

# Liberalization Process and Legal Aspects of the Turkish Natural Gas Market

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## Abstract

This chapter aims to study the liberalization process, legal aspects and especially reform plans of Turkish natural gas market with a critical approach. The natural gas market of Turkey is growing consistently. Although Turkey stands next to the important fossil fuel producing countries, its natural gas resources are very limited. Nevertheless, Turkey's geographical position is a key link between the world's largest energy resources and the European markets. Therefore the regulation and liberalization of Turkish Natural Gas Market is of not only national but also global importance. Currently, Turkey's natural gas market is in the early stages of liberalization. First significant steps regarding the liberalization of the market were taken with the Natural Gas Market Law (NGML) of 2001. Since then there has been a slow but gradual progress. The pricing strategy of Turkish governments, unrealistic targets of the NGML and capacity problems of the Turkish private sector are some of the important reasons why the planned liberalization stage could not be reached considerably. The legally unbundling of market activities and a significant decrease in market share of BOTAŞ, which is the state owned and market dominant natural gas company, are exemplifying the failed targets of the NGML. After 13 years of enforcement of the NGML, the law maker plans to reform the NGML in order to ensure the compliance with the EU regulations and to bring dynamism in the liberalization process. However, realistic targets and a change in the pricing policy of the government seem to be necessary in order to achieve a certain stage of market liberalization. It can also be recommended to take more effective measures to ensure a fair access to the natural gas transmission system for all of the market players. At that point the unbundling of market activities is indispensable. The unbundling of market activities can be carried out through different methods such as "a legal

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separation of transmission activities”, “an independent system operator” and “an independent transmission operator.” On the other hand, establishing and keeping strong energy companies will be necessary for Turkey in order to reach its long declared target of being an international trade hub for natural gas.

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**Keywords**

Gas market • Liberalization • Turkey

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## 8.1 Introduction

Turkey, as a country dependent on natural gas import, aims on one hand at liberalizing its natural gas market. On the other hand, it has enough reasons to have state-controlled mechanisms over the market, for example because of the necessity to ensure the supply security. With its current 30 % private sector participation, the Turkish domestic gas market seems to be in the early stages of liberalization. The milestone in the liberalization process of Turkish natural gas market was the enacting of the Natural Gas Market Law (NGML) in 2001, which abolished the monopoly rights of State owned BOTAŞ, the Turkish Petroleum Pipeline Company.

Despite all the important steps in the direction of market liberalization, the NGML of 2001 failed in some of its significant targets. Especially the plan of the law maker regarding the legally unbundling of market activities by 2009 could not be realized. In order to bring innovation and movement in liberalization process and to ensure the supply security, the government has taken a reform of the NGML in sight. The Ministry of Energy and Natural Resources of Turkey announced a new draft of the NGML, which was presented to the cabinet in May 2013. The draft includes significant reforms for the Turkish natural gas market. One of the key points of the draft is again the legal unbundling of BOTAŞ. Another important point of the NGML Draft is concerned with reducing BOTAŞ’s major share in the natural gas market.

The question whether Turkey should create a fully liberalized domestic natural gas market is not being answered in full conformity. While some represent the idea of a completely liberalized market and fully unbundled market activities, others assert that an advanced degree of liberalization in the natural gas sector will not be in the national interest of the country and therefore, because of its strategic importance for the economy, the government should stay in control of the market.

One of the main reasons why some are against a liberalization of the natural gas market has closely to do with the domestic energy resources capacity of Turkey. It is, in terms of energy resources, an unlucky country. Only about 2 % of the total natural gas demand is being met by domestic resources (TUSIAD 2009; Cagaptay and Evans 2013). Despite this fact, a liberalized natural gas market is clearly a need for Turkey. But at the same time the necessary measures should be taken by the

government in order to secure the supply. For example the “supplier of last resort” formulation may help to secure the supply for consumers.

Despite this fact, Turkey has a very strategic geographical position and because of that, it has good prospects to become a key country in ensuring energy security of Europe in the future. Its geographical position is a key link between the world’s largest energy resources and one of the biggest energy markets (MENR 2009). The close proximity to more than 70 % of the world’s proven oil and gas reserves in Middle East and Caspian Basin on one hand and the closeness to the industrialized European Market with great demand on energy on the other hand, make Turkey to become a natural bridge in terms of oil and natural gas transmission Shaffer (2006). The dependence of European Countries on certain natural gas exporting countries, especially on Russia and on limited pipeline routes, makes it necessary to find new supply sources and routes. In light of that diversification need, Turkey has gained increasingly significance as the “fourth corridor” or “southern corridor” for the transmission of natural gas from the Middle East, the Caspian Basin and Central Asia to the European markets. In this regard, major pipeline projects are planned which will contribute to the energy supply security of Europe.

