



**State Energy and Water Regulatory Commission (SEWRC)  
Bulgaria**

# **Annual Report to the European Commission**

**July 2012**

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## **1. Foreword**

This is a national report elaborated by the State Energy and Water Regulatory Commission to the Agency for the Cooperation of the Energy Regulators of the European Commission about the status of the Bulgarian electricity and natural gas sectors in 2011, according to the requirements of article 37(1)(e) of the Directive for the internal electricity market (2009/72/EC) and article 41 (1)e of the Directive for the internal natural gas market (2009/73/EC).

Alongside with the fact that the national report represents the first published national report after the entering into force of the above cited Directives, it is also the next in a series of annual national reports published since 2008. These reports comprise of depiction of regulator's powers and duties, review of the regulation process and the national legislation application in performance of the current European Directives in the electricity and natural gas sectors, as well as the security of supplies regarding the same sectors.

During the past year with the active participation of SEWRC the Drafts of the new Renewable Energy Act and the Act for amendment and supplement of the Energy Act have been developed, where the principles and provisions of the new European legislation of the third energy package have been transposed.

The new Market rules for trade with electricity, which are in force since August 2010, have been stepwise implemented in 2011 in parallel with the testing of the market organization and operation. The performed Market rules' test period showed the necessity of some feasible amendments and updating.

**Angel Semerdjiev**  
**Chairman of SEWRC**

## **2. Main developments in the gas and electricity markets**

### **2.1. Main developments in the electricity market**

#### **Wholesale market**

In line with Directive 2009/72/EC and under the Energy Act, the electricity market in the Republic of Bulgaria has been fully liberalized since 1 July 2007.

The annual net output in the country in the reporting period 2011 was 44.11 TWh, which was an increase in the net generation with more than 6.11 % in comparison to 2010. To a greater extend, the reason for this increase was the cheaper electricity by HPP power generated during the comparatively wetter 2010 year in the country 2011. The share of the electricity market opening for 2011 was 38.8 % with sales on the free market to the amount of 15.66 TWh – in the internal market and in the region.

In 2011 17 % of the internal consumption of the country was traded in the wholesale market at freely negotiated prices, in comparison to 2010, when this share was about 18 %. The share of the quantity traded in the internal market was 5.0 TWh with annual electricity end consumption of 28.52 TWh in 2011.

In 2011 the regulator issued licenses to 15 new companies for the activity of “electricity trading” with which the total number of licensed traders had become 98, which was an increase in their number with 8,6 % to 2010.

The electricity market in Bulgaria can be characterized as national and at the same time, well-integrated with the neighboring countries.

The activities and organization of the market in the country and trade with the neighboring countries in 2011 were regulated through the “Electricity Trading Rules” and “Auction Rules for the Allocation of Capacities on the Interconnections between the Control Area of Electricity System Operator EAD - ESO EAD (TSO), and its Neighboring Control Areas for the Year of 2011”. These Rules have been harmonized and approved by the national regulator State Energy and Water and Regulatory Commission (SEWRC) of the Republic of Bulgaria.

In 2011 Electricity System Operator EAD of the Republic of Bulgaria and the Romanian system operator CN TRANSELECTRICA SA developed and adopted new Common Auction Rules for Allocation and Procurement of Transmission Capacities on the Interconnections between the Control Areas of Electricity System Operator EAD - ESO and CN TRANSELECTRICA SA (TRANSELECTRICA). The Auction rules have been agreed with the State Energy and Water and Regulatory Commission (SEWRC) of the Republic of Bulgaria as an immanent part of the agreed “Auction rules for Allocation of Capacities on the Interconnections between the Control Areas of Electricity System Operator EAD - ESO EAD (TSO) and CN TRANSELECTRICA SA (TRANSELECTRICA) for 2011” (Common/General Auction Rules). These Common Auction Rules complement the agreed Common Rules with a procedure for the allocation of intraday transmission capacities, using an Auction Office.

In 2010 by Decision of Protocol No 159 of 29 Nov 2010, item 9, SEWRC likewise agreed “Common Auction Rules for Allocation of Transmission Capacities on the

Interconnections between the Control Areas of Electricity System Operator EAD - ESO and "Hellenic Transmission System Operator" SA (HTSO) for 2011 for the interconnection between Bulgaria and Greece.

The procedures in the new agreed Common Auction Rules between the Bulgarian and Romanian system operators, respectively between the Bulgarian and Greek system operators comply with the requirements of the new Regulation (EC) No 714/2009.

Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between Bulgaria and FYROM for 2011 are in a process of reconciliation.

The auction rules with the neighboring countries – Serbia, FYROM and Turkey are in line with the effective EU rules and with the bilateral agreements and rules for cross-border exchange and electricity trading. The latter also applies to the harmonization of the interconnection transfer capacities between the Bulgarian TSO and the operators of the neighboring transmission systems. The Auction Operator calculates and allocates the transfer capacities in line with the norms and rules of the European Network of Transmission System Operators for Electricity (ENTSO-E).

By Decision of Protocol No 94 of 25 Jun 2010, item 5, SEWRC adopted new Electricity Trade Rules, which envisage the implementation of the Third Liberalized Energy Package. The Rules were published in SG, issue 64 of 17 Aug 2010 and entered into force in August 2010. Under the aforementioned Rules a new market model has been created and the new market organization envisages:

- Introduction of hourly schedules for all transactions, notwithstanding at regulated or freely negotiated prices;
- Notification schedules on a daily basis, in the day D-1;
- Introduction of balancing groups in the market structure and a new registered procedure for the balancing groups coordinators;
- Introduction of new market relations between ESO EAD and balancing energy providers;
- Introduction of a balancing mechanism in the balancing energy market operation – separation of the energy the operator uses for regulation from the energy the generator offers on the market – regulated and/or open;
- Introduction of a separate settlement for the balancing groups coordinators and the balancing energy providers;
- Regulation of the terms and conditions for the market participation of RES generators;
- Regulation of the trading terms and conditions on exchange principle.

The new Electricity Trade Rules, which entered into force in August 2010, define the necessary period 2011 for gradual implementation and parallel testing of the organization and market operation. After the completion of the testing periods for the implementation of the Trade Rules in 2011, a necessity for some feasible amendments and streamlines of the provisions appeared. The introduced in the new Electricity Trade Rules common principles and detailed requirements comply with the provisions of Directive 2009/72/EC and Regulation (EC) No 714/2009, under the requirements of the 3<sup>rd</sup> liberalized package.

By a tradition, Bulgaria is a net electricity exporter for the countries of the South East Europe region. In 2011, the share of net country exports 10.66 TWh represented over 24 % of the net electricity country output. The latter is mainly due to the increased cheaper hydropower in a relatively wet year 2011 for the country.

The electricity market in the country is organized and administered by the Electricity System Operator. In line with the Energy Act, electricity trading in the country is carried out on the basis of bilateral contracts between the trading participants: producers, traders and consumers of electricity and a balancing market. ESO balances the energy system by

technical and economical criteria, taking into consideration the received applications and bids for the balancing market.

The trade exchanges, including day-ahead offers are carried out under the above mentioned Common Auction Rules between the system operators of Bulgaria and Romania and Greece, and under the new Electricity Trade Rules. The free electricity market in 2011 included the bigger part of the business consumers, connected to high voltage network (HV) and a part of the middle voltage (MV) consumers.

At present, there is no electricity exchange organized in the country. The adopted by the National Assembly Act for the amendment and supplement of the Energy Act in July 2012 places the national electricity sector in the necessary compliance with the provisions of Directive 2009/72/EC and Regulation (EC) № 714/2009 under the requirements of the 3<sup>rd</sup> liberalized package.

### **Retail market**

In 2011 the electricity market in the country operated in line with a model, under which a part of the transactions for sale of electricity were concluded at regulated prices, approved by the regulator, and the rest was traded on the liberalized market at freely negotiated prices between the participants in the electricity market, under EA.

The Suppliers of Last Resort supply and sell electricity to the protected consumers – households and small business consumers (Directive 2009/72/EC) at regulated prices.

A certain share of the quantity of electricity output from certain producers in line with the Energy Act, was purchased by the Public Provider for protected consumers at regulated prices. The quantities of electricity purchased at regulated prices from the producers within set by the regulator “quota” in respect of each producer are determined on the basis of the principles of equal treatment and transparency in line with the methodology adopted by the regulator.

The regulated price for protected consumers in the country is formed as a mix price of the electricity producers from different primary energy sources (nuclear fuel, coal, water energy, RES), which represents a prerequisite for equality of all consumers. The rest of the electricity output can be sold by the producers on the liberalized market as equal participants.

Within the developed in 2011 Law on Amendments and Additions to the Energy Act in accordance with Directive 2009/72/EC and the third energy package, some requirements are formed and these requirements aim at the electricity market enlargement in the sector of small and medium-sized economic consumers.

In pursuance of the Energy Act and the currently in force *Ordinance on regulating the prices of electric power*, in respect of the protected consumers, by a decision of the regulator, the following prices are set:

- prices for access to the electricity distribution networks;
- prices for transmission over the electricity distribution networks;
- prices, at which the suppliers of last resort sell electricity to household consumers and enterprises having less than 50 hired personnel and an annual turnover up to 10 million euro.

Since 2008, the price for transmission over the distribution networks has been defined separately as a price for transmission over the electricity distribution networks and a price for access to the networks. The regulated by SEWRC prices for access and transmission of the distribution companies, under the Ordinance on regulating the prices of electric power, are set based on admitted by the regulator revenue requirements for the relevant distribution network maintenance and operation.

The main consumer groups connected to the distribution networks in 2011 were as

follows:

- Business consumers at middle voltage – the price for these consumers includes: a price for electricity to a supplier of last resort, a price for transmission over the electricity distribution network and a price for access to the electricity distribution network.
- Business consumers at low voltage – the price for consumers at low voltage includes: a price for electricity to a supplier of last resort, a price for transmission over the electricity distribution network and a price for access to the electricity distribution network.
- Household consumers connected at low voltage – the price for electricity includes: a price for electricity to a supplier of last resort, a price for transmission over the electricity distribution network and a price for access to the electricity distribution network.

