

**Natural Gas Industry in Turkey**

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**Natural Gas Industry in Turkey**

**Introduction**

Turkey has around 7,4 billion cubic meter (m3) of proven natural gas reserves which is yet to be recovered. Turkey is a growing consumer of natural gas in its own right, with consumption having increased significantly over the last decade. The country’s total consumption of natural gas was around 35 billion m3 and was able to produce 900 million m3 only in 2007. Such a huge gap between consumption and production creates highly profitable opportunities for energy investors. In addition to Turkey’s energy demand, although Turkey does not have sizeable reserves, it is an important energy transit country for the transportation of natural gas from the main sources to the main consumer markets, namely from Russia, Middle and Central Asia to Europe.

|  |  |  |  |
| --- | --- | --- | --- |
| Natural Gas Reserves (m3) by the end of 2007 | | | |
| Original gas in place (\*) | **Recoverable gas** | **Cumulative production** | **Remaining recoverable gas** |
| 2 612 023 177 | 16 933 224 781 | 9 559 956 812 | 7 373 267 969 |

\*Total probable-possible reserves ***Source:*** General Directorate of Petroleum Affairs

Natural gas demand of the rapidly growing Turkish market is met through import. Turkey purchases natural gas directly from the countries with vast natural gas reserves; from Russian, Iran, Azerbaijan, Nigeria and Algeria. Projects are being implemented to transport natural gas from Egypt, Iraq, Kazakhstan and Turkmenistan to European markets.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Annual Natural Gas Transportation (Million Contract m3) "Import" | | | | | | | | |
|  | **Russia** (Gazexport & Turusgas) | **Iran** | **Russia** (blue stream) | **Azerbaijan** | **Nigeria** | **Algeria** | **Spot LNG** | **Total** |
| 2002 | 11.603 | 669 | - | - | 1.274 | 4.078 | - | 17.624 |
| 2003 | 11.422 | 3.520 | 1.252 | - | 1.126 | 3.867 | - | 21.188 |
| 2004 | 11.106 | 3.558 | 3.238 | - | 1.034 | 3.237 | - | 22.174 |
| 2005 | 12.857 | 4.322 | 4.969 | - | 1.030 | 3.851 | - | 27.028 |
| 2006 | 12.246 | 5.691 | 7.403 | - | 1.118 | 4.203 | 80 | 30.741 |
| 2007 | 13.799 | 6.158 | 9.346 | 1.279 | 1.420 | 4.277 | 170 | 36.450 |
| 2008\* | 8.013 | 2.253 | 6.068 | 2.620 | 717 | 2.743 | 339 | 22.752 |

\* As of July ***Source:*** BOTAS

In 2007, totally 13.799 million m3 of natural gas was imported from the Russian Federation through Gazexport and Turusgas and also 9.346 million m3 of natural gas was imported via the Blue Stream Pipeline, 1.420 million m3, 4.277 million m3 and 170 million m3 of natural gas equivalent of LNG was imported from Nigeria, Algeria and spot LNG market respectively. In addition to that, 6.158 million m3 Natural gas from Iran, and 1.279 million m3 from Azerbaijan were imported. Thus, the total import volume of natural gas reached 36,5 billion m3 in 2007. Turkey also started to transport natural gas to Greece in February 2008. BOTAS has recently registered that Turkey transported 198 million m3 to Greece via the newly constructed pipeline.

As a result of the supply agreements prepared with high demand increase estimations, no supply trouble is expected to occur in Turkey till the year 2015 according to the existing agreements.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Natural Gas Contracted Volumes (million Cm³) | | | | | |
|  | **2008** | **2009** | **2010** | **2015** | **2020** |
| Russian Federation | 6.000 | 6.000 | 6.000 | - | - |
| 1. LNG (M. Ereglisi) Algeria | 4.444 | 4.444 | 4.444 | - | - |
| 1. LNG (M. Ereglisi) Nigeria | 1.338 | 1.338 | 1.338 | 1.338 | 1.338 |
| Iran | 9.556 | 9.556 | 9.556 | 9.556 | 9.556 |
| Russian Fed. (Addition)(West) | 8.000 | 8.000 | 8.000 | 8.000 | 8.000 |
| Russian Fed. (Black sea) | 12.000 | 14.000 | 16.000 | 16.000 | 16.000 |
| Turkmenistan (\*) | - | - | - | - | - |
| Azerbaijan (\*\*) | 5.000 | 6.600 | 6.600 | 6.600 | 6600 |
| Total Supply | **45.553** | **49.092** | **51.059** | **40.791** | **40.791** |

\* Negotiations are still being carried out to finalize an agreement.

\*\* Annual contracted amounts may vary upon changes in the initial date for gas deliveries.

***Source:*** BOTAS

Turkey’s demand for natural gas is estimated 178,425 billion m3 until 2015, while the current contracts secure supplying 186,495 billion m3 of natural gas for the same period (2008-2015). Turkish natural gas demand had been projected to increase very rapidly in coming years.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Natural Gas Demand and Export Estimation(million m³) | | | | | | | |
|  | **2008** | **2009** | **2010** | **2015** | **2020** | **2025** | **2030** |
| Natural Gas Demand Volume of Turkey | 37.533 | 40.903 | 43.806 | 56.183 | 65.867 | 70.546 | 76.378 |
| Export (Greece) | 492 | 737 | 737 | 737 | 737 | 0 | 0 |
| Total Demand | 38.025 | 41.640 | 44.543 | 56.920 | 66.604 | 70.546 | 76.378 |

***Source:*** BOTAS

The prime consumers are be natural gas-fired electric power plants and industrial users. In 2007, 35.064 million m3 of natural gas was sold for power (19.658 million m3), industrial (7.836 million m3) and residential purposes (7.570 million m3).

|  |  |  |
| --- | --- | --- |
| Types and Number of Customers Under Contract (2007) | | |
| Customer Type | **Receiving Gas** | **Not Receiving Gas** |
| Build-Operate-Transfers | 4 | 1 |
| Build-Operates | 4 | 0 |
| State Owned Power Plants | 4 | 0 |
| Distribution Companies | 51 | 0 |
| Organized Industry Zones | 49 | 1 |
| Distribution Pru–Ate Customers | 5 | 0 |
| Auto-Producers | 83 | 0 |
| CNG Customers | 2 | 0 |
| LNG Customers | 10 | 0 |
| Industrialists | 213 | 22 |
| TOTAL | **425** | **24** |

***Source:*** BOTAS

**Players in the Sector**

Prior to 2001, Turkey’s natural gas market and infrastructure were almost entirely dominated by state-owned BOTAS. In May 2001, Turkey enacted a new Natural Gas Market Law with the intent to liberalize the natural gas sector, encourage foreign investment in energy infrastructure, and harmonize its energy policy with that of the EU. Among other things, the law aimed to abolish the monopoly, separating the company into units for natural gas import, transport, storage, and distribution by 2009. Consequently, the law has paved the way for privatization of the natural gas market, various components of which have already been privatized. Turkey’s Energy Market Regulatory Authority (EMRA) is responsible for implementing the Natural Gas Market Law, and also now sets natural gas prices in Turkey.