Additionally, the Natural Gas Transmission System of BOTAŞ plays and most probably will play an important role in enhancing Turkey’s significance as a transit country. Therefore the liberalization of the Turkish natural gas market and any change in regulations will affect not only the national markets, but also the international transmission of natural gas, the import strategies of European countries and the export plans of natural gas producing countries in Middle East, Caspian basin and Central Asia (Cagaptay and Evans 2013).<sup>1</sup>

In light of the mentioned international significance of Turkey, this chapter aims to examine the legal aspects of the Turkish domestic natural gas market in connection with the natural gas policy of Turkey. Within this frame, the draft of the new Turkish Natural Gas Market Law, its critic and possible impacts for Turkey and the international energy markets will constitute an important component of the chapter. Furthermore, the historical background of natural gas related regulations will also be examined.

This chapter is structured as follows: Sect. 8.2 looks at the natural gas market of Turkey with its significant components, such as BOTAS and the Natural Gas Transmission System. Section 8.3 examines the regulations of the Turkish natural gas market. The liberalization process of the market is issued in the same section. Section 8.4 deals with the planned reform of the Natural Gas Market Law of Turkey. Section 8.5 contains the conclusion.

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<sup>1</sup>For an analysis of geopolitical position of Turkey regarding natural gas sources, see also Cagaptay and Evans (2013), pp. 25–35.

## 8.2 The Turkish Natural Gas Market

### 8.2.1 Natural Gas in Turkey

The import of natural gas in Turkey started in 1987. During early years after that Turkey's total natural gas import and consumption amounts were less than 1 bcm<sup>2</sup> (Cagaptay and Evans 2013). Since then there was a very rapid increase of consumption reaching its highest level in 2013 with annual volume of 46.1 bcm.<sup>3</sup> That means an increase of almost 150 % in comparison with consumption one decade ago (EMRA 2012). At the same time, the share of natural gas in total energy consumption of Turkey reached a 33 % level (IEA 2009). These numbers correspond to the parallel growth of the economy and the results of BOTAŞ's investments for expansion of natural gas to the entire area of Turkey. Furthermore Turkey is also becoming a destination for spot LNG to fill the gaps in supply (Cagaptay and Evans 2013).

A remarkable feature of the Turkish natural gas market is the sector distribution of the natural gas consumption. In this respect, the high consumption in power plants for the purpose of electricity generation, with almost half of entire national consumption, draws attention (Turkel et al. 2009). That makes natural gas the major source for the electricity generation, although Turkey produces annually only less than 2 % of its total consumed natural gas.<sup>4</sup> The industrial consumption takes the second place with almost 27 %. Lastly, the household consumption is approximately 25 %. It seems that parallel to the policy of the Turkish Government to bring natural gas to every part of country, the rapid increase in residential consumption will continue.

In the natural gas market of Turkey, the regulation regarding the rights and liabilities of market actors concerning natural gas transmission through transmission network within the scope of NGML and the legislation in line with this law has been specified by Network Operation Principles (Network Code). The charges for national gas transmission through the transmission network are determined by transmission and dispatch control tariffs. It is of great importance to bring forward the legislation and the problems related to multiple-supplier market after BOTAŞ lost its identity as the only supplier of Turkish natural gas market.

Within the scope of unbundling provisions of NGML, BOTAŞ has separated accounts for transmission and commercial activities as the first step for a fully unbundling in future. In this respect the responsibility of BOTAŞ Natural Gas Operations District Management is the granting access to third parties who want to benefit from natural gas transmission service and providing equal service to all stakeholders within the tariff models to be formed in line with Network Code.

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<sup>2</sup> \*billion cubic meter

<sup>3</sup> \*billion cubic meter

<sup>4</sup> See also Cagaptay and Evans (2013, p. 8).

### **8.2.2 The Petroleum Pipeline Corporation (BOTAŞ)**

BOTAŞ, the Petroleum Pipeline Corporation, which is a 100 % state-owned company, is the operator of natural gas transmission system of Turkey. BOTAŞ is also the major natural gas importer, wholesaler and exporter in Turkey and therefore is a vertical integrated structure in terms of variety of its activities within natural gas market.

BOTAŞ was originally established by the Turkish Petroleum Corporation (TPAO) in 1974, for the purpose of transporting Iraqi crude oil to the Ceyhan (Yumurtalık) Marine Terminal. This mission relied on the Iraq-Turkey crude oil pipeline agreement signed in 1973 between the Republic of Turkey and the Republic of Iraq. Turkey's increased need for diversification of energy sources lead to an expansion of activities of BOTAŞ. In this respect BOTAŞ began with its activities of transporting and trading of natural gas in 1987, which are today the major fields of business for BOTAŞ.

### **8.2.3 The Natural Gas Transmission System of Turkey**

Turkey's main natural gas transmission grid is owned and operated by BOTAŞ. BOTAŞ's investments to expand its transmission network to cover the whole area of Turkey have been largely completed. The length of high-pressure pipelines has exceeded 13,000 km and reached almost all of the provinces. Current and future investments of BOTAŞ are expected to mainly focus on the completing of national transmission pipelines, the construction of loop connections within the system and underground storages and the installation of new compressor stations.