## **Public obligations and consumer protection**

Considering the increased share of electricity output generated by renewable energy sources (RES) like small HPP, wind energy, biomass, etc., a charge for green energy is added to the price of the Public Provider for transmission wheeling through the transmission network. This charge is calculated as the difference between the costs for the purchased electricity at preferential prices and the costs of basic price. These additional costs are directed to all consumers in the country, as a common obligation of the society.

In 2009 SEWRC adopted with a Decision protocol No 78 of 22 June 2009 a “Methodology for compensation of the costs of the Public Provider and the Suppliers of last resort coming from the imposed to them obligation to purchase electricity at preferential prices from renewable energy sources”. The Methodology has been developed with the aim to formulate standard and transparent rules, ensuring equitable assignment of costs from the purchase at preferential prices to all consumers.

Alongside with the other components of the price – for generation, transmission and distribution, the appointed by the Regulator green energy top-up and the highly effective co-generation of heat and electricity top-up too, contribute to the necessary transparency when forming the price for the end consumer.

In line with the Energy Act, the powers of SEWRC include the review of complaints of consumers against licensees or of licensees against licensees relating to the performance of the licensed activity. The terms and procedure for lodging complaints, their review and the procedure for voluntary settlement of disputes are established in a sub-regulatory act: the Ordinance on licensing the activities in the energy sector. The Commission has adopted Internal Rules for reviewing complaints and requests for voluntary settlement of disputes in 2004, updated in 2008.

SEWRC makes a thematic analysis every year of the received complaints under pre-defined indicators.

In 2011 1570 complaints were registered in SEWRC's Electricity sector in a total of over 5.9 million consumers, which means they reduced by 4.7 % to 2010. According to the reported by the companies' data, about 18 % of the complaints were resolved absolutely or partially and a considerable part of remaining share was unfounded. To carry out the control on the distribution companies' and end suppliers' work with the consumers, the Commission requires from the companies reported information regarding the solving of the received complaints. The adopted SEWRC's decision for each separate case is sent to the stakeholders and respective institutions. In 2011 the Commission issued complaint Decisions at the total of 154.

During the year 15 extraordinary inspections were carried out in the electricity distribution companies and end supplier companies regarding the fulfillment of the license terms and obligations, as well as regarding SEWRC's decisions. As a result, finding records were drawn up and obligatory instructions were given, containing deadlines for implementation.

In relation to consumer issues and complaints with a wide public concern, SEWRC works in collaboration with the other state institutions.

The main principles governing the activities of SEWRC in the performance of its regulatory powers, are the prevention and non-admissibility of infringements relating to competition on the energy market, as well as ensuring a balance between the interests of the energy utilities and consumers.

### **Infrastructure**

Operational costs and transmission network maintenance costs are reimbursed through approved prices for transmission and access.

The prices approved in 2011 were as follows:

- Price for transmission to the electricity transmission network paid by all network users to transmission operator NEK EAD.
- Price for access to the electricity transmission network paid to electricity system operator ESO EAD by all users of the network, without the amounts under transactions with a subject "electricity transit".

The regulated by SEWRC prices for access paid to ESO EAD and for transmission paid to NEK EAD for using the transmission network, are set based on admitted by the regulator revenue requirements for the maintenance and operation of the electricity transmission network.

In 2011 the regulator approved technical measures and means for the rehabilitation of the electricity transmission system of the country with the modernization of transmission control and the transformation, realized by loan funds and own funds of the transmission company NEK EAD.

In 2011 the Regulator approved an investment programme and the transmission enterprise undertook a number of reconstructions and enlargement of the transmission network, as well as construction of new substations and lines, due to the current high pace of constructing new RES capacities from wind, HPP, biomass and photovoltaic energy in certain regions of the country.

The Electricity System Operator ESO EAD carries out the operational management and regulates the allocation of electricity loads of the electricity system, by taking into account the accepted and confirmed applications for transfer capacity of the trading participants on the basis of the then in force Electricity Trading Rules and the Auction Rules.

The cross-border transfer capacity on the interconnections is allocated by the Auction Operator in the form of commercial rights for transfer in line with the current agreements and agreed with the operators of the neighboring countries Auction rules. The Auction Operator calculates and allocates the transfer capacities in line with the norms and rules of the European Network of Transmission System Operators for Electricity (ENTSO-E).

The transmission system and the interconnections with the neighboring countries ensure the necessary transit capacity for the commercial electricity exchange in the region.

### **Security of supply**

In line with the Energy Act, ESO prepares short-term and long-term forecasts and development plans for the electricity system in order to ensure the electricity balance of the



country. On the basis of the forecasts and the plans, ESO submits to the Minister of Economy and Energy a draft electricity balance and a list of the sources needed by the country, including new production capacities and interconnection lines.

The total installed capacity in the country in 2011 was 12 228 MW. The maximum net available output capacity to the annual maximum was 9432 MW, and the peak load in January 2011 was 7300 MW.

At this stage of development of the domestic and regional electricity market, the electricity transmission network of the country has not faced significant problems related to security of supply and congestions in the electricity system, including the cross-border transfer capacities. As a result of the considerable in 2011 increase of the RES electricity capacities in the country, mainly wind power in north-east Bulgaria, some difficulties occurred regarding the connection of new capacities to the transmission and distribution networks due to limited capacity. In this regard, in the Ministry of economy, energy and tourism, under the currently in force EA, and in SEWRC an Electricity Transmission Network Development Plan of Bulgaria for the period 2010 – 2020 is in process of reviewing and approval. Under the current legislative framework SEWRC reviews and approves investments and schedules for the network expansion of electricity distribution companies.

Rare cases of short-term congestions occur in the interconnectors with some of the neighbouring countries of the Republic of Bulgaria (with higher loads in the winter season).

### **Regulation/Unbundling**

In line with the Energy Act, the Electricity System Operator (ESO) is part of a vertically integrated enterprise, the Public Provider NEK EAD. But in line with the Act and the terms of the license, ESO's activities are independent from a legal and organizational point of view, from a financial and accounting point of view and in view of the decision-making process in relation to the functions assigned to it by law, from the other activities of the vertically integrated enterprise.

The legal, organizational and financial unbundling of ESO from the Public Provider has been ensured.

ESO prepared a compliance program, subject to approval by the regulator for 2011 as well, setting out the specific measures related to the performance of the license conditions and the requirements specified above. Every year, ESO submits an annual report on the fulfillment of the measures under the objectives specified in the program and the report is submitted to the regulator for review and approval.

The performance of the compliance program also takes into account and ensures the independence of ESO, of the persons responsible for the management, including the operational management of the electricity system.

The distribution companies in the territory of the country similarly prepare and submit compliance programs setting out the measures to ensure the independence of the Distribution System Operator. The compliance programs submitted are reviewed by the regulator at its sessions and are either approved or, if necessary, supplemented by instructions in order to guarantee the independence of the operator from the other activities of the vertically integrated enterprise. The distribution enterprise prepares an annual report on these measures which is submitted to the regulator for approval.

In 2011 the regulator approved the reports for the compliance programs of ESO and of the distribution companies.

In 2011 the Electricity System Operator continued to prepare, maintain and publish on its web site the necessary general and specialized information concerning the activities on the balancing energy market and about the transactions at freely negotiated prices.

The new Auction Rules and Electricity Trading Rules ensure transparency and non-discrimination between all participants in the auctions for transfer capacities.

In 2011 the organizational and technical activities continued for the transition to calculation and provision of transit capacities on the interconnection lines with the controlled areas of the neighboring countries by day-ahead offers.

Since the end of 2010 the above mentioned Auction Rules have entered into force between “ESO” EAD and the Romanian system operator CN TRANSELECTRICA SA for allocation of the transit capacities on the interconnection lines by day-ahead offers. In pursuance of the requirement of item 3.1 of the Guidelines, Appendix I of Regulation (EC) 714/2009 “ESO” EAD, at the end of 2010, by SEWRC’s Decision of Protocol No 159 of 29 Nov 2010, the agreement of the “Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between the Control Areas of Electricity System Operator EAD - «ESO» and “Hellenic Transmission System Operator” SA (HTSO) for 2011 was completed.

Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between Bulgaria and FYROM for 2011 are in a process of reconciliation, which rules likewise comply with the new Regulation (EC) No 714/2009 regarding the cooperation and coordination between both operators of neighbouring transmission networks.

In 2011 with the active participation of SEWRC, a draft of the new Renewable Energy Law was developed, under Directive 2009/28/EC and implemented principles and formulations of the third energy package. The Law was passed by the National Assembly of Bulgaria in May 2011.

Given the new responsibility activities and competences of the national regulatory authorities, resulting from the introduction and implementation of the principles and provisions of the third energy package, SEWRC developed and adopted the Rules of Procedures of the Commission, which is to be the pre-condition for adequate structure, expertise and budget to ensure the Commission's activities.

## **2.2 Main developments in the gas market**

By the amendment of the EA, promulgated in State Gazette, issue 54 of 17 July 2012, the Third Energy Liberalization Package was transposed, and more precisely Directive 2009/72/EC of the European Parliament and the Council of 13 July 2009, concerning the common electricity internal market rules, Art. 39,§.5 and Directive 2009/73/EC of the European Parliament and the Council of 13 July 2009, concerning the common natural gas internal market rules.

The above cited Directives stipulate new rules in relation to the National Regulatory Authorities (NRA). The provisions of art.35 of the Electricity Directive and art.39 of the Natural Gas Directive enhance Regulators’ independence. Articles 36 and 37 of the Electricity Directive and articles 40 and 41 of the Natural Gas Directive empower the NRA with new aims, obligations and powers.

In the new EA in art.21, § 1, item 27, it is stipulated that SEWRC acquires the power to certify the natural gas transmission system operators about the completion of the independence requirements and also to monitor their compliance. It is envisaged that within six months of the EA’s entrance into force, Bulgartransgaz EAD must submit at SEWRC a certification application for an independent transmission operator.

The implemented amendments of the administrative and penal provisions are dictated by the need for the control SEWRC carries out to be bind with the possibility to impose appropriate and proportionate to the infringements sanctions.

### **Wholesale market**

In 2011 there were no essential changes in the organization and operation of the natural gas market.