**Exploration Activities**

Historically, much of Turkey’s natural gas production occurred at sites where crude oil was also produced. Over the last decade, however, several non-associated natural gas fields have been discovered. The largest non-associated natural gas find is Marmara Kuzey, an offshore field that came on stream in 1997 located in the Thrace-Gallipoli Basin of the Sea of Marmara. Turkey’s small natural gas production is carried out primarily by the Turkish Petroleum Corporation (TPAO), which produced approximately 421 million m3 in 2007, while other companies produced 472 million m3 of natural gas in the same year.

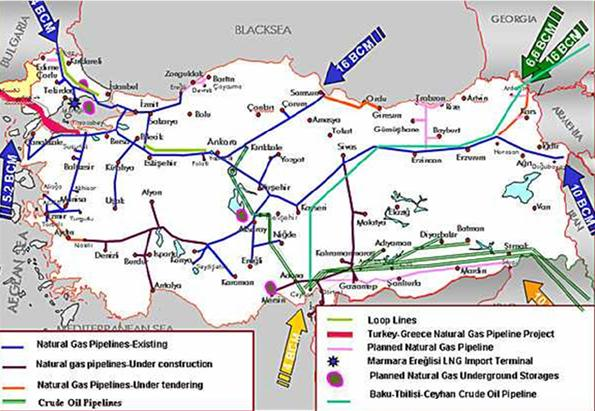
TPAO has partnered with several international oil and natural gas firms for ongoing exploration and production activities. TPAO’s priority for the last few years has been for exploration at offshore natural gas basins. In March 2002, Amity Oil announced a natural gas discovery at the Gocerler-3 well in the Thrace-Gallipoli Basin, and has since announced several other discoveries in the region. In September 2004, TPAO said that it had found a viable gas deposit at the Ayazli-1 and Ayazli-2 wells off the western Black Sea coast. Since then, a joint venture of TPAO (51 percent), Toreador (37 percent), and Stratic (12 percent) has conducted extensive exploratory drilling and seismic testing in the region. Estimates from Toreador have put recoverable natural gas reserves in the Western Black Sea Project at 40 million m3. The project began commercial natural gas production by the end of 2006, with initial flows around 2 million m3 per day. The success of this project has encouraged other offshore exploration projects in the Black Sea. The TPAO-Toreador-Stratic consortium has announced several new natural gas fields in the South Akcakoca Sub-basin (SASB) during 2006, including at the Bayhanli-1 and Akkaya-3 wells. In the Eastern Black Sea, TPAO has partnered with BP and Chevron where ongoing testing occurs at several wells. Recently, Alpullu natural gas field in District I Marmara was discovered by Amity Oil International Pty. Ltd. in 2007.

**Pipelines**

Turkey has an extensive network of pipelines connecting markets both domestically and internationally.

**Domestic Network of Pipelines**

Turkey’s growing natural gas demand has led BOTAS to substantially increase the country’s natural gas transport infrastructure. Turkey’s domestic pipeline network has also grown alongside the country’s growing international pipeline connections.

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***Source:*** BOTAS (BCM: billion cubic meters)

**International Network of Pipelines**

Turkey has several important international pipeline links that bring natural gas to Turkey for domestic consumption, but that might also build upon Turkey’s emerging role as an energy transit country.



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Major Int’l Pipelines | Route | Length (km) | Capacity (m³/y) | Source | Status |
| Blue Stream | Russia-Turkey | 1213 | 16 | Russia | In operation |
| Iran-Turkey | Iran | 1210 | 14 | Iran | In operation |
| Turkey - Greece - Italy | Karacabey-Komotini-Otranto | 808 | 11,6 | Azerbaijan | In operation |
| Baku-Tbilisi-Erzurum (BTE)  (South Caucus Pipeline SCP) | Azerbaijan-Georgia-Turkey | 690 | 8,8 | Azerbaijan | In operation |
| Trans-Arab Pipeline | Egypt-Jordan-Syria-Turkey | 1236 | 10 | Egypt | Project Preparation Stage |
| Iraq-Turkiye | Iraq - Turkey | 1160 | 10 | Iraq | Project Preparation Stage |
| Trans-Adriatic | Turkey-Greece-Albania | 533 | 24 | Iran-Shah Deniz | Project Preparation Stage |
| Nabucco | Turkey-Bulgaria --Romania-Hungary -Austria | 3282 | 30 | Caspian Region - Iran-Iraq-Egypt | Project Preparation Stage |

**Source:** Ministry of Energy and Natural Resources (MENR)

**Blue Stream Pipeline**

The Blue Stream natural gas pipeline transports Russian natural gas to Turkey via a 1213-km pipeline, 400 km of which extends underneath the Black Sea. The project was carried out by Russia’s Gazprom, Italy’s Eni, and BOTAS at an estimated cost of $3.2 billion. The line reaches the Turkish port of Sumsun and extends to Ankara. At its lowest point, the pipeline reaches underwater depths of 2150 meters. Construction of the line was completed in December 2002, with an initial schedule of delivering 2 billion m3 of natural gas in 2003. However, dues to disruptions, the line’s formal inauguration took place in November 2005 at a metering station in Samsun, Turkey.

The Blue Stream pipeline has a capacity to pump 16 billion m3 per year of natural gas to Turkey. Turkey already receives additional piped natural gas imports from Russia via a Western overland route that transports natural gas to Turkey, passing through Moldova, Ukraine, Romania, and Bulgaria (commonly referred to as the Trans-Balkan Pipeline). This line has a capacity to deliver 14 billion m3 per year of natural gas to Turkey. In 2007, Turkey imported 63 % of its natural gas from Russia, significantly increasing Turkey’s dependence on Russia for natural gas, and thereby analysts are crowding out other planned or proposed pipeline projects that would diversify the country’s energy sources.

**Iran-Turkey Pipeline**

In January 2002, Iran and Turkey officially inaugurated a natural gas pipeline link between the two countries, following several years of delays. The line runs approximately 1210 km from Tabriz in Iran to Ankara, the Turkish capital. The pipeline has a maximum capacity to pump 16 m3 per year of natural gas, although since the project began, annual levels have generally been within the 3 to 4 billion m3 range. There have been several supply disruptions on the Tabriz-Ankara line. On January 19, 2006, Iran reduced natural gas flows through the line to 12 million m3/d, citing “technical problems” caused by cold weather at the Tabriz natural gas field. At that time, the line should have been exporting 27 million m3/d of natural gas to Turkey. On 1 January 2008 Iran reduced gas supplies to Turkey and on 7 January 2008 gas supplies were stopped because cut-off gas supplies from Turkmenistan. The supplies were restored on 27 January 2008. The supply was cut-off again in February 2008 because of bad weather conditions.

**South Caucasus Pipeline**

The Pipeline transport natural gas from the Shah Deniz gas field in the Azerbaijan sector of the Caspian Sea to Turkey. The line is variously known as the South Caucasus Pipeline (SCP) or Baku-Tbilisi-Erzurum (BTE), and runs parallel to the crude oil BTC pipeline for most of its route before connecting to the Turkish pipeline network near Horasan in Erzurum. Construction on the $1.3 billion project began in late 2004, and the pipeline was completed during the first quarter of 2007 and it started to transport gas in July 2007. The technical operator of pipeline is BP and commercial operator is Norway’s Statoil. BP and Statoil each hold a 25.5 percent stake in the project and serve as co-operators, with the State Oil Company of Azerbaijan Republic (SOCAR), Russia's Lukoil, Turkey's TPAO, France's Total, and Iran's NICO holding around 10 percent each. The initial capacity of the pipeline is 8.8 billion m3 of gas per year, and after 2012 its capacity could be expanded to 20 billion m3 per year.The pipeline has a potential of being connected to Turkmen and Kazakh producers through the planned Trans-Caspian Gas Pipeline.

