission Tariffs	Defined other than transmission tariffs.
Tariffs Approval or Determination	Regulatory Authority.
Access to the Transmission System	Transmission is regulated. Transit Transmission is negotiated.
Capacity Allocation and Congestion Management	First come first serve and capacity goes with the customer.
Access to the LNG Terminal and Storage	Access to the storage is negotiated. No LNG available
Cross Border Trade	NO regulatory influence on cross border transport/transit.
Dispute Settlement	Regulatory Authority.
Gas Release Program	YES
Public Service Obligations	NO
Market Dominance	75%
New investment Approval	Long term planning is approved by Regulatory Authority; distribution investment is done by DSO's.
Country Analysis	Legal and regulatory framework has been established in Austria. Natural gas market has been opened to competition in 2002. The Regulatory and legal framework is mostly compatible with 2003/55/EC Natural Gas Directive. However, there are some specific articles to be harmonized with the Directive such as legal, organizational and decision making unbundling of the TSO's and DSO's. In addition, the public service obligations and monitoring of the security of supply issues are to be harmonized with the same Directive as well. In addition, despite that competition is in place, one company still retains a dominant market position (75%). However, a gas release programme is foreseen for further liberalization and creation of more competition in the market.

BOSNIA AND HERZEGOVINA

Regulatory Authority	YES
Market Opening	NO
Unbundling	Legal, organizational, decision making and accounting unbundling are foreseen for transmission activities in the envisaged Gas Law.
Monitoring of Security of Supply	Ministry of Energy.
Licensing Code	Not Available
Network Code and Approval Authority	Not Available
Tariffs for Third Party	Not Available
Transit Transmission Tariffs	NO transit transmission.
Tariffs Approval or Determination	Government
Access to the Transmission System	NO TPA
Capacity Allocation and Congestion Management	NO congestion.
Access to the LNG Terminal and Storage	NO storage and LNG terminal.
Cross Border Trade	NO
Dispute Settlement	Court
Gas Release Program	Not Available
Public Service Obligations	YES
Market Dominance	100%
New investment Approval	NO Regulation.
Country Analysis	Legal and regulatory framework has not been established in Bosnia & Herzegovina yet. Monopoly of state still remains in the market. However, Gas Law is expected to be in force by 2005.

BULGARIA

Regulatory Authority	YES , (1999)
Market Opening	82% , eligibility threshold is 0.002 BCM/year . Natural gas market has been opened to competition in 2003.
Unbundling	Account and organizational unbundling are currently required. Legal unbundling is envisaged by 2007.
Monitoring of Security of Supply	Regulatory Authority
Licensing Code	YES
Network Code and Approval Authority	Network Code has not been published yet. However there are some rules for TSO's and DSO's operations.
Tariffs for Third Party	Price cap,
Transit Transmission Tariffs	Defined other than transmission tariffs.
Tariffs Approval or Determination	Regulatory Authority, except transit transmission tariffs.
Access to the Transmission System	Transmission is regulated. Transit transmission is negotiated.
Capacity Allocation and Congestion Management	First come first serve.
Access to the LNG Terminal and Storage	Access to storage is regulated.
Cross Border Trade	NO , foreseen by 2007.
Dispute Settlement	Regulatory Authority
Gas Release Program	NO
Public Service Obligations	YES
Market Dominance	Not Available
New investment Approval	Not Available
Country Analysis	Legal and regulatory framework has been established in Bulgaria. Natural gas market has been opened to competition in 2003. However, there are no particular strategies for decreasing state monopoly in the market at present. The new legal and regulatory framework is mostly compatible with EU Natural Gas Directive. However, there are some specific articles to be harmonized with the 2003/55/EC Natural Gas Directive such as unbundling of TSO's and DSO's.