Under the EA and the Rules for provision of access to the gas transmission and/or gas distribution networks, in compliance with the European Directive for full natural gas market liberalization, all consumers since 01 July 2007 have the right to chose their natural gas supplier, or in other words, the market is 100 % liberalized.

Natural gas supply on the territory of the Republic of Bulgaria is carried out over the gas transmission network owned by Bulgartransgaz EAD and over gas distribution networks owned by the respective gas distribution companies. In the territory of the country, a transit gas pipeline has also been constructed, owned by Bulgartransgaz EAD, which transports natural gas through the relative sections of the territories of Greece, Macedonia and Turkey. The activity of public supply is carried out by Bulgargaz EAD. The natural gas on the entry of the gas transmission network is provided based on agreements with foreign providers.

Wholesale trade in natural gas is carried out by the regulated access of third producer countries. The import of natural gas is carried out on the basis of long-term agreements with Gazprom OAO for internal consumption and for transit over the transit pipelines. The supply of natural gas to the consumers from South Western Bulgaria over the transit gas pipeline to Greece and Macedonia is carried out on the basis of an agreement with Gazexport OOO. Bulgartransgaz EAD owns and manages the transmission and transit gas pipelines at high pressure as well as the underground gas storage of Chiren.

The activities of the gas transmission network operator, Bulgartransgaz EAD, are unbundled legally, functionally and financially from the other activities in the vertically integrated enterprise.

The gas transmission network operator provides:

- integrated management and reliable functioning of the gas transmission network;
- transmission of natural gas over the gas transmission network and its measurement/reporting;
- maintenance of the sites and facilities of the gas transmission network in line with the technical requirements and the safety at work requirements;
- development of the gas transmission network in line with the long-term forecasts and plans for development of the gas supply and outside them, when it is economically justified;
- maintenance and the development of the auxiliary networks.

With respect to the activities of the gas transmission system operator, as part of a vertically integrated enterprise, effective mechanisms have been set in place to guarantee its independence, while the persons responsible for managing, including the operational management of the gas transmission system:

- are not allowed to participate in the management of the other companies of the vertically integrated enterprise, which carry out extraction, distribution, public provision, public supplies and trade in natural gas;

- take independent decisions in the performance of the tasks entrusted to them;
- are obliged not to allow discriminatory treatment in the performance of their tasks.

The activity of public provision is carried out by Bulgargaz EAD, which is a license holder of a license for the activity of natural gas public provision, issued by SEWRC. Bulgartransgaz EAD is a license holder of a license for the activity of natural gas transmission, transit transportation and storage. The natural gas on the entry of the gas transmission network is provided by three foreign suppliers (Overgas Inc., Wintershall and Gazexport) and one local supplier (Petreko SARL). Bulgartransgaz EAD owns the transmission gas network, gas distribution companies are connected to this network and also about 400 directly connected consumers. Gas supply in the territory of Bulgaria is carried out over the gas transmission network owned by Bulgartransgaz EAD and over gas distribution networks owned by the respective gas distribution companies. In the territory of the country, a transit gas pipeline has also been constructed, owned by Bulgartransgaz EAD, which transports natural gas through the respective sections to the territories of Greece, Macedonia and Turkey.

Import is carried out by a single importer – Bulgargaz EAD, which is part of Bulgarian Energy Holding (BEH EAD). BEH EAD was established in September 2008 with 100% state share and with a subject of activity generation, extraction, transmission, transit transportation, storage, operation, distribution, sales and/or purchase of natural gas, electricity, heat energy, coals, as well as all kind of energy and resources for the energy generation. Large energy companies are included in BEH EAD, like Bulgartransgaz EAD (operating as combined operators carrying out the activities of natural gas storage, transmission, transit transportation) and Bulgargaz EAD, operating as natural gas public provision.

Under art.176, para.1 of EA, extractive companies or natural gas traders, on one hand, and the natural gas public provider, suppliers of last resort, storage facilities operators, liquid natural gas facilities operators, natural gas traders or customers – on the other, conclude natural gas transactions among each other at freely negotiated prices. For the reported 2011 the quantities, traded at freely negotiated prices by the sole country natural gas trader – Deksia Bulgaria OOD, were 32 million m<sup>3</sup>, supplied by the extractive company Melrose resources OOD.

Wholesale trade in natural gas is carried out by the regulated access of third producer countries. The import of natural gas is carried out on the basis of long-term agreements with Gazprom OAO for internal consumption and for transit over the transit pipelines. The supply of natural gas to the consumers from South Western Bulgaria over the transit gas pipeline to Greece and Macedonia is carried out on the basis of an agreement with Gazexport OOO. Bulgartransgaz EAD owns and manages the transmission and transit gas pipelines at high pressure as well as the underground gas storage of Chiren.

Bulgargaz EAD is the sole Public Provider that carries out wholesale trade at prices regulated by SEWRC, with a market share of 84.16 % of the total resource in 2011, and the remaining 15.84 % was from domestic extraction. The maximal hourly flow of imported natural gas was 0.0048 TW/h. Local extraction in 2011 was 406 million m<sup>3</sup>, realized by Melrose resources OOD and Exploration and extraction of oil and gas AD. To compare, the extraction in 2010 was only 54 million m<sup>3</sup>. The significant increase of the extracted natural gas in the country is due to the newly developed by Melrose Resources Sarl two deposit fields in Kaliakra and Kavarna. The Bulgarian country operates the underground gas storage Chiren, with a capacity of the active gas about 450 million m<sup>3</sup>/per year. In 2011, 349 million m<sup>3</sup> of natural gas were pressurized in it, and the amount of the drawn quantity was 368

million m<sup>3</sup>.

### Retail market

SEWRC performs monitoring and current control of the natural gas distribution companies concerning the fulfillment of their approved business plan target parameters, connected with their obligations under their licenses for natural gas distribution and supply. After analysis was made, it was found that the fulfillment of the business plans was at a satisfactory level, on the background of the general economic situation in the region of Southeast Europe.

Natural gas distribution companies 2011	Constructed network	Investment	Number of consumers		Consumed natural gas, tpm <sup>3</sup>	
	M	thousand BGN	industrial	households	industrial	households
<b>Total</b>	<b>304 832</b>	<b>51 732</b>	<b>5 370</b>	<b>57 427</b>	<b>437 694</b>	<b>69 227</b>

When regulating the distribution and supply prices, SEWRC takes into account the specific features of the market, including the fact that the needed natural gas distribution infrastructure of the country is still in process of construction and the connected to the natural gas distribution network consumers are still few. The applied by SEWRC regulatory mechanism provides balanced incentives for the natural gas distribution companies to continue the network development and to connect new customers with the purpose to gradually increase their consumption, where among the others, a higher rate of equity is set for the activities of distribution and end supply, the forming of the regulatory period prices as annuity prices and the adoption of cost-formulated tariff structures.

16.71 % of natural gas consumption (including the local extraction quantities) in the country is realized by 33 natural gas distribution companies, servicing 5 natural gas distribution regions (Dounav, West, Trakia, Mizia, Dobrudja) and 66 municipalities outside these regions.

In order to stimulate investments for the gas distribution companies, SEWRC applies the “price cap” method of regulation. As an investment incentive for the gas distribution companies, the Commission approves the rate on equity on an individual base for each company.

The regular monitoring of the natural gas market carried out by SEWRC is an incentive to encourage retail competition in order to ensure non-discrimination between all participants in the market and between the participants of one and the same category likewise and to contribute to efficient competition and proper functioning of the market. In this regard, SEWRC in performance of its control powers carried out scheduled inspections of the energy companies, as well as extraordinary inspections on the occasion of received warnings and complaints. As an illustration of the activity encouraging competition in the market, it could be pointed out the fact that SEWRC approves price cap for the sale of natural gas, the gas distribution companies being entitled to sell to end consumers at prices lower than the ones approved.

Under the Rules for the provision of access to the gas transmission and/or gas distribution networks of 1 July 2007, all consumers have the right to choose their supplier of

natural gas, which right is guaranteed in the issued in 2009 licenses for the activity of “natural gas supply by an end supplier”.

### **Infrastructure**

The tariff model applied in respect of the transmission company is „post stamp”. It is envisaged the entry-exit tariff model to be introduced in pursuance of the 3<sup>rd</sup> energy liberalized package by Bulgartransgaz EAD as a part of the developing entirely new tariff policy of the company.

The price of natural gas at the entry of the gas transmission network is formed by the Public Provider as a weighted average value taking into account the quantities of natural gas notified for delivery from imports for the domestic market and from local extraction enterprises for the purposes of sales in a subsequent period, the terms and conditions under the contracts for transit of natural gas to the Bulgarian border and the exchange rate set by the Bulgarian National Bank of the US dollar or any other foreign currency to the Bulgarian lev, in which the natural gas imported in the country is paid. To the price thus formed, a margin of 2% is added, pursuant to Art.17, para.6 of the Ordinance to regulate natural gas prices (ORNGP). Upon approval of the periodic changes, prices can be adjusted by the Commission based on extra loss/extra profit, due to the difference between estimated and reported values of the pricing elements of previous period/periods.

On 30 Dec 2009 Decree № 325 of Council of Ministers was adopted amending the Ordinance to regulate natural gas prices / ORNGP / adopted by Decree № 131 of Council of Ministers of 2004 (Promulgated, SG. 55 of 2004, as amended and supplemented. No. 64 of 2007) and entered into force on 01 Jan 2010. This Decree amends Art. 17 of ORNGP, which concerns the manner the sale price of natural gas by public provider, are determined.

In line with the currently effective contracts of Bulgargaz EAD with external suppliers, the entry price is changed every quarter, i.e. four times per year.

The prices for end consumers connected to the gas distribution network are formed by adding to the natural gas price at the entry of the gas transmission network and the charge for transit (19.73 BGN/1000 m<sup>3</sup>) the price for distribution and supply of the specific group or subgroup of consumers.

For the improvement and development of the gas distribution networks in 2011, 51 732 thousand BGN have been invested, a total of 304.832 m of distribution pipelines having been constructed.