The Natural Gas Network System of Turkey has nine entry points. The main entries are the four connections with other transmission networks connected from neighboring countries (Bulgaria, Georgia and Iran) and the Black Sea. The other entry points are the connections points with two LNG Terminals (Aliağa in İzmir and Marmara Ereğlisi), two domestic production sites and one underground storage facility.

Furthermore there are nine compressor stations in operation within the transmission system. One of the most important ones of these is the Erzincan Compressor Station, which was completed in 2013. This Compressor Station has a key position for the transmission of natural gas from east to west. It will not only eliminate a weakness of the BOTAŞ Transmission System for national transmission service, but it will also play an important role for the transit-flows of natural gas from Middle East and Caspian Region to Europe through Turkey.

Currently there are many ongoing projects and construction works which aim to improve the transmission network of Turkey. One of these projects is the loop connection of the West line to the Greece line. With this loop connection the circle in the transmission system of the Marmara Region will be completed. Furthermore, eight new entry points are planned for three local production sites (Lüleburgaz-Şarköy and Mardin), three LNG terminals (in Adana, Aliağa and Çandarlı) and two

underground Storages (in the Aksaray salt lake and the Mersin salt lake) in the future. With the two natural gas underground storage projects, the storage capacity will be increased from 2.2 bcm to at least 4 bcm within next years.

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## **8.3 Natural Gas Market Regulations and the Liberalization Process**

### **8.3.1 In General**

BOTAŞ was for a long time the monopoly structure regarding vertically integrated import, trade, transmission and distribution activities of natural gas. The opening of the market started in 1990s with the privatization of distribution units of BOTAŞ.<sup>5</sup> However, the milestone in the liberalization process of Turkish natural gas market was the enacting of Natural Gas Market Law (NGML) in 2001, which abolished the monopoly rights of BOTAŞ in the natural gas market.

However, the legal process of the Turkish natural gas market began in 1988 with the enforcement of the Statutory Decree with Number 350, regarding natural gas use (EMRA 2012). Based on that statutory decree and the decree with number 7/781, BOTAŞ was established as the subsidiary of TPAO<sup>6</sup> in 1974. With these regulations, BOTAŞ was appointed as the only authorized body for natural gas import. After that the Statutory with Number 397 under the title “Natural Gas Use” authorized BOTAŞ for natural gas and LNG import, sales, distribution and also its pricing in Turkey (EMRA 2012).

### **8.3.2 The Natural Gas Market Law (NGML)**

The Turkish Natural Gas Market Law with law number 4646 (NGML) covers the import, transmission, distribution, storage, marketing, trade and export of natural gas and the rights and obligations of all real and legal persons relating to these activities.<sup>7</sup> This Law describes its target as the liberalization of the natural gas market and the formation of a financially strong, stable and transparent market along with institution of an independent supervision and control mechanism over the same, so as to ensure supply of good-quality natural gas at competitive prices to consumers in a regular and environment friendly manner under competitive conditions (EMRA 2012).<sup>8</sup> The NGML meets especially with the requirement of the 2003 EU Gas Directive.<sup>9</sup>

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<sup>5</sup> For detailed information regarding privatization of natural gas sector facilities, see TUSIAD (2009), pp. 30–39.

<sup>6</sup> \*Turkish Petroleum Corporation.

<sup>7</sup> Art 2 of the NGML.

<sup>8</sup> Art 1 of the NGML.

<sup>9</sup> Number: 2003/55/EC; IEA, Turkey Review, 69. For detailed information, see Aslan (2009).

The NGML empowered the Energy Market Regulatory Authority (EMRA) in this respect with broad competences to prepare and enact the necessary secondary legislation. Furthermore it charged EMRA with the duty to regulate and control especially in connection with the necessities of liberalization of the natural gas market.

Although the NGML contributed to the improvement and partly liberalization of the market, there are many reasons to categorize some of its regulations as an unsuccessful undertaking (TUSIAD 2009). This is mostly because of its unrealistic targets. For example, the annual import amount of BOTAŞ should have been decreased to 20 % of the annual national consumption amount by 2009, which at the end didn't happen. The market share of BOTAŞ is still over 70 %.

Another reason why the liberalization targets couldn't be met has nearly to do with the pricing strategy of Turkish government (Rzayeva 2014). Turkey followed for decades a strategy to keep the natural gas sector under state control. On the one hand, governments used natural gas as an instrument for political interest. So they subsidized BOTAŞ, which sold the natural gas with lower prices. On the other hand, the importance of natural gas for electricity production and industry was presented as a legitimate way for such a control. As a result, the private sector had difficulties to compete with BOTAŞ and was unable to enter into the market easily.

In order to speed the liberalization process up and meet the expectations of the market, in 2012, the Ministry of Energy and Natural Recourses announced the intention of the Government to reform the NGML and publicized a new draft in this regard.