**Turkey-Greece-Italy**

In July 2005, Turkey and Greece began construction on a pipeline connecting the two countries. Greece has established a natural gas purchase agreement with Azerbaijan, and Azeri natural gas is being pumped from Bursa in Turkey to Komitini in Greece. Right after the SCP started commercial operation, the Turkey-Greece pipeline was officially inaugurated on 18 November 2007. Eventually, the Turkey-Greece Interconnector will be linked to the planned pipeline connecting Greece and Italy. The intergovernmental agreement for the construction of pipeline was signed on 4 November 2006 in Rome by Italian Minister for Productive Activities Claudio Scaiola and Greek Development Minister Dimitris Sioufas. Also Turkish Minister of Energy and Natural Resources Hilmi Güler was present at the ceremony. On 26 July 2007, the additional protocol on construction was signed in Rome. On 11 June 2008, the project company IGI Poseidon SA was incorporated in Italy. Current plans call for a $1.3-billion, 800-km pipeline from northern Greece to southeastern Italy. The construction will start in 2009 and the pipeline is expected to become operational in 2012. The offshore section will cost €500 million and the Greek section will cost €600 million. The capacity of pipeline is planned to be 8 billion m3 of natural gas annually.

**Possible Projects under Construction and Consideration**

On account of various supply interruptions and disputes over Turkish natural gas pipeline links with Russia and Iran, Turkey has looked to other natural gas-rich countries in the region to diversify its import sources. A number of natural gas import projects are either under construction or in various stages of planning.

**Trans-Caspian Gas Pipeline**

In May 1999, Turkey's BOTAS signed an agreement to build a 1,690-km natural gas pipeline from Turkmenistan that would travel underneath the Caspian Sea, across Azerbaijan and Georgia, and on to Turkey. The planned capacity of the pipeline is 30 billion m3 of natural gas per annum, and the estimated cost will be around US$ 5 billion. In Baku it will be connected with the South Caucasus Pipeline (Baku-Tbilisi-Erzurum pipeline), and through this with the Nabucco Pipeline. Granherne, a subsidiary of KBR, has been selected to carry out the feasibility study of the pipeline.

**Trans-Arab Pipeline**

Turkey and Egypt have long discussed the possibility of Egyptian natural gas exports to Turkey. Most recently, energy ministers from Turkey, Egypt, Jordan, Lebanon, and Syria discussed the possible expansion of the “Trans-Arab Pipeline” to Cyprus and Turkey, and possibly onward to Western Europe. The pipeline, which currently runs from Egypt through Jordan to Syria, has a capacity of 10 billion m3 per year, when completed, it will have a total length of 1,236 kilometres at a cost of US$1.4 billion. The pipeline, which will be interconnected with Turkey and Iraq by 2009, will provide a new transport route for gas resources from the Mashreq region to the EU. In March 2006, Egypt, Syria, Jordan, Turkey, Lebanon and Romania reached an agreement to build the pipeline's extension through Syria to the Turkish border. From there, the pipeline will be connected to the planned Nabucco Pipeline for the delivery of gas to Europe. Turkey expects to buy 2-4 bcm of gas annually by the Arab Gas Pipeline.On 4 January 2008, Turkey and Syria signed an agreement to construct a 63 kilometers pipeline between Aleppo and Kilis connecting Arab Gas pipeline with the Turkish grid. The connection is expected to be ready by 2011. Recently, EU Energy Commissioner Andris Piebalgs and External Relations Commissioner Benita Ferrero-Waldner met representatives of the Mashreq countries (Egypt, Jordan, Lebanon and Syria), Iraq and Turkey on May 5, 2008 in Brussels to discuss the finalization of the Trans-Arab gas pipeline, promote its role as a future supplier of the EU backed Nabucco project and encourage the full participation of Iraq in regional energy activities, including as a partner in the Trans-Arab project. The projects is expected to be finalized by the end of 2008.

**Nabucco**

Another possible project that seeks to deliver natural gas across Turkey to European markets is the “Nabucco” project, which would connect the Caspian region, Middle East and Egypt via Turkey, Bulgaria, Romania, Hungary with Austria and further on with the Central and Western European gas markets.



The pipeline length is approximately 3,300 km, starting at the Georgian/Turkish and/or Iranian/Turkish border respectively, leading to Baumgarten in Austria. In this respect it has to be taken into account that a reasonable amount of the gas volumes, reaching Baumgarten, have to be further transported through Austria to the Central and Western European Countries. According to market studies the pipeline has been designed to transport a maximum amount of 31 billion m3/y. The estimated investment costs including financing costs for a complete new pipeline system amount to approximately € 7.9 billion.

The Nabucco project is included in the EU Trans-European Energy Network programme and a feasibility study for the Nabucco pipeline has been performed under an EU project grant.The FEED services of the pipeline, including the overall management of the local FEED contractors, the review of the technical feasibility study, route confirmation, preparation of the design basis, hydraulic studies, overall SCADA and telecommunications, GIS and preparation of tender packages for the next phase, is managed by UK-based consultancy Penspen. Construction of pipeline is expected to begin in 2010 and is planned to be finished in 2013.The company leading the project is OMV from Austria.

**Liquefied Natural Gas (LNG)**

Turkey imports liquefied natural gas from Algeria and Nigeria at its only LNG import terminal at Marmara Ereglisi, near Istanbul. The LNG terminal and regasification plant are owned by BOTAS, and have been in operation since 1994. BOTAS has considered building as many as three additional LNG facilities in Turkey. One proposal is for a 6- billion m3/y LNG import terminal near Izmir for the import of LNG from Egypt. However, LNG plans have been stalled while other natural gas import pipeline projects are considered. One option that Turkey has also considered is for the construction of an LNG liquefaction plant and export terminal at Ceyhan for the export of Russian natural gas from the Blue Stream Pipeline. This is one option to turn Turkey into a transit center, and possibly an attractive project to manage potential oversupply of natural gas to the Turkish market in the years ahead.

**Opportunities in the Turkish Natural Gas Market**

**High demand growth potential**: Turkey, with a population of over 70 million and a rapidly growing economy, has had one of the fastest growing gas markets in the world in the past decade. While annual average GDP growth has been 7 % in the last 5 years, annual average growth in gas consumption has been 15 % for the same period.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **GDP Growth Rate (%)** | **Annual Average Growth rate** | **Gas Consumption (bm3)** | **Growth in Gas Consumption (%)** | **Annual Average Growth rate** |
| **2002** | 6.2 | **7** | 17.378 | 8.4 | **15** |
| **2003** | 5.3 | 20.938 | 20.5 |
| **2004** | 9.4 | 22.108 | 5.6 |
| **2005** | 8.4 | 26.865 | 21.5 |
| **2006** | 6.9 | 30.493 | 13.5 |
| **2007** | 5 | 35.064 | 15 |

***Source:*** IMF and BOTAS

**Favorable supply geography and infrastructure:** Turkey is favorably located relative to gas resource-rich, revenue-needy supplying countries to the east, including Azerbaijan, Iran, Iraq, Russia and Turkmenistan. Russia and Iran rank first and second among the world’s largest gas reserves holders, and have already been connected to Turkey through major pipelines. While major natural gas sources are already connected to Turkey, Iraq and Turkmenistan will also be linked to Turkey in the near future. Future incremental import contracts, including short-term ones, can use the existing infrastructure at lower cost.