### **Security of supply**

The State has determined as the competent authority in charge of the security of supply to be the Ministry of economy, energy and tourism. Under art.72 a of EA, the Minister of economy, energy and tourism after consultations with SEWRC and with the natural gas undertakings and organizations, representing the interests of natural gas supplied households and industrial consumers, introduces at national level:

1. Preventive action plan, consisting of the measures needed for the eliminating or reducing of the identified risks impact, in line with the risk assessment;

2. Emergency action plan, consisting of the measures needed for the eliminating or mitigating of the impact resulting from the cut off natural gas supply.

Assessment of the risk was carried out on the basis of elements pointed out in Regulation (EU) № 994/2010 of the European Union and the Council of 20 October 2010, by MEET in cooperation with SEWRC experts and representatives of the energy companies.

## **Regulation/Unbundling**

With the amendment of EA, (promulgated in State Gazette, issue 54 of 17 July 2012) in art.21, para.1, item 27, the power of SEWRC to certify the transmission system operators is envisaged: to certify the electricity transmission network operators and the natural gas networks for compliance with the independent requirements, to monitor their observance and send the appropriate notifications to the European Commission. In art.81 a, para.1, it is stipulated that SEWRC shall certify each transmission network operator for the fulfillment of the independence requirements and monitor their observance by the certified operator. SEWRC shall open procedures for the certification under para. 1 on its own initiative, upon the request of the transmission operator or upon the motivated request by the European Commission. SEWRC adopts a draft for a certification decision or for the rejection of certification within 4 months of the certification application submission date or of the initiation of proceedings by it or at the request of the European Commission. In case in that period SEWRC does not act expressly, it is considered that the certification decision draft has been adopted.

Regarding the natural gas distribution undertakings, para 1, 2 and 3 of art.26 of the Directive is not applied in the Republic of Bulgaria, due to the fact that all 27 distribution companies service less than 100 000 connected consumers.

In performing its powers, SEWRC is guided by the principle of a balance between the interests of energy enterprises and consumers and it creates a competitive environment and equal treatment for access to the service of gas supply.

In 2011, SEWRC reinforced monitoring and control on the licensed companies in the sector, in order to improve the capacity of the gas distribution networks, to encourage investments in the improvement of the gas infrastructure and the right of access to the service under transparent procedures and rules.

Being a part of the requirements of the Third energy liberalized package and to provide an unimpeded and non-discriminatory approach in the provision of access to the gas networks and their development in the interest of the natural gas market participants, Independent Transmission Operator has been chosen as the optimal decision for ensuring non-discriminatory access to the natural gas network and provision of transparency and efficiency of the activities of the transmission operator.

## **3 Electricity market**

### **3.1 Networks regulation**

#### **3.1.1 Unbundling**

o Articles 10,11 2009/72/EC and Article 3 of Regulation (EC) 714/2009 (*unbundling and certification of the transmission operator*) o Article 26

Article 9 of Directive 2009/72/EC requires the guaranty of the unbundled activities of transmission, supply and generation of electricity, and any form of control between the companies performing these activities to be excluded. In 2011 National Electricity Company EAD still performed the role of a license holder of a license for the activities of public provision, transmission and generation of electricity. In parallel with this, SEWRC actively took part in the work groups on amendment of the Energy Act in connection with the transposition of the provisions of Directive 2009/72/EC. In Art.44 of EA (promulgated in

State Gazette, issue 54 of 17 July 2012), it is stipulated that a company which holds a license for electricity transmission cannot hold a license for another activity apart from the activity of organization of a power exchange.

In 2011 Energy Act did not envisage a certification procedure for the transmission network operators, which was the reason certification not to be performed. By the transposition of Directive 2009/72/EC with the amended EA<sup>1</sup> in Art.21, para.1, item 27 it is regulated the power of SEWRC to certify the transmission system operators: it shall certify the electricity distribution network operators for compliance with the independence requirements, to monitor fulfillment of these requirements and to send the respective notifications to the European Commission. In art.81 a, para.1, SEWRC's power is further developed by introducing the possibility to open a certification procedure officially or at the request of the transmission operator, as well as at the motivated request of the European Commission. Certification or the reject of certification is adopted by a draft decision by the regulator within four months of the date of submission of the certification application or of the proceedings initiating at the operator's request or at the request of the European Commission. In case the Commission does not act expressly in the cited period, it shall be considered that the draft decision for the certification is adopted.

Regarding the certification of transmission systems owners or distribution systems operators, which are controlled by person or persons by third states, Directive 2009/72/EC in art.49 „Transposition“ delays this process, as the procedure under art. 11 of the Directive is due to be applied as of 3 March 2013. In the light of the foregoing, SEWRC has not performed certification of such entities. Despite this fact, the certification procedure of such entities and the grounds for applied rejection are expressly envisaged in the legislation (art. 81 6 of EA<sup>2</sup>).

### **3.1.2 Technical operation**

o Balancing services (Article 37(6)(b), Article 37(8),

Electricity market operation in the country is regulated by the Market rules for trade in electricity (in force since 2010). Since mid 2011 the application of these rules started, and by means of these rules total unbundling of the network services from the electricity price was practically achieved and thus conditions for the electricity market competitive development have been provided. The implemented general principles of the Market rules contain also some concrete requirements connected with the performance of the provisions of Directive 2009/72/EC and Regulation (EC) № 714/2009 according to the requirements of the Third liberalized package.

In 2011 the public provider National Electricity Company EAD remained almost the sole electricity provider on the balancing market. Independent generators are still not sufficiently economically interested in participating on the electricity market. The total volume of the traded balancing energy was comparatively small and the traded shortage volumes amount at 245 396 MWh (about 0,008 % of the net country's consumption), and the traded surplus volumes amount at 102 392 MWh (about 0,003 % of the net country's consumption). In 2011 average reported balancing energy price in the country at shortage was about 80.19 EUR/ MWh, average surplus balancing energy price – 13.7 EUR/ MWh and it remained unchanged to the previous year. In the table below, concrete electricity price values traded on the balancing market are presented for 2011.

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<sup>1</sup> Published in State Gazette , issue 54 of 17 July 2012

<sup>2</sup> Published in State Gazette 54 of 17 July 2012



Shortage balancing energy	
Minimum price, EUR/MWh	66.59
Maximum price, EUR/MWh	80.51
Average price, EUR/MWh	80.19

Surplus balancing energy	
Minimum price, EUR/MWh	12,79
Maximum price, EUR/MWh	14,00
Average price, EUR/MWh	13,70

The legal, organizational and financially accounting unbundling of the Transmission System Operator (TSO) and of the Distribution System Operators (DSOs) within the vertically integrated enterprises, respectively, the Public Provider and the public suppliers was realized in 2008.

At the present time, the Electricity System Operator (ESO) is part of the vertically integrated enterprise of the Public Provider. However, under the law and the licensing terms its operation is independent, in legal and organizational form, in finance and accounting aspect and in decision making in functions, assigned by law, from the other operations of the vertically integrated enterprise.

The legal, organizational and financial unbundling of ESO from the Public Provider is implemented.

ESO prepares a compliance programme, subject to review and approval by the regulator, which presents specific actions fulfilling the licensing terms and the above requirements. The programme includes specific obligations of employees. ESO prepares an annual report on fulfilling the measures for objectives, set out in the programme, which is then sent to the regulator for approval.

According to adopted in 2011 Energy Act amendments related to Regulation (EC) № 714/2009, and the application of measures of the Third energy package, the separation of the transmission and supply of electricity activities in the Bulgarian electricity market received the necessary legal basis. The selected model for separation of the transmission system operator is independent transmission operator.

Activities related to electricity supply and operational management of distribution networks by the distribution network operator (DSO), in 2009 were also split into separate entities with separate accountings. The functional unbundling of DSOs in the vertically integrated enterprise based on the compliance program ensures the independence of the DSO.

In view of the above, the four distribution enterprises on the territory of the country prepare and submit compliance programmes, specifying measures ensuring the independence of the distribution system operator. These compliance programmes are reviewed at meetings of the regulator, and approved, or, if needed, the regulator sets guidelines for amendment of the programme, in order to guarantee the independence of the operator from other operations in the vertically integrated enterprise. Compliance programmes contain specific responsibilities of employees, in order to achieve the targets, and assign employees,

responsible for programmes' follow-up. The Distribution operator prepares an annual report on these measures, to be approved by the regulator.

#### **Security and reliability Standards, quality of services and supplies** (Article 37(1) (h),) Article 37 (1) (h)

Regarding the security of supply and the guarantee of compliance with the requirements of services quality and electricity supplies, SEWRC monitors and yearly carries out a review of the fulfillment of the adopted in 2010 „Methodology for reporting the fulfillment of the target indicators and electricity quality indicators control and service quality of network operators, public providers and end suppliers“. To guarantee the consumers interests it is envisaged for SEWRC to adjust the revenue requirements of energy company every price period of the regulatory period depending on the energy quality indicators fulfillment and on service quality during the previous year. In 2010 for the first time a correction factor was applied, reflecting the fulfillment of the adopted energy quality and service quality target indicators.

The indicators for non-interruption of supply are the System Average Interruption Duration Index – SAIDI and the System Annual Interruption Frequency Index – SAIFI.

When determining and reporting the indices for non-interruption, the periods of interruption longer than 3 minutes are taken into account and these periods fall into:

- scheduled interruptions (determined in minutes per year), for which the consumers are previously informed by the companies;
- non-scheduled interruptions, which are due to stable or incidental failures of the facilities, incorrect manipulations, etc., for which it is not possible to notify previously consumers.