### **8.3.3 The Energy Market Regulatory Authority**

The Energy Market Regulatory Authority (EMRA) is the key institution in the Turkish energy market. It is the independent regulator for electricity-, natural gas-, petroleum- and LPG markets. The main task of EMRA is to set up and implement regulatory measures to ensure the establishment of a liberal and competitive natural gas market. It should especially ensure the equal entrance for all equal shippers and fair conditions for all market players. EMRA also regulates and approves storage, transmission and all retail tariffs (IEA 2009).

### **8.3.4 The Natural Gas Market Transmission Network Operation Regulation**

The Natural Gas Market Transmission Network Operation Regulation was prepared and published by the Energy Market Regulatory Authority in 2002. Its preparation and enacting was ordered by the NGML of 2001. The Regulation came into force in 2002.

The main aim and regulation subject of the Natural Gas Market Transmission Network Operation Regulation is specifying the principles and procedures, which

should be included in the network operation rules of natural gas transmission companies.<sup>10</sup> The rules and principles of network operation are prepared by BOTAŞ, as being the only Natural Gas System Operator in Turkey, and approved by EMRA.

The Natural Gas Market Transmission Network Operation Regulation includes the principles and procedures concerning issues such as system access, notification of transportation amount and scheduling of the transportation service, determination of transportation amount, service interruptions, dispatch, system balancing, communication system, capacity allocation, natural gas delivery and metering.<sup>11</sup>

### 8.3.5 The Network Code

The Principles on Natural Gas Transmission System Operation (Network Code),<sup>12</sup> which is based on the Natural Gas Market Transmission Network Operation Regulation, is prepared by BOTAŞ and approved by EMRA (Özen 2012).

The Network Code is prepared to set out specific rights and obligations of parties using transmission system. These parties are especially wholesale companies as the shippers and BOTAŞ as the transmission system operator. The Network Code includes the system entry and network operation rules in line with the principles of equal parties and prohibition of discrimination and an economically efficient operation.

The Network Code entered into force in 2004. It was amended in 2007 and almost every year after that as a result of market needs and the liberalization process.<sup>13</sup> It consists of two parts, namely the basic practices and operation provisions. The first part regulates especially obligations of transporters and shippers, application conditions regarding system entry and system entry disputes.

The second part of the Network Code, under the heading “operational provisions”, covers and regulates especially following issues: definitions and interpretations; reservation, transfer, takeover and usage of capacity; dispatch control and system balancing; internal consumed gas; system entry and exit conditions; notification and program of transportation amount; delivery, possessory and responsibility regarding transported natural gas; allocation of natural gas; measurement and analysis provisions; quality and pressure provisions; system planning and maintenance; provisions regarding emergency case, difficult day and limited capacity day; settlement of disputes and finally invoicing and payment.

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<sup>10</sup> Art 1 of the Natural Gas Market Transmission Network Operation Regulation.

<sup>11</sup> Art 2 of the Natural Gas Market Transmission Network Operation Regulation.

<sup>12</sup> Also known as BOTAŞ Network Code.

<sup>13</sup> For more information, see Ünal (2012), pp. 77–83.



### 8.3.6 Liberalization Process and Third Party Access

Within the scope of the EU integration process, Turkey has undertaken important steps to create a liberal competitive natural gas market. As mentioned above, the first step in this respect was the Natural Gas Market Law, which came into force in 2001. The aim of this Law was to liberalize the market and to encourage privatization and competition. Before this, the poor legal and technical groundwork made it almost impossible to accomplish widespread privatization in the natural gas market (Cagaptay and Evans 2013; Atias 2009).

One of the challenges for the NGML was to set up an equal access to the transmission service. The main problem was the position of BOTAŞ as both the monopoly natural gas trader and the monopoly transmission operator at the same time. The Law regulates the access of third parties to the transmission infrastructure based on certain tariffs, which should be set by EMRA.

Although the Network Code came into force in 2004, the first shipper other than BOTAŞ accessed the transmission system in 2007. As a result of contract release auctions in that year and the following 2 years, four new importers entered the Turkish natural gas market with an annual total volume of 4 bcm (Rzayeva 2014, pp. 29–30). The total consumption of natural gas in Turkey in 2007 was 35.4 bcm (Rzayeva, p. 5). After this first access, the process moved fast in following years and the number of shippers that signed a “Standard Transmission Agreement” with BOTAŞ as transmission system operator increased rapidly.<sup>14</sup>