**Extensive transmission backbone:** The system is substantially in place or under construction to cover the main consumption areas of the country, with significant ongoing investments.

**Lack of clean energy substitutes:** Alternative clean energy sources are not readily available in large amounts, except for hydropower, which is already heavily exploited (with the exception of small hydro plants) and expensive to develop.

**Proven environment for investors:** Turkey introduced new laws and reforms liberalizing the energy market. Strong regulation and/or unbundling provided by the Energy Market Regulatory Authority as well as the Competition Authority are strong indications of a fair and competitive energy market in Turkey. Rules and regulations imposed by the Competition Authority are strict and mandatory. Moreover, foreign investors are protected and treated as equal to local investors by law.

All these factors create highly lucrative investment opportunities for global and local investors. The opportunities for the industry arise from:

**Access to multiple sources of supply:** Turkey’s geographic location offers it a unique opportunity. Unlike most of the import-dependent European countries, due to its relative proximity to major gas producers, Turkey has a potential access to multiple sources of pipeline gas supply. Many countries in Eastern Europe have no supply choice, being locked in to a monopoly supplier (Gazprom). Accessing these multiple sources could foster the creation of a competitive gas market in Turkey, as well as enhance its supply security.

**Turkey’s potential role as a transit corridor:** Turkey offers an overland route which can bring together gas producers in the Caucasus and the Middle East and gas markets in southern and central Europe. Routes through Turkey offer Iran (and, later, Iraq and possibly Syria) a pipeline option for exports to Europe. They give the Caucasus (and, later, Central Asia) a strategic alternative to routes through its major competitor, Russia. They offer European markets a fourth major supply source (to Algeria, Norway and Russia).

**Potential for social and economic improvement:** Usage of gas can be extended, ensuring better quality of air, life and health in many cities, and lowered production costs for industry, assisting Turkey’s export competitiveness. The use of gas for electricity generation can, and has reduced, the Government of Turkey budgetary needs on behalf of traditional (hydro) electric development.

**Potential to mobilize domestic and international capital and entrepreneurship in a restructured, expanding gas sector:** Turkish investors have responded vigorously to the opportunities created by the offer of new gas distribution franchisees and by the privatization of certain existing distribution networks. International gas industry investors

maintain a presence in Turkey and, along with Turkish entrepreneurs, are likely to be attracted to invest as new opportunities arise, for example, in gas wholesaling, regional pipelines and, eventually, in new gas imports.

Although natural gas imports of Turkey are adequate and even more than the need; problems that happen from time to time arise from the lack of storing facility to compensate short-time interruptions in the supply. Natural gas storages have an important role for ensuring supply assurance in a consumption center at the scale of Turkey. Projects to store significant amounts of natural gas within salt layers under Silivri and Salt Lakes are going on.

It is anticipated to eliminate dominant situation of BOTAS, which had the monopoly on import, transportation (excluding local distribution), sale and pricing of natural gas in accordance with the Decree Law on Use of Natural Gas of April 1990 No. 397, on import and wholesale of natural gas until 2009 in accordance with provisional article 2 of the Natural Gas Market Law No. 4646 that was adopted on April 18th, 2001.

**Relevant Law and Regulations**

**Natural Gas Market Law No. 4646**

Following the Electricity Market Law, which was adopted on April 20th, 2002 to form and arrange electricity markets in Turkey, the Natural Gas Market Law No. 4646, which specifies outlines of operation of Turkish Natural Gas Market, was adopted on April 18th, 2001.

Purpose of the law is “to create a financially strong, stable and transparent natural gas market via liberalization of the natural gas market in order to provide consumers with high-quality, permanent, cheap natural gas within the framework of competitive principles and to ensure independent arrangement and supervision in the market”.

Expropriation operations to be performed regarding natural gas activities shall be carried out in accordance with the provisions “Expropriation; shall be made within the scope of the principles specified in the expropriation law of 4.11.1983 No. 2942 in case where operations prescribed in this law require to do so. Requirement decision to be taken by the board regarding this issue shall be considered as public interest decision and following transactions shall be carried out in accordance with the provisions of the expropriation law. Ownership of the immovable asset expropriated shall belong to the Treasury; right of use shall belong to the legal entity paying the expropriation price. Rights of use are a part of the relevant license or certificate and limited to validity period of them. In case of termination or cancellation of the license or the certificate, expropriation prices paid by legal entities shall not be paid be paid back” present in article 12 “Miscellaneous Provisions” of the Natural Gas Market Law.

**General Provisions**

With the Natural Gas and Electricity Market Laws, supervision of the energy market is left to the EPDK, as an independent regulatory authority. License holder companies are obliged to have their facilities, legal books and records ready for supervision by EPDK, open them to supervision when required and provide all kinds of information and documentation to be required by EPDK to perform its activities on time.

According to the law, companies performing activities in natural gas field may participate in only one of the companies, which perform activities in a field other than their own field, on condition that they cannot hold majority of the shares of the other company. Within this framework, provisional article 2 of the law reduces dominant situation of BOTAS, which is the vertical integrated public institution in the natural gas market, and limits its activities in fields other than transmission. Furthermore, public institutions (municipal distribution companies) performing natural gas distribution activities shall be privatized.

Public sector participation is allowed in every part of the sector, however, license should be taken for each activity in the natural gas markets.

The law identifies natural or legal persons that have freedom to execute natural gas purchase-sale contract with any production, import, distribution or wholesale company as free consumers. In accordance with paragraph (a) of article 8 of the law, consumers and user unions with an annual natural gas purchase more than one million cubic meters, companies purchasing gas for generating electrical energy, cogeneration plants generating electrical and thermal energy and production companies producing natural gas in Turkey are identified as free consumers.

EPDK is authorized to determine the annual consumption amount required to be a free consumer on condition that the relevant person/company should be at license stage only.

**Provisions Regarding Local Distribution**

Provisions regarding local distribution of natural gas are explained in detail in paragraph (g) of the relevant Law. Some major points are summarized below (For all the provisions of the law regarding local distribution, see the section Natural Gas Market Law No. 4646).

-Local natural gas distribution service shall be given for a license period to be determined by EPDK.

-EPDK shall open tenders for cities that do not have access to natural gas distribution. License may be granted to the contracting company for a period to be determined by EPDK by considering issues such as development level, consumption capacity and number of users of the city, including ownership of the local natural gas distribution network.

-Legal person that holds the distribution license may sell the distribution network, which shall be under its ownership, to another legal person prior to termination date of the license period.

-It is possible for companies, license period of which is over, to renew their licenses. In order to do this, the company shall request EPDK to renew the license one year prior to expiry date of the period. EPDK shall decide on the issue by considering issues such as economical and technical adequacy of the company, customer satisfaction, service quality etc. If license of the company is not renewed, EPDK opens a new tender for local distribution and evaluates the most suitable offer. Price of the network shall be collected from the contracting company and paid to the company, license of which is not renewed, by EPDK.

-EPDK has the authority to follow up and supervise the distribution activities and arranges the relevant procedures and principles via the regulations issued.