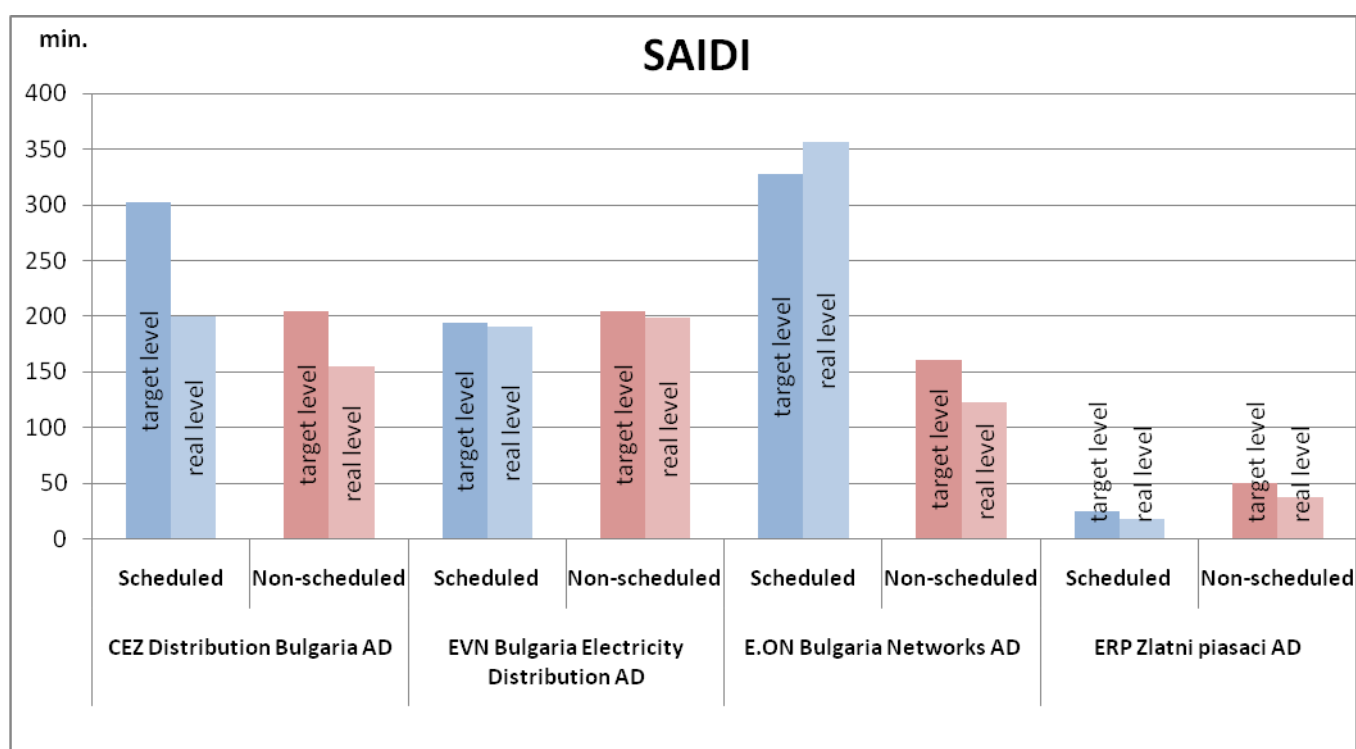
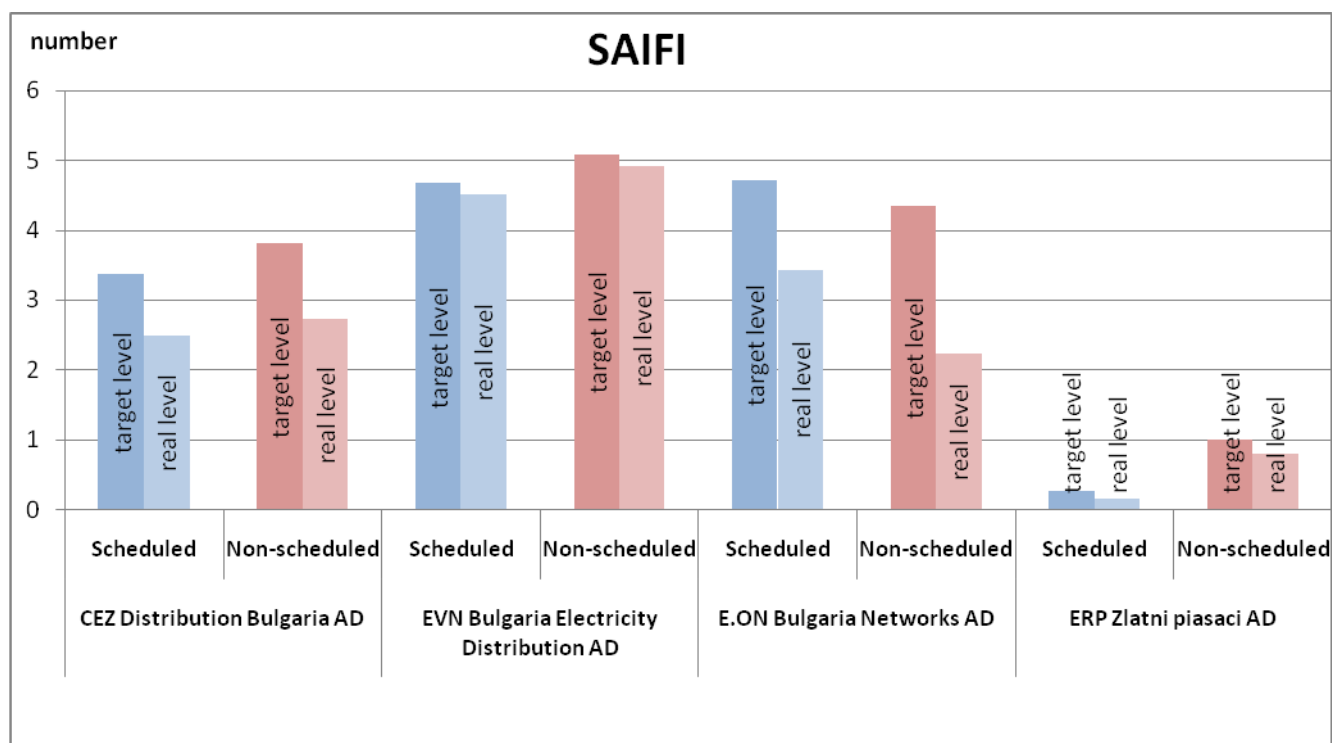
Interruptions due to third parties and force majeure (unforeseen or inevitable event of an extraordinary nature) are excluded.

The achieved values of the four electricity distribution companies in the country according to the SAIFI and SAIDI indices in the case of scheduled and non-scheduled interruptions in 2011 are as follows:

<b>Non-interruption of supply indicators SAIFI и SAIDI for 2011</b>									
<b>Indices</b>	<b>types</b>	<b>CEZ</b>		<b>EVN</b>		<b>E.ON</b>		<b>Zlatni piasaci</b>	
		Target levels-Methodology	reported	Target levels-Methodology	reported	Target levels-Methodology	reported	Target levels-Methodology	reported
<b>SAIFI</b>	Scheduled	3,36	2,49	4,67	4,52	4,72	3,43	0,25	0,16
	Non-scheduled	3,82	2,72	5,09	4,91	4,35	2,23	1,00	0,79
<b>SAIDI</b>	Scheduled	302,80	199,80	194,40	190,30	327,50	356,11	25,00	18,00
	Non-scheduled	204,30	154,70	204,30	198,20	160,30	122,70	50,00	37,00

The two graphics below show the achieved reports of the electricity distribution companies at lower levels of the power quality target indicators (SAIFI-number and SAIDI-duration of interruptions) defined in the Methodology approved by SEWRC.

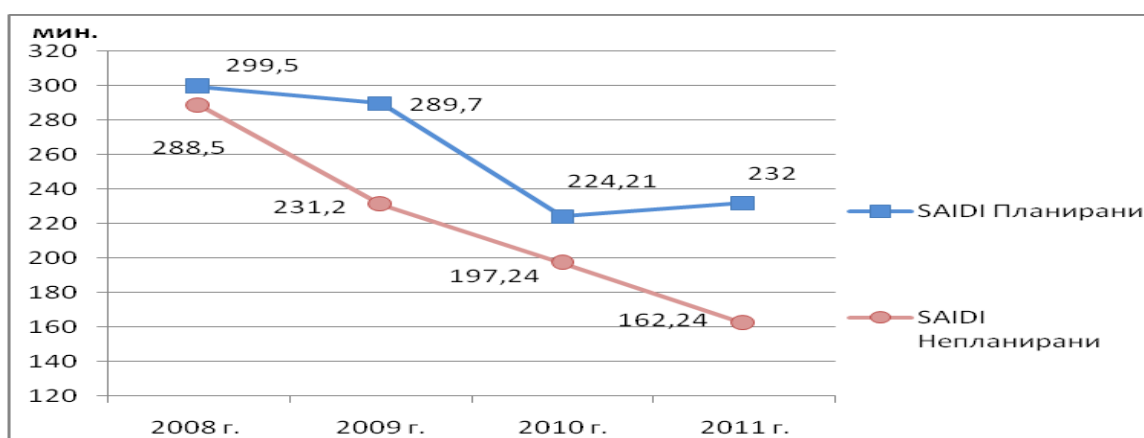
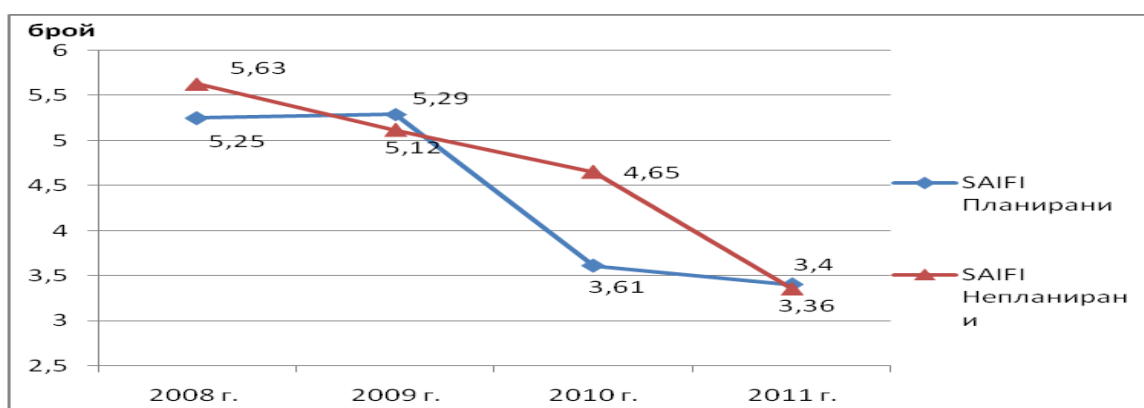
The only higher than the envisaged in the Methodology values are the reported values of scheduled SAIDI of „E.ON Bulgaria Networks” AD, which is due to the larger volume and respectively duration of the performed scheduled outages and network reconstruction.