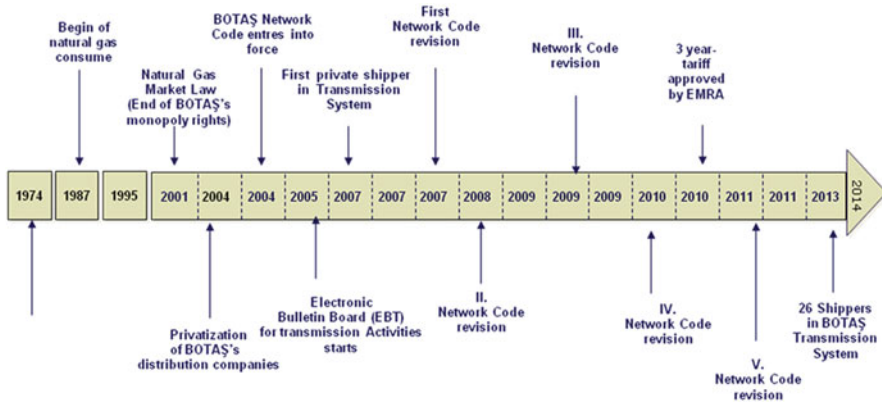
Another important step in the direction of liberalization was taken in August of 2012 as Gazprom, the Russian Natural Gas Company, signed supply contracts with four Turkish companies at an amount of 6 bcm per year. This agreement replaced the contract between Gazprom and BOTAS, which dated back to 1986 and expired in December 2011. Currently, there are 31 shippers in the BOTAŞ Transmission System, 8 of which are importers. In spite of this increase in the share of private sector, BOTAŞ takes on its activities still as a major market player (Fig. 8.1).

### 8.3.7 Unbundling of Market Activities

An important characteristic of a liberalized natural gas market is the unbundling of a natural gas company owning transmission system infrastructure and conducting trade activities as a shipper in the same system. The main ratio of such an unbundling is the ensuring of fair competition among system users. There are three main types of unbundling in this regard. These are from weak to strict, in the following forms: account separation, functional separation and legal unbundling.

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<sup>14</sup> For detailed information about the regulatory and legal improvement of natural gas transmission system of Turkey, see Özen (2012), pp. 34–53.



**Fig. 8.1** History of some developments in natural gas market of Turkey

The NGML includes provisions regarding unbundling of BOTAŞ, which is still a vertical integrated company. But as a preparation for the unbundling, the NGML set forth the separation of accounts of BOTAŞ regarding the transmission, storage, sales and import activities, within a certain time. This provision was fulfilled by BOTAŞ, even if not on time.

However, the unbundling provisions of NGML were more advanced than just an account separation. The vertically integrated legal entity structure of BOTAS should have continued until 2009. After this date, BOTAŞ should have been restructured into a horizontally integrated legal entity. Furthermore, according to this provision, among the legal entities to be formed as a result of restructuring, only the company which has the gas purchase and sale contracts and which will perform import activities should represent BOTAŞ and should have been called BOTAŞ. The companies, other than the one involved in transmission activities, should be privatized within 2 years. This provision is not applied up so far. BOTAŞ still undertakes its activities as a vertically integrated entity. The goal to unbundle BOTAŞ will be pursued also in the new draft of NGML.

## 8.4 The New Draft of the Natural Gas Market Law

### 8.4.1 In General

The NGML of 2001 had clearly aimed to liberalize the Natural gas market in Turkey. If we look back to the developments of last 10 years in the natural gas market, we can say that this law was by and large successful. But despite all important steps in the direction of market liberalization, the NGML has failed in some of its targets. As mentioned above, a significant decrease in market share and unbundling of BOTAŞ are two important examples of failed targets.

In order to bring innovation and movement in the liberalization process, the Government has taken a reform of the NGML in sight. The Ministry of Energy and Natural Resources of Turkey announced a new draft of the NGML, which includes very important steps for the natural gas market of Turkey.

Regarding the aims of the NGML reform, it can be understood that especially the demands of the private sector have been taken in consideration. These demands are mostly linked with an establishment of a fully liberalized natural gas market. But on the other hand, there are clear signs showing that the Ministry of Energy and Natural Recourses of Turkey has some suspicions regarding the liberalization of the market. These doubts can especially be seen through the provisions, which regulate some mechanisms regarding the supply security of the country. Some of the important changes in the NGML-Draft will be handled below briefly.

## **8.4.2 Reforms in the New NGML Draft**

### **8.4.2.1 Unbundling of BOTAŞ**

One of the key points of the draft is the legal unbundling of BOTAŞ. According to the second provisional article of the draft, the vertically integrated structure of BOTAS will continue for 1 year after the draft comes into effect. After 1 year,<sup>15</sup> BOTAŞ will be unbundled in three different legal entities, in another word: in three companies. The first entity will operate the transmission system. The second company will be responsible for the operation of LNG facilities and storage activities. The last one will carry out, according to the description of the NGML Draft, “other activities”. These activities will clearly be the main activities of BOTAS besides of transmission and operation of LNG facilities and storage activities. These are namely the import, export and wholesale of natural gas. According to the draft the third company will keep on the brand name of “BOTAŞ” and will represent it.

According to the NGML Draft, the transactions for the restructuring process will be conducted by BOTAŞ, taking on the opinions of the Ministry and the Undersecretaries of Treasury. In this sense, it will be ensured that the BOTAŞ will perform its obligations in its licenses under financially strong and competitive conditions.

### **8.4.2.2 Prohibition of Natural Gas Import Contracts**

Another important point of the NGML Draft is concerned with reducing BOTAŞ’s major share in natural gas market. According to the draft, BOTAŞ will not be

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<sup>15</sup> The draft regulates that the vertically integrated legal personality of the PPC will be preserved until January 1, 2015. After that date, the PPC will be re-structured as three separate legal entities to perform the transmission activities, the operations of LNG facilities, the storage activities and the other activities. But the given certain date will most probably be changed, because of extension of the enactment period.

allowed to make new Natural Gas import contracts until its share drops to 20 % of the national consumption.