-Company that obtains the distribution license is obliged to invite the relevant municipality (or municipal company) to have 10% shares of the distribution company for free. This partnership may be increased by 10% maximum upon request of the municipality on condition that price of the shares should be paid.

-In case where the municipality does not own enough shares to acquire at least one administrative board membership, EPDK may require the distribution company to make necessary arrangements to represent the municipality in administrative and supervisory boards.

The law also determines responsibilities of the distribution company. Some major points may be listed as follows:

-Distribution companies are required to establish natural gas dispatch controlling center (SCADA). However, this requirement is not valid in cities that are determined to have low consumption amounts by the Authority.

-In case where the consumer requests to connect the network but the connection is not possible in technical and economical terms, distribution company is obliged to connect the consumers to the network. If there is a dispute regarding possibility in technical and economical terms, final decision on the issue shall be given by EPDK.

-Distribution companies may control or have third parties control suitability of innerinstallation made and/or used by the users. The company may refuse to provide gas if inner-installation is not suitable. Distribution companies are not responsible for damages and losses to arise from repair made at inner-installation without permission, improper and bad use, use of wrong and defective equipment, construction of installation out-of-project and neglect of installation.

-Same distribution company may obtain licenses in maximum 13 cities across the country; however, this number may be increased if required by EPDK.

**Natural Gas Pricing Procedures and Regulations**

EPDK arranges natural gas sale prices and accordingly gross profit margins of the companies engaged in natural gas business via decisions announced within the framework of the Natural Gas Market Law No. 4646 and Regulations on Natural Gas Market Rates. Although natural gas pricing procedures and especially retail sale rates are outlined in this section, potential purchases should examine the relevant law submitted in Annex-A and regulations of EPDK and consult with their own consultants to fully understand the relevant regulations.

As it is stated in article 11 of the Natural Gas Market Law No. 4646, while determining the retail sale rates: service cost, reasonable profitability to allow investments, current natural gas purchase prices in the market and similar points are taken into consideration and rates are determined by EPDK. Companies may request EPDK to determine the rates again due to inflation and other issues.

Rates are prepared and submitted to EPDK by companies until October every year as based in incomes-expenses, costs, investments and quality of services delivered. EPDK may request information and documents from the companies regarding these cost and service criteria in order to examine and approve the rates proposed or call them directly to meeting. EPDK examines the rate proposals and information and documents submitted until December 31st at the latest and approves them if found suitable or request revision. Companies are given a time period to be determined by EPDK for revision of rate proposals that do not comply with the procedure. If revisions are not made within the designated time period, EPDK determines the rates in its own initiative.

EPDK has determined five different rate types within the scope of the regulations on rates. These are connection rates, rates regarding transmission and dispatch control, storing rate, wholesale rate and retail sale rate. While determining the rates other than the connection rate, prices should be shown on energy (kWs) and volume (m3) basis as depending of top thermal value of 9155 kca1/m3.

**Connection Rate**

Procedures of rates for connection to distribution network are determined by EPDK. Fixed connection rate to be applied for the subscribers within responsibility area of the distribution network is determined as USD 150 by letter of EPDK of 26 April 2003 No. 0816 addressed to OĐB. As it is stated in paragraph (g) of article 4 of the relevant law, when subscribers that are within responsibility area of the distribution company request to connect to network and this connection is not possible in technical and economical terms, the distribution company is obliged to connect the subscribers to the network. The distribution company is not obliged to deliver natural gas to subscribers that are out of the responsibility area. Likewise, subscribers that are out of responsibility area of the distribution company are not obliged to have the distribution company establish their connection. If these subscribers cannot connect to the most suitable distribution company, they may connect to the transmission network.

**Rates Regarding Transmission and Dispatch Control**

Income ceiling and productivity objectives to be determined by EPDK are used in calculation of transmission rates. Transmission rates are arranged in a way to meet fixed and variable costs of transmission and dispatch companies, ensure continuity of investments and leave a reasonable profit according to achievement of the productivity objectives determined. No discrimination should be made between equal parties and equal access right should be ensured in transmission rates.

**Storing Rate**

Provided that they comply with the storing rate approved by EPDK, storing prices are determined freely between storing companies and clients. No discrimination should be made between equal clients and equal access right should be ensured in storing use procedures.

**Wholesale Rate**

Natural gas wholesale prices are determined freely between parties that perform natural gas purchase-sale. However, it is the basic principle that dominant position in the market should not be misused, supply assurance and regularity should be ensured and other measures determined by EPDK should be complied in wholesale rates.

**Retail Sate Rate**

Natural gas purchase price, unit service and depreciation cost and other factors are taken into consideration in calculation of retail sale prices. In distribution networks, which are contracted by EPDK recently, unit service and depreciation cost accepted by EPDK is applied. Service cost, reasonable profitability to allow investments and current natural gas purchase prices in the market and similar issues are taken into consideration in confirmation and determination of retail sale prices by EPDK.

Distribution companies may apply seasonal and/or deducted or non-deducted rates on condition that they should be confirmed by EPDK. Retail sale price to be applied for free consumers is determined freely between the parties provided that it does not exceed the retail sale price ceiling confirmed by EPDK. Price to be applied only in natural gas transmission service fields of the distribution companies is determined freely between the parties provided that it does not exceed the part of the retail sale price excluding natural gas purchase price confirmed by EPDK.

According to the Regulations on Rates, natural gas distribution companies cannot demand any additional fee from consumers, other than the confirmed rates.

Within the framework of the decision of EPDK No. 135 that was published on the Official Gazette of April 30th, 2003 No. 25094, top limit of retail sale price for non-free consumers shall be calculated according to the formula below:

fri = fwdi + 0.3 (fwdi - Vi) Here:

i: means the month to apply the rate,

fri : means top limit of natural gas sale price to be applied for subscribers, other than public institutions and organizations, by the distribution company in month i (TL/m3)

fwdi : means total natural gas wholesale price including Excise Tax, transmission and storage price to be applied for distribution companies by BOTAS in month i (TL / m3)

vi: means the excise tax prescribed for month i (TL / m3)

In accordance with the same letter, top limit of retail sale price for free consumers shall be calculated according to the formula below:

fri = fwdi + 0.11 (fwdi - Vi)

Here: i: means top limit of natural gas sale price to be applied for subscribers, other than public institutions and organizations, by the distribution company in month i(TL/m3)

fwdi : means total natural gas wholesale price including Excise Tax, transmission and storage price to be applied for distribution companies by BOTAS in month i (TL / m3),

Vi : means the excise tax prescribed for month i (TL / m3)

**Corporate Tax**

Profits obtained by companies established in Turkey, limited liability companies and Turkey branches and agencies of foreign companies are subject to Corporate Tax. Legal domicile of the company is important in terms of taxation. Whereas companies established in Turkey are fully liable to Corporate Tax, companies established abroad are partially subject to the tax and taxation is imposed only on the activities in Turkey. Potential purchasers should examine provisions of Corporate Tax Law No. 5520 and Income Tax Law No. 193 and related decrees for tax liabilities to be imposed.

**Guideline for Investment in the Natural Gas Market**

The main duty of the Energy Market Regulatory Authority (EMRA), which assumed regulatory responsibilities pertaining to the natural gas market with the enactment of Natural Gas Market Law No. 4646, is to put in place and to implement regulatory measures to ensure the establishment of a liberal and competitive natural gas market where all market segments will be open to new entrants. According to Natural Gas Market Law No. 4646 natural gas market activities are; import, export, wholesale, transmission and distribution of natural gas.