The average reported values of the four electricity distribution companies in the country according to the SAIFI and SAIDI indices in the case of scheduled and non-scheduled interruptions in 2011 are as follows:

Average values of the continuity of supply indicators SAIFI and SAIDI for 2011		
Indices	Types	Values
SAIFI	Scheduled, number	3,40
	Non-scheduled, number	3,36
SAIDI	Scheduled, minutes	232,00
	Non-scheduled, minutes	162,24

The longer duration of the scheduled SAIDI is due to the higher number of extensions and scheduled outages of the network, aiming for the long-term capacity of the distribution network to meet the requirements of secure, reliable and efficient operation, maintenance and development. The average values of the continuity of supply indicators for the period 2008-2011 are shown in the graphics below:



The indicators for quality of commercial services defined in the Methodology are directly linked to the results and relations between the electricity distribution companies, end suppliers and the consumers.

As a quality indicator of these relations, the response time or the time for taking the necessary corrective measures by the energy utilities is taken into consideration, the same being divided into: general quality indicators of commercial services and guaranteed indicators. The guaranteed indicators have been laid down as commitments in the General Conditions of the contracts for sale of electricity and General Conditions of the contracts for transmission of electricity to consumers over the electricity distribution networks of the end supplier approved by the Commission.

In applying the Ordinance on regulating the prices of electric power, a generalized adjustment ratio is applied, including the performance of the target values for quality of energy, for non-interruption of supply and for the quality of service specified in the Methodology.

In case of non-fulfillment of the target values, the revenue requirements of the companies are reduced by a maximum negative adjustment set by a decision of the Commission for each year of the regulatory period.

The implemented regulatory mechanism for adjustments in the revenue requirements of the distribution companies (and according to the achieved fulfillment of the power quality indicators applied since 2010) represents an incentive for the companies to improve the electricity supply quality.

The value of the maximum negative adjustment is linked to the expected return which the company will have on the investments made in order to improve the indicators.

Thus the Methodology provides incentives for the distribution companies to develop and invest in their networks, and the monitoring of the regulator for the fulfillment of service and supply quality requirements is in compliance with Article 37 (1) (h) of Directive 2009/72/EC.

#### **Time spared for monitoring of connection and maintenance (Article 37 (1) (m).**

The Energy Act regulates the duties of the transmission and distribution companies to connect all generation entities and user entities to the relevant network. The terms and conditions for connection, suspension of the accession or supply and the limits of property between electrical facilities, are defined by an Ordinance of the Minister of the economy and energy. Instructions for the price-formation of connecting consumers to the electricity distribution network, general conditions of the contracts for electricity supply and distribution and the rules for work with consumers are approved by SEWRC and are publicly available. They are placed at a prominent place at the centres servicing clients of the companies and on the web pages of the suppliers and distribution companies. Due to the considerable increase of the electricity capacities in the country in 2010, mainly coming from renewable energy, certain difficulties aroused concerning the connection of new capacities to the transmission and distribution networks due to limited capacity. Total number of concluded connection contracts in 2011 with the four distribution companies amount at 15 469. Average time needed for the elaboration of a preliminary contract and written statement about the conditions for connection of a consumer according to the grounded target indicators in the Methodology is 30 days. In 2011 average time for the issuance of a connection permit was reduced to 18 days. The reported by the electricity distribution companies in 2011 average time for the construction of connection facilities and performance of routine actions and repairs without permit procedures, was 43 days. In case the connection construction requires

coordination of project documentation with other institutions, average time for construction of a connection amounts at 93 days.

Information regarding connection complaints of new consumers is submitted to SEWRC every year. It represents mainly complaints concerning rejection or delay of connection to the distribution network, incorrectly set price or connection conditions.

Complaints concerning the consumer's right to be connected in order to be supplied with electricity, are reviewed by SEWRC under the current Internal Rules to Work with Consumers in submitted to the Commission complaints and signals and for amicable solution of disputes.

In this connection in 2011 SEWRC started work on updating the Methodology of reporting the target values of the electricity and service quality indicators and the determining of a single approach in applying the distribution network connection prices and the development of a new pricing structure. Plan for the development of the electricity transmission network in Bulgaria for the period 2010-2020 is in process of reviewing for approval in the Ministry of economy, energy and tourism and in SEWRC.

### **Monitoring and technical cooperation between the Community and the TSOs of third countries (Article 37 (1) (s))**

The relation between the electricity system operator with the neighbouring operators concerning the technical cooperation and the application of protection measures for physical safety and security of the system are regulated through agreements and rules for joint work and cooperation.

Every year SEWRC agrees Auction rules for the allocation and procurement of transmission capacity on the interconnections in the control area of Electricity System Operator EAD and the control areas of the neighbouring countries.

The interconnection cross-border transmission capacity in the form of commercial transmission rights is allocated and agreed bilaterally by the auction operators of the neighbouring systems based on the electricity system managing rules and the current Auction rules approved by the regulator and the European network of transmission system operators (ENTSO-E) rules. ESO EAD is a full member of ENTSO-E and works in a regime of parallel work with the European EEC. Parallel work is carried out in compliance with "Operation Handbook" of ENTSO-E and is based on the mutual benefit principles, solidarity and mutual support in case of emergencies to ensure the safe, qualitative and effective electricity supply of consumers.

Maintenance programmes of the system electricity lines, which concern cross-border transmission between Bulgaria and the neighbouring countries – Greece, Romania, Serbia, FYROM and Turkey, are a subject of agreement between the operators. In 2011 there were no circumstances to make the imposition of curtailments necessary due to: force majeure, extension of the period scheduled outage, unscheduled disconnection of an interconnection or some other reasons concerning the security and safety of the power system.

Through the established regional cooperation and the operational arrangements for the coordinated allocation of cross-border capacity, as well as the coordinated mutual support in emergencies, the safe and secure operation of both the internal and international electricity markets is guaranteed.

#### **3.1.3 Connection and access network tariffs**

- o Article 37(1)(a), Article 37(6)(a), Article 37(8), Article 37(10), Article 37(12) , Article 37(3)(c) and (d)

- o Prevention of cross-subsidiary (Article 37(1)(f))

In accordance with the adopted method of regulation, the Commission uses a different approach in assessing the economic effectiveness of the price components and the network tariffs regulation of the transmission and distribution networks.

In the regulation of the network tariff for transmission through the transmission network, where the Commission uses the method “rate of return” regulation without incentives, all price components are assessed annually when the new tariff is being approved. Due to the fact that in the country there is only one regulated HV electricity transmission company, there is no comparable basis on which costs evaluation to be done. Regarding the last, SEWRC uses as an assessment criterion of the annual costs level the annually collected information and in addition, taking into consideration the specific circumstances concerning the legal requirements for security and technical security of supply.

In the regulation of the network tariffs for the electricity distribution companies and end suppliers, the Commission applies incentive-based regulation. Through the application of the "revenue cap" method, the Commission approves the revenue requirements of the energy utility for the first year of the regulatory period and analyses them and adjusts them for each subsequent year of the regulatory period. The envisaged adjustments of the revenue requirements are related to the inflation rate, the efficiency ratio, the performance of the target quality indicators, the difference between forecast and actual expenses for the purchase of energy, as well as expenses created by the change in the structure of consumption. In addition, indicators are applied to the methods, reflecting the quality of performance of the activity (the quality of electricity, the quality of service), in accordance with which the recognized revenue requirements of the energy utility are adjusted in view of the performance of the target indicators specified by the Commission. The difference in the performance of the forecast investments and actual investments is also taken into account. The revenue requirements are reduced in accordance with the difference between the reported non-performance of the target indicators for quality and allowed variation.

The tariffs for transmission and distribution of electricity to the final consumers are approved by the Commission upon the proposal of the companies within the time limits and format specified in the Ordinance on the regulation of prices of electric power and the Instructions adopted thereto. The separate groups of consumers and tariff structures are specified upon the proposal of the companies and the same are grouped in accordance with the voltage level and by zones in the 24-hour period.

For the application of a general approach in approving the prices for the second regulatory period, the Commission took into account the conclusions of the analysis of the achieved results of the regulated companies and the objective of the applied regulation method – creating conditions under which the companies reduce their operating expenses and at the same time ensuring the necessary investments in order to improve the quality of service.

In determining the revenue requirements of electricity distribution companies, the amount of technology costs is determined in accordance with Instructions of the State Energy and Water Regulatory Commission for the electricity transmission through the distribution networks price-formation, accepted currently at the amount of 15%, which is close to the reported real technological costs over the past several reporting periods.

#### **3.1.4 Cross-border issues**

##### **Cross-border infrastructure access, including capacity allocation and congestion management procedures**

(Article 37(6)(c), Article 37(8), Article 37(9),

Regarding the operational management and the allocation of the available transmission capacity on the interconnections between ESO EAD in its role as an electricity system operator of the Republic of Bulgaria and the neighbouring electricity system operators, there are Memorandums of cooperation signed between them. The procurement and allocation of the available transmission capacity on the interconnections is coordinated and carried out through the application of auction rules developed jointly by the Bulgarian electricity system operator ESO EAD and the neighbouring electricity system operators. Auction rules are agreed with the regulatory authorities of the countries. In 2011 the available transmission capacity was allocated by the relevant auction operator in the form of commercial transfer rights on annual, monthly and with some of the neighbouring operators shown below – daily basis. When an auction for the interconnection transmission capacity is carried out, creation of a transparent governance method of the network peak loads is achieved, as well as obligation procedures and non-fulfillment consequences. In pursuance of the provisions of Regulation (EC) № 714/2009, the following are regulated in the current auction rules: different types of auctions, tender procedure organization, participation requirements and registration, determination of auction outcomes and provision of commercial transfer rights (CTR), secondary CTR market and their transfer, interconnection transmission capacity utilization rules and obligations arrangements (settlement) and payments.