Furthermore, an expired import contract can also not be renewed by BOTAŞ. But BOTAŞ will be allowed to make new import contracts with the permission of the Council of Ministers for the purpose of supply security and export.

However, it should be noted that also the current code includes a similar provision which could not be implemented yet. Therefore, instead of only creating provisions which are difficult to implement, it would be more helpful to support such legal intentions with political and economical steps. Changing the pricing policy and smoothing the way for the private sector may for example help to overcome the bureaucratic obstacles, which seem to play a significant role against liberalization targets.

Regarding the LNG import contracts, it should be stated that they are fully exempted from the contract-prohibition in the NGML Draft. In comparison to the NGML in force, the draft does not oblige but authorizes to contract release auctions. A new concept in that sense is the possibility of so called “amount transfer”. The draft empowers BOTAŞ also to make auctions to release natural gas amounts. With these provisions, the law maker aims and hopes a supply-side reduction of BOTAŞ’s share in the natural gas market.

#### **8.4.2.3 Prohibition of New Natural Gas Sales Contracts**

The Draft of the new NGML repeats in some of its provisions the targets of the existing NGML with different methods. According to the NGML Draft, BOTAŞ will not be able to sign new contracts for the sale of natural gas. However it will be allowed to renew the existing natural gas sales contracts.

The main target of such a provision is the decreasing of the market share of BOTAŞ, the market dominator, in the natural gas market. This regulation will provide also a demand-side decrease in the BOTAŞ’s market share. That will be a policy change of the law maker regarding the liberalization process of the market, because the existing law includes only the supply-side precautions in the export, which prevents the decrease in the BOTAŞ’s market share depending on the actions of the foreign companies as natural gas sellers. This strategy seems to have economic risks, because it is possible that BOTAŞ will own big volumes of natural gas in the future, which it will not be allowed to sell, as a result of that sale contract prohibitions.

#### **8.4.2.4 The Ministry as the Responsible Authority for Supply Security**

One of the reforms of the draft is the naming of an authority as the responsible subject for the security of the supply of natural gas. That is the Ministry for Energy and Natural Resources (MENR). In this respect the draft regulates that the ministry is liable for taking measures for the supply security of natural gas.<sup>16</sup> For that purpose, the Ministry should regulate the procedures and principles for the supply

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<sup>16</sup> Art 22 of the Draft.

security of natural gas through bylaws. The duties and responsibilities of both the Ministry and EMRA are aimed to be clear through the coordination between the Natural Gas Market Code and MENR Law on the Organization and Duties.

#### **8.4.2.5 Establishment of an Organized Wholesale Market**

The NGML Draft aims to prepare the necessary ground for a natural gas bourse. For that purpose, it regulates the establishment of an organized natural gas wholesale market and explains some concepts and activities in this respect. Some of these are the operation of organized natural gas wholesale markets, the storage obligation and the natural gas operational activities including the financial reconciliation transactions of the activities occurring in these markets and the other financial transactions regarding the subject activities and also assuming the supplier of last resort function.

The most important function of an organized wholesale market will be the specification of the pricing according to the supply and the demand on such a market. The establishment of such a market is expected to provide the performing of the natural gas market activities under transparent and competitive conditions.

#### **8.4.2.6 BOTAŞ as “The National Transmission System Operator”**

BOTAŞ is the only Natural Gas Transmission System Operator of Turkey. In order to provide such a de facto situation a legal basis, the NGML Draft defines this concept and gives this mission to BOTAŞ. This provision should especially serve a competitive environment for the access of the third parties to this transmission system. In case that the other transmission companies rather than the BOTAŞ itself conduct transmission activities, this provision will help the network to operate together. However, after the planned unbundling of BOTAŞ, the legal entity which will operate the transmission system will have to give up the brand name of “BOTAŞ”.

#### **8.4.2.7 Separation of Storage Activities**

As a reform, the NGML Draft separates the storage activities of natural gas in the gas form and in the form of the liquefied natural gas (LNG). This separation should ensure that for those two types of storage, which have different technical features, separate licenses and procedures will be regulated. According to the NGML Draft, before issuing a storage license the approval of the Ministry of Energy and Natural Resources is required.

The separation of storage activities will have also an effect in terms of identifying the conditions regarding the storage obligation. Furthermore, such a separation will probably include the Ministry in relation to the natural gas storage in the area of exploration and a production license based on the Turkish Petroleum Code and the other open areas.

Additionally, the draft provides that the Authority (EMRA) will set the tariffs for the license storage and LNG activities. However the LNG terminal and storage operators will have to prepare their tariffs, which should be in conformity with the procedures and principles identified by the Authority. Finally they will declare

these tariffs after submitting them before the Authority. The Authority will approve then the appropriate tariffs and these tariffs will be applied without any discrimination against equal parties.