Natural gas market legislation is enacted in conformity with the EU Acquis concerning natural gas market.

**Types of Licenses**

Types of licenses that shall be granted by the Authority, based on the activities to be conducted are; import license, transmission license, storage license, wholesale license, distribution license, compressed natural gas (CNG) license and export license. Licenses shall be issued to be valid for a minimum period of ten, a maximum period of thirty years.

Import companies shall conduct the activity of import of natural gas, in LNG or gaseous form, for the purpose of selling it to wholesale companies, eligible consumers or export companies or directly exporting it. Import companies shall be obligated to obtain a separate license for each import arrangement they enter into and may purchase natural gas from production companies, wholesale companies and import companies. The annual quantity of natural gas imported by any import company under one or more import licenses shall not exceed twenty percent of the total estimated national consumption in that calendar year as determined and announced by EMRA in the month of January every year. The sales of an import company under one or more import license may not exceed twenty percent of the estimated natural gas consumption amount announced by EMRA for the current year, in the month of January each year. Wholesale companies must meet all the conditions and obtain an import license in order to import natural gas. If the application for an import license is accepted by the Board, then an import license shall be issued. Import companies which submit with their applications any preliminary contract or statement showing that they will provide, within five years, the storage capacity to store locally ten percent of the quantity of natural gas to be imported in each calendar year shall be obligated to submit to the EMRA the lease contracts entered into for this purpose with licensed storage companies. In cases where an import company is selling natural gas to distribution companies and where the storage capacity provided as per provisions of paragraph five is inadequate, the relevant import company shall be given a time of five years as of the date the license is issued to take the necessary measures related to storage. If the storage facilities in the country at the end of such period are still inadequate, such period may be extended by up to two years by a Board decision.

Transmission is defined in Natural Gas Market Law No: 4646 as natural gas delivery by gas pipeline networks excluding gathering lines used for generation purposes and distribution networks, or by delivery equipment for liquefied natural gas (LNG). Transmission licensee shall be responsible for his own part regarding performance of arrangements and all other services required for ensuring natural gas flow and operation of the system. In addition, the licensee shall be obligated to take all measures to ensure transmission of natural gas through the lines under his responsibility in a secure, effective and cost-efficient manner and take all other actions stipulated in the applicable legislation. The transmission licensees (LNG) shall transport liquefied natural gas (LNG) only in Turkish territorial waters and territory. Transmission license (LNG) holder shall be liable to perform LNG filling, transport and delivery activities in accordance with the terms and procedures foreseen in the relevant legislation and to plan, design, construct, procure and operate the transport vehicles and facilities according to the foreseen standards.

The storage license holder shall be responsible for planning, designing, construction and operation of the underground and on-ground storage facilities and LNG facilities, in accordance with the principles, procedures and standards set forth in the applicable legislation and other legislation.

Wholesale licensee may purchase natural gas from production companies, import companies and wholesale companies. Wholesale licensees may sell natural gas to export companies, eligible consumers, CNG sales companies, import companies, distribution companies and wholesale companies throughout the country. Those wholesale companies which have presented preliminary contracts or commitments, at license application, showing that the applicant shall provide for storage capacity within Turkey, shall submit lease contracts concluded with storage companies holding licenses in order to fulfill this obligation. If, however, he sells natural gas to distribution companies, the licensee shall be granted a five year period from the effective date of the license in order to provide the required storage capacity. Where the capacity of storage facilities does not reach the necessary level in Turkey, such period may be extended for up to two years by the Board’s decision. Although provision of storage capacity within five year from the date of the license is compulsory in respect of natural gas to be sold to eligible consumers, this period may be extended for a period designated by the Board in case the storage facilities throughout the country do not reach a sufficient level.

The companies, which will be entitled to receive in-city natural gas distribution licenses, shall be selected through tenders to be conducted by EMRA. Between 2003 and 2006, with the exception of few cities, our Authority held in-city natural gas distribution license tenders for all of the cities in Turkey. A distribution license shall be granted to the company entitled to receive the license upon completion of the procedures defined in the relevant regulations and the tender file.

The companies holding compressed natural gas (CNG) licenses based on the content of their respective licenses perform the activity of CNG sale which is defined as the purchase of natural gas at wellhead, from national transmission network or in-city distribution system, from suppliers an/or distribution companies; they perform the activity of transmission and distribution defined as compression, filling in pressurized containers and sale, and transport of compressed natural gas (CNG) by means of special vehicles between cities, sale of natural gas obtained from CNG sale stations by reducing its pressure at places where the transmission network does not reach.

Export companies may purchase natural gas from production companies, wholesale companies or import companies.

**Licensing Process**

In order to grant relevant licenses to engage in market activities, the legal entities shall file applications with the Authority by submitting the necessary information, documents and commitments. In order to commence the review and evaluation regarding applications that are deemed to be filed in accordance with the principles pertaining to license applications, the applicants shall be notified in writing to deposit one percent of the licensing fee into the account of the Authority within ten days following the date of notification. The license applications of the legal entities to engage in natural gas market activities, to the Authority shall be responded by the Authority within sixty days following the commencement of the review and evaluation process. The results of the review and evaluation process, carried out by the Authority, shall be submitted to the Board and the license application shall be finalized by a Board decision. In cases where a license application is rejected by a Board decision, the justifications for such rejection shall be notified in writing to the related applicant within ten working days following the Board decision. The legal entity that is deemed eligible for obtaining a license, by a Board decision, as a result of the review and evaluation process, shall be notified in writing that the relevant license shall be issued upon fulfillment of the relevant obligations within ninety days. Legal entity, which fulfills its obligations, shall be granted the relevant license as per the aforesaid Board decision. The commercial title of the licensee and the type of the license acquired shall be published in the Official Gazette and announced in the Authority’s website. With exceptional cases where force majeure conditions exist, any license application shall be rejected by a Board decision upon failure to fulfill these obligations within the specified period.

The applications regarding imports from the countries other than those with which contracts have already been executed by BOTAS, are evaluated within the framework of the procedures and principles determined by the Board Decision numbered 725 and dated 13/04/2006.

For all the license types, except for the distribution license, the period of the licensing process, excluding the time necessary for the fulfillment of the obligations by the company applying for the license, is approximately three months.

**License Fees**

The license fee, annual license fee, renewal of the license fee, modification of the license fee and copy of the license fee that will be applied in the year 2007 are as folows:

a) Import Activity:

-License fee: 75.000.- YTL.

-Annual license fee: 0,0005 YKr for per KWH sold.

Legal entity that holds more than one import license shall pay annual license fee according to its total sale with respect to all its import licenses.

b)Transmission Activity:

i) Transmission

-License fee: 750.000 YTL.

-Annual license fee: 0,0005 YKr for per KWH transmitted.

ii) Liquefied Natural Gas (LNG) Transmission:

-License fee: 37.500 YTL.

-Annual license fee: 0,0005 YKr for per KWH transmitted.

c) Storage Activity:

- -License fee: 150.000.- YTL.

- Annual license fee: 0,0005 YKr for per KWH stored.

d) Wholesale Activity:

- -License fee: 50.000.- YTL.

- Annual license fee: 0,0005 YKr for per KWH sold.

e) Distribution Activity:

- -License fee: 50.000.- YTL.