CROATIA

Regulatory Authority	YES , (2001)
Market Opening	45% , eligibility threshold is 100 MCM/year . However competition has not been in place yet.
Unbundling	Transmission is legally unbundled, upstream activities are unbundled.
Monitoring of Security of Supply	Ministry of Economy
Licensing Code	YES
Network Code and Approval Authority	Network rules for TSO, Approval by Regulatory Authority then passed by Minister.
Tariffs for Third Party	Prepared by market participant and approved by Government after taking opinion of Ministry and Regulatory Authority. The third party access is based on Postage stamp method.
Transit Transmission Tariffs	NO transit transmission tariffs.
Tariffs Approval or Determination	Tariffs are Prepared by market participant and submitted to Government. Government approves after taking opinion of Ministry and Regulatory Authority.
Access to the Transmission System	Negotiated.
Capacity Allocation and Congestion Management	First come first serve.
Access to the LNG Terminal and Storage	Access to the storage has not defined yet. No LNG Terminal.
Cross Border Trade	NO
Dispute Settlement	Not Available
Gas Release Program	NO
Public Service Obligations	YES
Market Dominance	Not Available
New investment Approval	Transmission, storage and LNG facilities by Ministry of Energy, concessions are granted to distribution.
Country Analysis	Legal and regulatory framework has been established in Croatia. Despite natural gas market opened (%45), the competition has not been created in the market yet. Monopoly of state still retains in the market. In addition, there are some specific articles are to be harmonized with the Directive such as legal, organizational and decision making unbundling of the TSO's and DSO's, dispute settlements, access to the transmission and storage. On the other hand, a gas release programme is foreseen for further liberalization and creation competition in the market.

GREECE

Regulatory Authority	YES , however, the Regulator has no decisive authority for the gas market except for the distribution activities. Secondary legislation has not been published yet. The Greek government notified to the European Commission that it shall make use until November 2006, of the derogation from the EU Gas Directive as an emerging gas market.
Market Opening	Government indicated that the first step of gas market liberalisation taken by Law to open the Greek gas market, as of 1 July 2005, for power producers and co-generation operators with consumption above 26.4 MCM per year shall be applied despite of the derogation. This means that 63% of the market will be liberalised. However for such liberalization to become effective the corresponding legal framework needs to be enacted. Eligibility threshold is not defined as secondary legislation has not been in place yet.
Unbundling	NO
Monitoring of Security of Supply	Ministry of Development.
Licensing Code	N/A
Network Code and Approval Authority	N/A
Tariffs for Third Party	N/A
Transit Transmission Tariffs	N/A
Tariffs Approval or Determination	N/A
Access to the Transmission System	N/A
Capacity Allocation and Congestion Management	N/A
Access to the LNG Terminal and Storage	N/A
Cross Border Trade	NO
Dispute Settlement	N/A
Gas Release Program	NO
Public Service Obligations	NO
Market Dominance	100%
New investment Approval	N/A
Country Analysis	Despite the Regulatory Authority established, legal and regulatory framework for natural gas has not been established in Greece yet. The secondary legislation is under preparation. The market liberalization process and opening of the market is foreseen by July, 1 2005. Greece is granted with derogation in the EU Natural gas Directive.

HUNGARY

Regulatory Authority	YES , (2001)
Market Opening	67% , eligibility threshold is non-household customers. Natural gas market has been opened to competition in 2004.
Unbundling	Market activities are unbundled and also account unbundling exists currently.
Monitoring of Security of Supply	Regulatory Authority
Licensing Code	YES
Network Code and Approval Authority	YES , Regulatory Authority
Tariffs for Third Party	There are two components for transmission: a capacity and a delivery tariff. For storage injection and withdrawal tariff must be paid.
Transit Transmission Tariffs	Transit transmission tariffs are defined in the same basis as transmission tariffs.
Tariffs Approval or Determination	Ministry of Commerce and Traffic approve upon recommendation of Regulatory Authority.
Access to the Transmission System	Transmission and transit transmission are regulated.
Capacity Allocation and Congestion Management	Household and communal customers first then non eligible and then eligible have priority. In case of congestion, an auction mechanism is applied.
Access to the LNG Terminal and Storage	Storage is regulated.
Cross Border Trade	Cross border trade is regulated by a different Act.
Dispute Settlement	Regulatory Authority.
Gas Release Program	NO
Public Service Obligations	YES
Market Dominance	100%
New investment Approval	Regulatory Authority.
Country Analysis	Legal and regulatory framework has been established in Hungary. Natural gas market has been opened to competition in 2004. The Regulatory and legal framework is compatible with 2003/55/EC Natural Gas Directive. In addition, despite that competition is in place, one company still retains a dominant market position (100%). Moreover, a gas release programme is not foreseen for further liberalization and creation more competition in the market too.