In connection with the signed agreement between ESO EAD and CN Transelectrica SA, ESO EAD submitted a request at SEWRC for the „Auction Rules for allocation of transmission capacities on interconnection in the control areas ESO EAD and CN TRANSELECTRICA SA (TRANSELECTRICA) 2010 "(General Auction Rules) agreed by SEWRC and the Romanian regulator, to continue to be applicable till March 2011. After that the operators are to propose amended variant for agreement in compliance with Regulation (EC) № 714/2009. The found jointly by SEWRC and ANRE discrepancy between General Auction Rules and Regulation (EC) № 714/2009 refers to the transmission capacity curtailment procedure and the ejection to compensate the commercial transfer right owner in case of scheduled maintenance, for aside from the force majeure, another reason for the curtailment and non-compensation, the fact “unscheduled conditions in the network” is pointed out. The discrepancies in the cited clauses of the General Auction Rules were removed in 2011 and respectively agreed by a Decision of SEWRC, which allowed for the CTR owners not to be harmed when circumstances for which they should not bear responsibility occur.

„Rules for access to the Bulgarian-Greek interconnection (Auction Rules for Allocation of Transmission Capacities)” for 2011” were adopted and agreed by SEWRC.

In pursuance of the requirements of Regulation (EC) № 714/2009 the agreed by SEWRC General Auction Rules govern the terms and conditions for the available transmission capacity (100 % capacity) allocation through auctions in both directions between the control areas of the Bulgarian electricity operator and respectively the operators of Romania and Greece. The procedures included in the General Auction Rules between the Bulgarian and the Romanian, respectively Bulgarian and Greek system operator, aim at the guaranty of a transparent physical congestions management method and meet the requirements of Regulation (EC) № 714/2009.

The cross-border exchange of electricity of the Republic of Bulgaria with some neighbouring countries like Serbia, FYROM and Turkey continues to be carried out on the basis of developed and updated for 2011 “Auction Rules for the Allocation of Capacities on the Interconnections between the Control Area of Electricity System Operator EAD and its Neighboring Control Areas for the Year of 2011” (Auction Rules). The same were approved



by the State Energy and Water Regulatory Commission and were applied by Electricity System Operator (ESO) in 2011 r.

The Auction Rules also regulate all issues related to the allocation and procurement of 50% of available transfer capacities in both directions on the interconnections.

The cross-border transfer capacity on the interconnection is allocated by the Auction Operator in the form of commercial transfer rights. The Auction Operator calculates and allocates the transfer capacities according to the norms and rules of the European Network of Transmission System Operators – Electricity (ENTSO-E).

The interconnections of the Republic of Bulgaria with its neighboring countries – Greece, Romania, Serbia, Macedonia and Turkey – ensure the necessary conditions for the realization of electricity market under bilateral contracts as well as mutual help in case of emergencies.

For the allocation of the capacities on the Bulgarian interconnections for the region of South East Europe, a monthly allocation model is prepared. Every month, the net transfer capacities (NTC) are calculated, including certain periods within the month. These capacities are harmonized bilaterally with the neighboring system operators on the basis of bilateral contracts. For the harmonized NTC, public auctions are announced for transfer capacities.

Electricity System Operator (ESO) prepares, keeps and publishes on its website general and specialized information on its activities on the balancing energy market and on the transactions at freely negotiated prices.

The rules ensure transparency and non-discrimination of all participants in the auctions for transfer capacities.

At this stage of development of the internal and regional electricity markets the country's transmission network does not face serious troubles concerning the security of supply and the electricity system congestion including cross-border transmission capacities. As a consequence of the RES essential increase in the country in 2011, mainly wind energy in north-east Bulgaria, certain difficulties occurred in the connection of new capacities to the transmission and distribution networks due to limited capacity. In this respect, "Plan for the development of the electricity transmission network in Bulgaria for the period 2010 -2020" is being reviewed in the Ministry of economy, energy and tourism and in SEWRC, pursuant to the current Energy Act. In compliance with the current legal and normative base SEWRC reviews and approves investment and network enlargement schedules of the electricity distribution companies.

Rare cases of short-time congestion occur on the interconnections with some of the neighbouring countries (mainly during peak loads in the winter period).

### **Utilizing revenues for the interconnections**

(Article 37(3)(f))

In pursuance of the provisions of art.16, para 6 of Regulation (EC) № 714/2009 of the European Parliament and the Council of 13 July 2009 on conditions for access to the network for cross-border exchange in electricity and repealing Regulation (EC) № 1228/2003 (in force since 3 March 2011), any revenues resulting from the allocation of interconnection shall be used for the following purposes:

- a) guaranteeing the actual availability of the allocated capacity; and/or
- b) maintaining or increasing interconnection capacities through network investments, in particular in new interconnectors.

In cases, where revenues cannot be efficiently used for the purposes set out in the above mentioned items, they may be used, subject to approval by the regulatory authorities of the Member States concerned, up to a maximum amount to be decided by those regulatory

authorities, as income to be taken into account by the regulatory authorities when approving the methodology for calculating network tariffs and/or fixing network tariffs. In this regard, in 2011 SEWRC applied these regulatory powers by approving the revenues resulting from the allocation of interconnection at the amount of 14.4 million EURO to reduce the network services values, in particular electricity network access price.

#### **Cooperation** (Article 37(1) (c))

In 2011 SEWRC realized cooperation with the regulatory authorities of the neighbouring countries regarding issues connected with the cross-border exchange in the region. The main direction was the negotiation of agreements with the regulatory authorities of the neighbouring countries, which ensure the security of electricity and electricity supply.

The liberalized market operation and organization in the country and with the neighbouring countries in 2011 were regulated by „Electricity Market Rules” and by „Auction Rules for the Allocation of Capacities on the Interconnections between the Control Area of Electricity System Operator EAD and its Neighboring Control Areas for the Year of 2011”. The same are approved by the State Energy and Water Regulatory Commission (SEWRC) of the Republic of Bulgaria.

The cross-border transfer capacity on the interconnection is allocated bilaterally by the Auction Operators of the neighbouring countries in the form of commercial transfer rights of the neighbouring systems based on the electricity system managing rules and the current Auction rules approved by the regulator and in compliance with the rules of the European Network of Transmission System Operators – Electricity (ENTSO-E). ESO EAD is a full member of ENTSO-E and works in a regime of parallel work with the European EEC. Parallel work is carried out in compliance with "Operation Handbook" of ENTSO-E and is based on the mutual benefit principles, solidarity and mutual support in case of emergencies to ensure the safe, qualitative and effective electricity supply of consumers.

In 2011 Electricity System Operator EAD of the Republic of Bulgaria and the system operator of Romania CN TRANSELECTRICA SA worked under new „Intraday Capacity Allocation Auction Rules for the allocation of capacities on the interconnection between the control areas of ESO and TRANSELECTRICA”.

In 2011 SEWRC also agreed „Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between the Control Areas of Electricity System Operator EAD - ESO and “Hellenic Transmission System Operator” SA (HTSO) for 2011 for the interconnection between Bulgaria and Greece. These rules also complement the agreed Intraday Capacity Allocation Auction Rules.

These Intraday Capacity Allocation Auction Rules between the Bulgarian and Romanian and respectively, Bulgarian and Greek electricity system operators increase electricity market flexibility, including balancing market flexibility among Bulgaria, Romania and Greece.

The procedures in the new agreed Common Auction Rules between the Bulgarian and Romanian system operators, respectively between the Bulgarian and Greek system operators comply with the requirements of the new Regulation (EC) No 714/2009.

In the end of 2011 Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between Bulgaria and FYROM, Serbia and Turkey were agreed, which likewise comply with the new Regulation (EC) No 714/2009, regarding the cooperation and coordination between both operators of neighbouring transmission networks.

## Interconnectors Scheme of Bulgaria and the neighbouring countries



### 3.1.5 Compliance

- o Compliance of the regulatory authorities with the binding decisions of the Agency and the Commission (Article 37(1)(d)) and with the Guidelines (Article 39))
- o Power to carry out investigation and introduction of measures to promote competition ctr. (Article 37(4)(b) + 35(5)(a))
- o Power to obtain information by the electricity companies (Article 37(4)(c))
- o Compliance of the transmission and distribution companies, systems and electricity companies owners with the respective legislation of the Community, including cross-border issues (Article 37(1)(b), Article 37(1)(q), Article 37(3)(a),(b),(e) and Article 37(5) all unless (a) and (c) + imposing penalties (Article 37(4)(d))

In EA, art. 21, para. 1, item 31, the obligation of the regulatory authority under art. 37, § 1, b d of Directive 2009/72/EC is transposed to apply and control the fulfillment of legally binding decisions of the European Commission and the Agency for the Cooperation of Regulators.

The main principles leading SEWRC's activities in 2011 regarding the fulfillment of its regulatory powers were prevention and non-admission of energy market competition distortion, as well as guarantee the balance between energy companies interests and consumers.

In exercising its powers, the Commission analyses the performance of controlled energy companies, in order to create an environment preventing abuse of monopoly and limiting/violating the competition on the energy market in Bulgaria. Within the territory of the country, in view of its special competence, there is only one authority which is in charge of the application of the Community legislation in the field of competition, namely Competition Protection Commission (CPC). To that end, SEWRC has the right, pursuant to art. 21, para. 6 of EA, to inform the Competition Protection Commission, which in turn reviews the information and on a case by case basis may start a procedure under the Competition Protection Act.

National legislation guarantees that the regulatory authority takes independently its decisions and the later are not a subject of control by the Government, but pursuant to art. 13 of EA, only to the Court in terms of their legality. The activities of the Commission and its administration are financed by revenues from fees, taxes and property sanctions and donations by persons not a subject of licensing and/or control by the regulatory authority or persons connected to them.

In view of the exercising its powers in the pricing regulation, the Commission every year obtains information on the annual financial reports of licensees, their annual audit reports, as well as the reporting information by types of activities. Apart from this, the Commission may require other accountant documentation, technical and economic information, including concluded contracts. In 2011 it was explicitly envisaged in a normative administrative act, that the regulator may request from the energy companies any information and documentation concerning its functions. At present, by the amendments of EA, a particular text is envisaged in the law, not as it has been before - in a normative act, the regulator to request from the energy companies any information and documentation concerning the functioning of the energy market, including supply, transmission, distribution and storage contracts, as well as all further agreements and may provide some market participants with parts of this information, under the condition that no confidential information presenting a trade secret or protected by the law shall be revealed.

Within the calendar year 2011 the provisions of the Directive on certification were not transposed, thus, as it was cited above, certification was not carried out.