#### **8.4.2.8 Storage Obligation and Guaranty of Supply**

One of the important provisions regarding storage activities concerns the storage obligation of the natural gas suppliers. In this regard, the license owners supplying natural gas to distribution companies are required to take precaution for the storage and to guarantee the natural gas supply in their future contracts.

On the one hand, the storage obligation and guaranty of supply should serve the continuity and the security of natural gas supply for consumers, especially in case of interruption or curtailment of natural gas. On the other hand, this obligation should care for the security of national supply through the precautions to be taken by the license owners supplying natural gas to distribution companies to efficiently manage their own portfolios.

#### **8.4.2.9 The Possibility of Division and Combination of Distribution Zones**

The NGML Draft involves new provisions regarding the division and combination of distribution provinces. In this sense, EMRA will be authorized to identify several cities as one single distribution zone. Likewise, it will be able to combine several distribution zones under one single license. Also, the existing distribution zones can be divided into several license zones. For last two cases, there should be a request of legal entities having distribution licenses, to move in that direction.

The NGML Draft provides that the procedure and principles regarding application of division and combination of distribution zones will be regulated by law. Although the combination of distribution zones may seem to be problematic regarding the competition law and may cause regional monopoly structures, such a regulation is necessary in order to provide distribution companies to bring natural gas service to smaller towns as well.

#### **8.4.2.10 Expansion of the Definition of Eligible (Free) Consumers**

The natural gas regulations in force have high limits regarding the free consumer specification. Currently only a consumer, who has more than 100,000 c<sup>3</sup> to consume is allowed to select his or her supplier. Within the frame of its liberalization targets, the draft aims to soften these limits. Therefore the definition of a free consumer is provided to expand through the aims and types of various uses of natural gas. Free trade areas and organized industrial areas, the consumers out of distribution zones, as well as compressed natural gas (CNG) and LNG users are added to the definition of the free consumer.

#### **8.4.2.11 Account Separation for Distribution and Retail Sale Activities**

Another step on the way of a fully liberalized natural gas market is the separation of natural gas distribution and retail activities. As a preparation for such a final stage,

the NGML Draft provides the separation of accounts for distribution and retail sales activities of the natural gas market.

Another change in the Law is related to the shares of municipalities on the distribution companies. According to the NGML Draft, such shares of the municipalities can be sold. These changes should make it possible to track the expenditures for the distribution activities of natural gas and to make the structural changes on the shares of distribution companies with municipal partnerships.

#### **8.4.2.12 Supplier of Last Resort**

A very significant reform of the draft is the concept of “the supplier of last resort.” This concept is defined as legal entities identified by the EMRA, which are liable for supplying natural gas to customers of import or/and wholesale companies, in case these companies are not able to fulfill their obligations. The same applies if a free consumer is not able to assure its need of natural gas. In order to meet these obligations, the supplier of last resort will be required to have storage facilities in order to meet seasonal natural gas needs of customers. In current market conditions, the only company which can fulfill these conditions is BOTAŞ, the state owned petroleum pipeline corporation.

The application of the concept of the supplier of last resort is the result of the liberalization process of natural gas market. It should serve to ensure the balance between competition and supply security. The supplier of last resort can find a ground to be applied especially in temporary and exceptional cases. So it will get on the stage for example in cases of urgency, the bankruptcy of the suppliers while consumers cannot find any supplier, or when the natural gas supply service suddenly stops.

The relevant EU Natural Gas Directive bears the concept of the supplier of last resort. The concept has its place in the last EU Natural Gas Directive within the scope of the Third Energy Package. However, a definition for the concept of the supplier of last resort is not made in the relevant Directive. So the application of this concept and its scope can be determined in the national legislations. The appointment of a supplier of last resort is not an obligation in the EU natural gas legislation. However, it is also necessary to state that this situation does not give member states the absolute freedom.

#### **8.4.2.13 Provisions Related to CNG**

The NGML Draft includes some new provisions about compressed natural gas (CNG). It provides that the Ministry will give the licenses for exploration and operation of natural gas and that the production companies can sell the gas produced to CNG companies. The aim of this provision is to ensure the harmony with the definition regarding the wholesale of natural gas. Furthermore it has been provided that natural gas can be filled up as CNG in motor vehicles as long as it is stated within the license and that EMRA will separately regulate the matters regarding the activities within this scope.

#### **8.4.2.14 Administrative Sanctions**

The sanctions have been re-regulated in order to eliminate irregularities and to meet the need regarding the implementation of administrative monetary penalties. The new regulations are provided in order to increase the efficiency and deterrence of the penalties implemented by EMRA concerning the natural gas market and also in order to ensure the functional operation of the market.

#### **8.4.2.15 Agreements in Written Form**

One of the new provisions of the NGML Draft is related to the obligation to form agreements in written form. The NGML Draft provides that every transaction in the natural gas market is required to be dependent on a written agreement. This requirement of the existence of a written agreement should ensure primarily the prevention of the conflicts that can or will occur due to the use of natural gas from the existing transmission system without any agreement in written form.