ITALY

Regulatory Authority	YES , (1997)
Market Opening	100% , all customers are eligible. Natural gas market has been opened to competition in 2003.
Unbundling	Market activities are unbundled.
Monitoring of Security of Supply	Ministry of Production Activities.
Licensing Code	YES
Network Code and Approval Authority	YES , Regulatory Authority.
Tariffs for Third Party	Entry-Exit, RPI-X updating.
Transit Transmission Tariffs	NO
Tariffs Approval or Determination	Regulatory Authority
Access to the Transmission System	Regulated access to the system.
Capacity Allocation and Congestion Management	A mechanism is applied regarding to long term gas contract terms.
Access to the LNG Terminal and Storage	Access to the storage is regulated and to be defined for LNG terminal.
Cross Border Trade	General Rules. TPA exemption may be awarded for interconnectors and LNG Terminals.
Dispute Settlement	Regulatory Authority. For take or pay issues Ministry-European Commission.
Gas Release Program	YES ,
Public Service Obligations	YES
Market Dominance	68%
New investment Approval	Right to build direct lines. NO approval is required for transport, storage, LNG infrastructure. Municipality licensing required for distribution.
Country Analysis	Italy is one of the first countries that established her legal and regulatory framework in the Europe and Region. The legal and regulatory framework is compatible with 2003/55/EC Natural Gas Directive. However, despite that competition is in place, one company still retains a dominant market position (%68). On the other hand, a gas release programme is foreseen for further liberalization and creation more competition in the market.

MACEDONIA

Regulatory Authority	YES , (2003). However, natural gas market activities are executed by the Energy Law which does not cover separate legislation for natural gas. The new Energy Law which is going to cover natural gas will be adapted until end of 2004.
Market Opening	Natural gas market has not been opened to competition yet.
Unbundling	NO , but it is foreseen a legal and/or account unbundling of transmission, supply and distribution activities by Law.
Monitoring of Security of Supply	Regulatory Authority.
Licensing Code	YES, it is foreseen by the new Law.
Network Code and Approval Authority	It has not been issued yet, Regulatory Authority.
Tariffs for Third Party	Not Available
Transit Transmission Tariffs	Not Available
Tariffs Approval or Determination	Regulatory Authority
Access to the Transmission System	Regulated access is foreseen.
Capacity Allocation and Congestion Management	Not Available
Access to the LNG Terminal and Storage	Regulated access is foreseen.
Cross Border Trade	Not Available
Dispute Settlement	Not Available
Gas Release Program	NO
Public Service Obligations	YES , it is foreseen by the new Law.
Market Dominance	Not Available.
New investment Approval	Regulatory Authority.
Country Analysis	Macedonia has already started to establish legal and regulatory framework for natural gas market. The secondary legislation is still under preparation. Nonetheless, The new structure is seen to be mostly compatible with 2003/55/EC Natural Gas Directive.

ROMANIA

Regulatory Authority	YES , (2000).
Market Opening	40% , eligibility threshold is 3 MCM/year . The full open of the market is foreseen by 2007. A limited competition has been created in the market.
Unbundling	legal, organizational and operational unbundling is foreseen by 2007. Account unbundling is currently applied for each activity.
Monitoring of Security of Supply	Ministry of Economy and Trade.
Licensing Code	YES
Network Code and Approval Authority	YES , Regulatory Authority.
Tariffs for Third Party	Regulated.
Transit Transmission Tariffs	Regulated, if using the national transmission system, Dedicated lines established by international agreements.
Tariffs Approval or Determination	Regulatory Authority.
Access to the Transmission System	Transmission is regulated. Transit lines are dedicated lines and fully booked.
Capacity Allocation and Congestion Management	First come first serve and for congestion Priority and first come first serve are applied.
Access to the LNG Terminal and Storage	Regulated for storage.
Cross Border Trade	Not defined yet.
Dispute Settlement	Regulatory Authority.
Gas Release Program	YES
Public Service Obligations	YES
Market Dominance	42%
New investment Approval	Regulatory Authority.
Country Analysis	Legal and regulatory framework has been established in Romania. Natural gas market has been opened to competition in 2001. The Regulatory and legal framework is seen compatible with 2003/55/EC Natural Gas Directive. Moreover, a gas release programme is also foreseen for further liberalization and creation more competition in the market as well.