- Annual license fee: 0,0005 YKr for per KWH sold.

f) Compressed Natural Gas (CNG) distribution, transmission and sale:

i) Compressed Natural Gas (CNG) transmission and distribution:

- -License fee: 10.000.- YTL.

- Annual license fee: 0,0005 YKr for per KWH transmitted and distributed.

ii) Compressed Natural Gas (CNG) Sale:

- -License fee: 10.000.- YTL.

- Annual license fee: 0,0005 YKr for per KWH sold.

g)Export Activity:

- License fee: 10.000.-YTL.

- Annual license fee: YTL for per KWH exported.

The fees for license renewal, modification of the license and copy of the license regarding all market activities are as follows:

1. License renewal: 50% of the license fee for the relevant activity.
2. Modification of the license : 1.000.- YTL.
3. Copy of the license : 100.- YTL.

**Participation Fee**

The legal entities holding licenses and certificates are liable to pay participation fee. The participation fee is calculated by multiplying the net sales revenue amount in income tables to be prepared with respect to the annual activity periods of the said payers, with the participation fee rate to be determined by the Board, provided that such rate does not exceed 0.2 %. In this framework, the rate regarding the participation fee that the licensees that are performing in the natural gas market are obliged to pay for the year 2007 is determined as 0,05 %.(five out of ten thousand). The rate regarding the participation fee for the certificate holders that are performing in the natural gas market are obliged to pay for the year 2007 is determined as 0 (zero).

**In-City Natural Gas Distribution Tender Process**

EMRA is assigned with the duty of conducting in-city natural gas distribution license tenders. In order to bid in an in-city natural gas distribution tender the companies need to obtain pre-qualification from EMRA. In this framework,

As specified in the Article 8 of the Natural Gas Distribution and Customer Services Regulation:

* Companies whose participation to public tenders has been prohibited as of the date of the tender announcement,
* Companies where real persons, who hold shares equal to or above ten percent in the capital of the legal entity, have been sentenced to heavy imprisonment or imprisonment longer than five years for infamous crimes such as simple or aggravated embezzlement; forming an organization in order to commit a crime; extortion; bribery; robbery; fraud; falsification; breach of trust; fraudulent bankruptcy or for smuggling other than smuggling of goods; manipulation of public biddings and procurements; money laundering or disclosure of State secrets or fiscal evasion,
* Companies where relatives, up to first level, of president or members of the Board, chairman or members of the tender commission hold shares, directly or indirectly, other than those shares acquired through the stock markets,
* The companies whose capital are below the amount specified in the terms of reference ( in practice the minimum level is 1.000.000 YTL)
* The companies which are not based in Turkey,

shall not apply for pre-qualification.

Tender commission shall evaluate the pre-qualification applications based on the adequacy of the applicants. The adequacy of the companies shall be evaluated taking into consideration their financial status and experience of the company and/or its shareholders with respect to the network investment and performance of the operation activity required in the city subject to the tender hands on experience of the firms which are going to obtain services is taken into account. Pre-qualification applications shall be evaluated based on;

**-**With respect to financial viability; equity, balance sheets and income statements and documents and letters of intent of the bidder firm and its shareholders,

**-**With respect to experience; experience of the firm and/or its shareholder, in the natural gas sector and/or other sectors, experience of the firms which will provide construction and operation services to the bidder.

Since the distribution company shall not be allowed to perform any other activity other than natural gas distribution activity and the company which acquires the right to obtain a distribution license shall be obliged to make the necessary amendments in its articles of association in accordance with the relevant legislation or it will be necessary for the firm to establish another company with the same shareholder status, in the event that the company which will participate in the tender is newly established, the experience and financial liability of the direct and/or indirect real and/or legal person partners’ shall be taken into account.

Those companies which are deemed adequate by the Board shall be invited to obtain the tender documents from the Authority and submit their bids prepared in conformity with the tender documents to the Authority in the time specified. Bid bond and performance bond shall be determined as a fixed amount, the bid bond shall be stated in the tender announcement and amount of the performance bond shall be stated in the terms of reference.

The in-city natural gas distribution tenders are conducted in accordance with Natural Gas Market Law and Natural Gas Distribution and Customer Services Regulation in an open discount process. The bids shall be evaluated based on the unit service and depreciation charge, which shall be proposed as a single charge for supplying one kWh natural gas to consumers. The bids shall be ranked based on the unit service and depreciation charges offered, the three lowest bids shall be determined and the relevant bidders shall make discounts of their bids. The Board shall determine, as a result of the discount process, the bidder with the lowest bid, who shall be the company which acquires the right to be granted a distribution license and the companies ranking in second and third places. In the event that, as a result of the open discount process the unit service and depreciation charge comes out as 0 (zero), the open discount process continues over the connection fee which is determined in the terms of reference and will be valid for five years. The company bidding for the lowest connection fee wins the tender. The unit service and depreciation charge is applied for the duration specified in the terms of reference (in practice eight years). After the end of this term the unit service and depreciation charge based on price cap which shall be determined by the Board will be applied. The companies which win the tender and completed the necessary procedure before obtaining license are granted the distribution license by the Board Decision.

The company holding a distribution license is authorized in a specified city for specified license duration (in practice 30 years) to distribute natural gas via the distribution lines constructed by them under their ownership.

**Contract Release**

BOTAS, starting from the end of the preparation period, cannot execute a new natural gas purchase contract until its import amount falls down to the twenty percent of national consumption. Until the aggregate of its annual import amount falls down to the twenty percent of annual national consumption until the year 2009, BOTAŞ shall execute tender partially or fully for the existing natural gas purchase or sale contracts together with all their rights and obligations, with the participation of the interested companies that have both been pre-qualified to get import license and obtained prior consent from the seller company regarding contract transfer. Beginning from the first winner of the tender, BOTAS shall give consent to legal entities sequentially to negotiate with the seller party and to obtain seller’s consent for signing a new contract. The release becomes effective after the related legal entity executes a new contract with the seller party for the amount to be transferred. In the event that no such legal entity executes a contract with the seller party, another tender that allows volume release shall be done with the participation of the companies that are pre-qualified to get import license and provided that the winning import company shall agree to perform all cross border liabilities of BOTAS and that the natural gas price shall not be less than the natural gas price determined by bilateral agreements The Built- Operate and Built-Operate- Transfer model power plants whose contracts are under Treasury guarantee must prove to the Board that they, acting as a prudent operator, purchase the natural gas from the most economical source and reflect the decrease in the purchase cost of natural gas, in a manner to provide a decrease in the electricity sale price provided that a waiver from the Treasury guarantees shall be given by applying to the Under Secretariat of Treasury.

In this context, the first contract release tender is held by BOTAŞ on 30th of November 2005 and approved by BOTAŞ on 30th of November 2006, it is anticipated the the first private sector importer is going to start its activities within natural gas market in 2007.

**Network Code**

Network code has been in force since 1 September 2004. Capacity allocation is made for one year based on entry-exit system. The entry-exit transmission tariff system has been adopted by the Board. Currently, transmission capacity is not being offered to third parties due to BOTAŞ’s de facto position as the only supplier. Rules pertaining to TPA are set out in the network code. The current transmission tariff is a non-indicative postal rate. In order to have natural gas transported the procedure for system entry can be summarized as follows:

Those, who apply for the first time to have the natural gas transported from any Entry Point to any Exit Point, should have import, export, or wholesale license. The copy of this license, the below information and documents shall be submitted to the Transporter.