Other purposes of such a regulation are the protection of consumers and the security of natural gas supply for consumers and distribution companies. Written agreements should secure the legal basis for the resolution of the disputes between natural gas market actors with each other and consumers. Furthermore, such an obligation will create the opportunity to prevent some of the factors that restrain competition by providing a watch over natural gas market in which the number of players increases. Lastly, the obligation regarding agreements in written form should contribute to the predictions of demands and supplies of natural gas in Turkey.

### **8.4.3 Compatibility of the NGML Draft with the EU Third Energy Package**

One of the main components of the Third Energy Package of the EU is the regulations regarding natural gas markets within the Union. A close look to the Third Energy Package will show that the main goals of these regulations are the effective separation of competitive activities from network activities, creating more efficient market oversight and regulation, the establishment of more transparent market structures and providing the integration of markets. In other terms, the EU aims with these regulations to bind the European markets and to strengthen the competition.

One of the main aims of the NGML reforms is the integration with the EU regulation regarding natural gas. The NGML Draft law is consistent with the EU Third Energy Package on quite a few matters. Some of these are related to the unbundling, the regulation of the access to transmission system, the supply of last resort and the regulation of the LNG terminals.

However, the draft includes also some incompatibilities with the Third Energy Package of the EU which may result because of specific characteristics of the natural gas market of Turkey. For example the definition of the “useable storage capacity” is inconsistent with the EU legislation and the definition should be



regulated as “the storage capacity that can be put into use”. That is because the underground storage facilities depend on geological conditions. If this storage facility is the only one or has limited capacity for this purpose, it will be in a dominant position. For that reason, it will be a ‘compulsory element’ in terms of competition law and it should be open to third parties’ access and this access should be regulated.

### Conclusion

Turkey has a dynamic and consistently growing natural gas market. However it largely depends, in respect of natural gas, on import. On the other hand, Turkey is a natural bridge between natural gas producing countries and Europe, which is one of the biggest consuming markets of the world. This geographic position brings a great opportunity for Turkey to be a natural gas transfer point from east to west. Exactly at that point Turkey is confronted with an important choice: should it be just a transit country, where it has no control over the great amounts of natural gas passing through its territory via major pipeline systems of future, such as TANAP,<sup>17</sup> or should it be a trade hub for natural gas.<sup>18</sup> Although historically Turkey always declared that it follows the policy of being a trade hub for natural gas (Üçok 2013), the conditions and the natural gas producers affected Turkey to accept international transmission projects thorough which natural gas will pass without intervention of Turkey. That is clearly a tragic change in natural gas policy of the country. In order to become a natural gas trade hub, Turkey will have to improve its technical infrastructure regarding natural gas transmission and give more importance to re-export activities.

With almost 30 % private sector shipping participation within the transmission system, the natural gas market of Turkey is in the early stages of liberalization. The beginning of this process was the enacting of NGML in 2001. This law abolished the monopoly rights of the state-owned BOTAŞ in almost all of the natural gas market activities. BOTAŞ kept its monopoly rights only regarding the license for the transmission system operation (Turkel et al. 2009). Despite the opening of the market years ago, the natural gas market is still dominated by the state-owned BOTAŞ. Maybe the most important reason for this is the pricing strategy of governments in Turkey. They subsidized BOTAŞ, which sold the natural gas at uncompetitive prices. Therefore, the private sector had difficulties with surviving in the market. The pricing policy is still the most important obstacle against the liberalization.

The NGML in force couldn’t meet some of its important targets regarding the liberalization of the natural gas market of Turkey. Two of these important failed targets were a significant decrease in market share and unbundling of BOTAŞ.

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<sup>17</sup> TANAP: Trans Anatolia Gas Pipeline. The TANAP Project intends the transportation of the natural gas to be produced in Shah Deniz 2 field and other fields of Azerbaijan (and other possible neighboring countries) through Turkey to Europe from 2018 onwards.

<sup>18</sup> For detailed analyses regarding trade hub strategies of Turkey, see also Bilgin (2011).

In order to bring dynamism in liberalization process, the Turkish Government plans to reform the NGML comprehensively. On the one hand, the NGML Draft contains important changes in existing provisions and new regulations which are by and large compatible with respective regulations of EU. On the other hand, it also repeats some failed and unrealistic targets such as decrease of market share of BOTAŞ to 20 %. However the natural gas market of Turkey can only be liberalized with realistic regulations, necessary investments in transmission infrastructure and a change in pricing policy.

It is obvious that Turkey should urgently implement the planned market reform. That seems to be necessary in order to speed up the liberalization process of the natural gas market. A significant step in this regard will be an effective unbundling of market activities. Especially an independent gas transmission operator should be ensured. Another necessity is the reducing of market shares of dominant figures in the market. Furthermore, necessary legal bases should be created for long and short term supply security. In this respect, provisions regarding spot LNG trade and long term natural gas purchase agreements, especially in the interest of the private sector, should also be included in the regulations.

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