SERBIA

Regulatory Authority	NO , However, it is foreseen to be established by October 2004. The Law has been in force since August 2004. The secondary legislation is currently under preparation.
Market Opening	49% , Eligibility threshold is 50 MCM/year . Competition has not been created in the market yet.
Unbundling	Account, decision making and organizational unbundling are foreseen by Law.
Monitoring of Security of Supply	Ministry of Mining and Current Supplier (NIS).
Licensing Code	Not Available
Network Code and Approval Authority	Not Available
Tariffs for Third Party	Not Available
Transit Transmission Tariffs	Not Available
Tariffs Approval or Determination	Regulatory Authority defines and Government approves it.
Access to the Transmission System	Regulated.
Capacity Allocation and Congestion Management	Not Available
Access to the LNG Terminal and Storage	Not Available
Cross Border Trade	Cross border trade is regulated in accordance with Foreign trade Law.
Dispute Settlement	Regulatory Authority.
Gas Release Program	YES
Public Service Obligations	YES
Market Dominance	100% ,
New investment Approval	Ministry of Mining and Current Supplier (NIS).
Country Analysis	Serbia has already started to establish legal and regulatory framework for natural gas market. The market Law came into force in August 2004. The secondary legislation is still under preparation. Nonetheless, The new structure is seen to be mostly compatible with 2003/55/EC Natural Gas Directive.

SLOVENIA

Regulatory Authority	YES (since May 2004)
Market Opening	50% , Eligibility threshold is 25.000/year . Competition has been created in the market.
Unbundling	Account, decision making and organizational unbundling are foreseen for transmission companies. Account unbundling is foreseen for distribution companies.
Monitoring of Security of Supply	TSO is responsible for planning of the network so far. The responsibility has not been explicitly determined by Law.
Licensing Code	Granted by Government. A license code is expected to be in force soon.
Network Code and Approval Authority	YES , Regulatory Authority.
Tariffs for Third Party	Regulated.
Transit Transmission Tariffs	Partly regulated.
Tariffs Approval or Determination	Energy Agency of the Republic of Slovenia.
Access to the Transmission System	Regulated (postage stamp).
Capacity Allocation and Congestion Management	Not Available.
Access to the LNG Terminal and Storage	No storage and LNG terminals
Cross Border Trade	No cross border trade.
Dispute Settlement	Regulatory Authority.
Gas Release Program	Partly
Public Service Obligations	YES
Market Dominance	100% ,
New investment Approval	Government.
Country Analysis	Slovenia has already started to establish legal and regulatory framework for natural gas market. The market Law came into force in May 2004. The secondary legislation is partly completed and remain part is still under preparation. Nonetheless, The new structure is seen to be mostly compatible with 2003/55/EC Natural Gas Directive.

TURKEY

Regulatory Authority	YES (2001)
Market Opening	80%, eligibility threshold is 1 MCM/year. Wholesale market has been opened to competition in 2002.
Unbundling	Market activities are unbundled; also account unbundling is foreseen for each activity.
Monitoring of Security of Supply	Regulatory Authority.
Licensing Code	YES
Network Code and Approval Authority	YES , Regulatory Authority
Tariffs for Third Party	Regulated. Entry Exit methodology will be adapted.
Transit Transmission Tariffs	Regulated, if the current pipelines will be used.
Tariffs Approval or Determination	Regulatory Authority.
Access to the Transmission System	Regulated.
Capacity Allocation and Congestion Management	Proportional (pro-rata).
Access to the LNG Terminal and Storage	Regulated for storage (LNG terminal is treated as a storage facility).
Cross Border Trade	No legal arrangements yet.
Dispute Settlement	Regulatory Authority.
Gas Release Program	YES
Public Service Obligations	YES
Market Dominance	97% ,
New investment Approval	Regulatory Authority.
Country Analysis	Legal and regulatory framework has been established in Turkey. Natural gas market has been opened to competition at the end of 2002. The regulatory and legal framework is compatible with 2003/55/EC Natural Gas Directive. In addition, despite that a competitive environment is in place, one company still retains a dominant market position (97%). However, a gas release programme is foreseen for further liberalization and creation of full competition in the market.