* The anticipated time for the first entry of the Natural Gas to the Transmission Network and the annual quantity anticipated to be transported in each Gas Year for a period of 5 years as of this date.
* The Entry and Exit Points for Natural Gas to be transported through Transmission Network, capacities requested for these points and monthly distribution share of the annual quantities for delivery and offtakes.
* Minimum Delivery Pressure and minimum temperature requested for each Exit Point.

Production Companies holding Wholesale Licenses and those having Import Licenses shall submit the following information and documents in addition to the above:

* The temperature and pressure range of the Natural Gas to be transported at the Transmission Network Entry Point,
* The Quality Specification of the Natural Gas to be submitted to the Transporter at the Entry Point (the filled copy of the Quality Specification form for this form given in the Encl.1 of the NOP (minimum and maximum values are to be stated)),

Below information and documents shall also take part in the information and documents to be submitted by Import License holders:

* Provisions regarding Natural Gas flow in Import Contract concerning the Natural Gas Supply and Contract or Letter of Intent awarded with the Foreign Operator, if any.

The Transporter shall respond to the requests of the applicants, who submit the information and documents mentioned above, within 30 (thirty) days following the application date. If the Transporter rejects the applications, the justification of the rejection shall be conveyed to the applicants. If the application is found to be acceptable, the applicant shall be informed about the procedure to be followed.

**Certificates**

Any construction or service activity related to natural gas shall not be performed by persons who are not certificate holders.Certificate is the authorization granted by the Board to confirm that any real person or legal entity, who will design, construct, modify, maintain-repair, supervise, provide consultancy and similar services for facilities which are owned by a legal entity engaged in natural gas activities (licensees).

Electricity Market Law, Petroleum Market Law and LPG Market Law do not contain requirements regarding certificates.

Types of Certificates

-Construction and service certificate is the authorization issued by the Board to real persons or legal entities certifying that the real person or legal entity in question is qualified to perform the services of feasibility studies, design, consultancy, control, audit, construction, service, maintenance and repair of the facilities in the natural gas market.

-Internal installations and service lines certificate is the authorization issued by city distribution companies and by public and private entities holding authorization certificates to real persons and legal entities, certifying that the real person or legal entity in question is qualified to perform the services of consultancy, design, control, construction, audit, maintenance and repair pertaining to service lines and internal installations of city distribution networks.

If real or legal persons are willing to perform activities in more than one distribution zone, they must grant internal installations and service lines certificate for each distribution zone. The process regarding issuance of authorization certificate by public and private firms enabling them to issue internal installations and service lines certificates is postponed until 2009.

Certificates shall be issued to be valid for a minimum period of ten, a maximum period of thirty years. In practice, it is granted for ten years.

Certificate Process

Certificate application, certificate fees, the firms which obtained construction and service certificate, the firms whose certificates are terminated, relevant regulations, participation fee announcement, copy of internal installations and service lines certificate, copy of the petition for termination of the certificate and copy of the petition for visa are on EMRA website ([www.emra.org.tr](http://www.emra.org.tr)) in the “certificate procedure” section.

Real or legal persons shall apply to EMRA with necessary information and documents in order to obtain construction and service certificate and in order to obtain internal installations and service lines certificates they shall apply to distribution license holder.

In the application for the Construction and service certificate for each category at least one certificate of higher education is submitted. The owner of the company or the shareholder may submit his/her higher education certificate for the relevant categories. For internal installations and service line certificate application, besides the mechanical engineer holding competent engineer certificate, for the relevant field of activity; Certificate for Internal Piping Master, Welder Master Certificate, PE Welder Master Certificate (for PE pipes) are submitted.

Certificate applications which are understood to be not duly filed in accordance with the relevant legislation shall be deemed as not filed and the application documents shall be returned to the applicant, unless the errors are corrected or the missing issues are completed within thirty days as of the date of the relevant written notification. Certificate applications shall be responded within sixty days. If it is deemed appropriate to issue a certificate, such certificate shall be issued upon payment of the initial certificate fee to the Authority. If the initial certificate fee is not deposited in the account of the Authority within thirty days as of the date of notification, such application shall be deemed as not been filed.

Certificate and Participation Fee

The fees for certificate, renewal, modification, copy and certificate visa are determined by the Board until the end of December and published in the Official Gazette and on the website of the Authority. The fees for certificate, renewal, modification, copy and certificate visa are to be paid in cash.

The legal entities holding licenses and certificates are liable to pay participation fee. The participation fee is calculated by multiplying the net sales revenue amount in income tables to be prepared with respect to the annual activity periods of the said payers, with the participation fee to be determined by the Board, provided that such rate does not exceed 0.2 %. Participation fee, between the years 2004-2007 is determined to be as 0 (zero).

General Provisions Concerning Certificates

* Starting from the effective date stated in each certificate starting construction and service line certificate holders shall apply for visa in every three years and internal installations and service line certificate holders shall apply for visa in every one year.
* Certificates may be amended, without any fee where required according to the implementations within the scope of relevant legislation or with the relevant fee upon the request (change of title, field of activity and addition or exclusion of categories) of the relevant certificate holder.
* Certificates may be renewed to be valid for a minimum period of ten, a maximum period of thirty years as of the expiry date thereof, upon the request of the relevant certificate holder.
* Certificates shall expire at the end of their respective terms or upon bankruptcy of the relevant certificate holder. Certificates shall terminate, subject to Board approval, in cases where the relevant certificate holder wishes to return the certificate. In cases where a certificate holder wishes to stop performing the activities within the scope of his certificate, such certificate holder shall be obligated to file a written application, at least ninety days in advance of the requested termination date. Such applications shall include also the reasons of the request. Construction and service certificate holders shall file such applications with the Authority, whereas internal installations and service line certificate holders shall file such applications with the companies from which they had obtained their respective certificates.
* In the event of a change of the address for correspondence which was indicated in the application, the certificate holders must inform the Authority via notary three days prior to the change of the address. In case this notification is not made in due time the official communications to the previous address are deemed valid.
* The real or legal persons holding a construction and service certificate can be audited by EMRA or EMRA can have them audited. The real or legal persons holding internal installations and service lines certificate can be audited by distribution companies, or the companies with authorization certificate, from which they obtained their certificates.
* In the event that real or legal persons that are certificate holders infringe the relevant legislation, based on the quality of the act, the penalties foreseen in Article 9 are to be applied.
* Certificate holders cannot transfer their certificate or cannot make other parties make use of it.

**Useful Links:**

Investment Support and Promotion Agency of Turkey: <http://www.invest.gov.tr/>

General Directorate of Petroleum Affairs: <http://www.pigm.gov.tr/>

Turkish Petroleum Refineries Co.: <http://www.tupras.com.tr/>

Turkish Petroleum Co.: <http://www.tpao.gov.tr/>

Petroleum Pipeline Corporation: <http://www.botas.gov.tr/>

Ministry of Energy and Natural Resources: <http://www.enerji.gov.tr/>

Energy Market Regulation Authority: <http://www.epdk.gov.tr/>

Petroleum Platform Association: <http://www.petform.org.tr/>

Turkish Association of Petroleum Geologists: <http://www.tpjd.org.tr/>

Competition Authority: <http://www.rekabet.gov.tr/>

Privatization Authority: <http://www.oib.gov.tr/>