A certification procedure for an independent transmission operator is to be performed. § 192 of the Transitional and Final provisions of the amended EA stipulates, that in a six

months period since its coming into force the owner of the transmission network must submit at SEWRC a certification application, and within the legally established period of four months SEWRC is obliged to issue the respective certificate. After the completion of the certification process, the Commission may practically realize its power of art.21, para.1, item 27 of EA to monitor the obligation implementation of the independent transmission operator. In case of non-implementation of the obligation the independent transmission operator pursuant to art. 21, para. 3 of EA within its regulatory powers, the Commission:

1. imposes sanctions for a discriminatory behaviour of the operators to the benefit of the vertically integrated undertaking;
2. monitors the communication between the operator and the vertically integrated undertaking, to guarantee that the operator implements its duties;
3. acts as an authority for the dispute resolving between the vertically integrated undertaking and the operator;
4. requests information and documentation concerning trade and financial relations, including loans between the vertically integrated undertaking and the operator;
5. approves trade and financial agreements between the vertically integrated undertaking and the operator in cases when they influence the conditions of market development;
6. requires justification of the vertically integrated undertaking regarding the presented by the compliance responsible decision concerning network development plan or certain investments of the operator, including the compliance of the non-discrimination behaviour requirement to the benefit of the vertically integrated undertaking;
7. performs inspections at the entities of the vertically integrated undertaking and the operator;
8. approves ten-year transmission network development plan, monitors and controls its execution at the terms and conditions of the Ordinance pursuant to art. 60;
9. assigns all or certain tasks of the independent transmission operator to the independent system operator, at the proposal of the network owner, in case the operator violates habitually its duties regarding the independence requirements, pursuant to chapter eight „a“, section II, including habitual discriminatory behaviour to the benefit of the vertically integrated undertaking.

### 3.1.6 Dispute settlement

o Article 37(11), 37(5)(c), Article 37(4)(e)

In compliance with the EA, it is in SEWRC's powers to review complaints of consumers towards licensees and of licensees towards licensees regarding the performance of the licensing activity. The terms and conditions for complaints application, their reviewing and the amicable dispute settlement procedure are regulated in a secondary legislative act – Ordinance for the licensing of energy sector activities. Aiming the efficiently and effectively resolving of the issues, “Internal rules for handling complaints and requests for amicable dispute settlement” were updated in 2011.

In the structure of the State Energy and Water Regulatory Commission since 14 Oct 2011 a new division – **Main Division Complaints handling and dispute settlement** – was incorporated. The purpose of its creation is the necessity of achieving effective actions at a maximal level for resolving the problems in place, meeting the growing needs of the consumers. The following departments in the Main Division were created according to the territory approach: **Territory department „North“** with location the town of Pleven, **Territory department „South“** with location the town of Plovdiv, **Territory department „East“** with location the town of Varna.

Every year SEWRC elaborates a topical analysis of the filed complaints according to pre-defined parameters.

For the one-year period 1570 complaints, requests and signals from personal entities and organizations were registered in SEWRC in the sector of electricity. According to the reported data of the electricity companies, full or partial satisfaction of registered consumer complaints was about 18 % and a considerable part of the remaining share were groundless. To exercise its controlling function on the work of electricity distribution companies and end suppliers with consumers, the Commission requires from the companies reporting information on the resolving of filed complaints. The Decision, which SEWRC adopts on each separate case, is being sent to the stakeholders and institutions involved. In 2011 the Commission issued 154 decisions on complaints.

In 2011 two amicable dispute settlement procedures were carried out regarding the right of access and the obtaining of electricity equipment and for the value of electricity equipment obtaining.

In 2011 SEWRC's experts took part in 15 extraordinary and scheduled inspections of the energy companies and at seven conciliation proceedings.

To optimize the results of the SEWRC's activity in respect of the main consumers' issues and complaints, working groups have been formed by some officials, who participate in the investigating and reviewing procedures of complaints and amicable dispute settlement requests. When factual or legal complexity of a complaint occurs, work groups in a larger number of experts may be appointed and external experts may be attracted. In cases the consumer topic receives a large public impact, SEWRC works in cooperation with other state institutions.

The key principles underlying the SEWRC activities in fulfilling the regulatory powers of the Commission are prevention and avoidance of limitation or violation of competition on the energy market, as well as balancing the interests of energy companies and consumers.

## **3.2 Promoting competition**

### **3.2.1 Wholesale market**

#### **3.2.1.1 Price monitoring**

o Article 37(1)(i) and Article 37(1)(j)

Wholesale electricity market is regulated by the adopted in August 2010 by the Commission Electricity Market Rules. The market model in force for the reported 2011 was characterized as follows:

- Schedules notification on a daily basis, on the day D-1 and allocation of transmission capacity on an auction base;
- Introduction of balanced groups in the market structure within the current testing period of Electricity Market Rules and new licensing procedure for balancing group coordinators;
- Stepwise introduction of hourly schedules for all transactions, whether regulated or concluded at freely negotiated prices;
- Upgrading of the market mechanism in the balancing energy market operation;
- Introduction of a separate settlement for the balancing groups coordinators and balancing power suppliers;
- Regulating the conditions for participation in the market for renewable energy producers;
- Creation of trading conditions based on power exchange principle.

In the regulation of the network tariff for transmission through the transmission network, where the Commission uses the method “rate of return” regulation without incentives, all price components are assessed annually when the new tariff is being approved. Due to the fact that in the country there is only one regulated HV electricity transmission company, there is no comparable basis on which costs evaluation to be done. Regarding the last, SEWRC uses as an assessment criterion of the annual costs level the annually collected information and in addition, taking into consideration the specific circumstances concerning the legal requirements for security and technical security of supply.

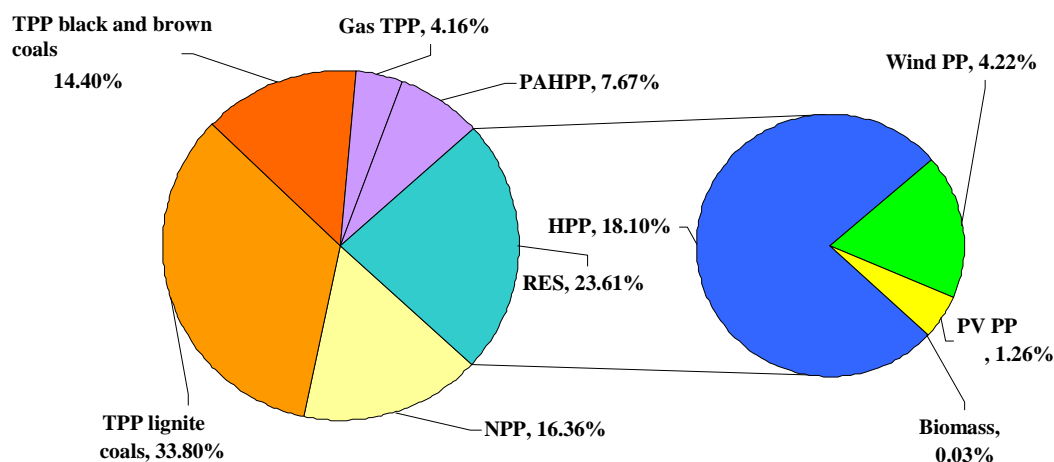
In 2011 the public provider „Nationalna Electricheska Kompania” EAD remained almost the one electricity supplier on the balancing market. Independent generators are not yet economically interested in participation on the electricity balancing market.

Currently in the country there is not an organized power exchange and electricity trading is performed mainly at bilateral contracts between the market participants and on a balancing market organized by ESO. That is why at this stage objective average price and margin between buy and sell prices on the Bulgarian electricity market cannot be defined.

The New Electricity Trading Rules, in force since August 2010, determined a necessary period (until 30 June 2011) for phasing and parallel testing of the market organization and operation as an implementation of new features previously presented to the electricity market. The introduced in the new rules general principles and specific requirements are pursuant to the formulations of Directive 2009/72/EC and Regulation (EC) № 714/2009 in accordance with the Third Liberalisation Package.

The total electricity output potential of the country based on primary energy sources and generated power for 2011, is structured as follows:

**Structure of the installed capacities by types of plants**



The total installed capacity in the country is 12 228 MW. The maximum net output capacity in 2011 was 9 432 MW, and the peak load in January 2011 amounted to 7300 MW. The yearly net output in the country for the reporting period was 44.113 TWh. Out of free market sales of 15.6 TWh – domestic market and net export, the share of open electricity market for 2011 was 35 %.

The total installed capacity of wind energy in the country in 2011 amounted to 516 MW at annual output of about 1 032 GWh. In 2011 installed capacity of photovoltaic (PV) amounted to 125 MW at output 183 GWh.

Net commercial exports for 2011 amounted to 10.66 TWh.

Index	Year								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
PP gross output fed into transmission grid	42 514	41 539	44 259	45 710	43 093	44 831	42 573	46 260	50 070
PP consumption and auxiliary services	6 176	6 146	6 233	5 890	6 067	5 890	5 307	4 689	5 957
Net generation fed into transmission grid	36 338	35 393	38 026	39 730	37 026	38 941	37 266	41 571	44 113
Physical export	1 283	741	799	1 139	3 058	3 097	2 662	1 168	1 450
Total net generation fed into transmission grid	37 621	36 134	38 826	40 869	40 084	42 038	39 928	42 739	45 563
Losses in transmission grid	761	742	844	881	872	905	847	895	951
Gross consumption from transmission grid	36 860	35 392	37 982	39 988	39 212	41 133	39 081	41 844	44 612
PSPP consumption	483	289	549	471	590	718	927	988	1 199
Physical export	6 772	6 620	8 380	8 391	7 538	8 441	7 731	9 613	12 111
Net consumption from transmission grid	29 605	28 483	29 053	31 126	31 084	31 974	30 423	31 243	31 302

With annual domestic consumption of electricity of 31,3 TWh in 2011, the share of traded quantity on the domestic market amounted to 5 TWh. This quantity was directly negotiated by 77 large and medium economic consumers of high and medium voltage with six large producers as market participants.

The electricity market in the Republic of Bulgaria is fully liberalized as of 1 July 2007. Cross-border transfer capacity on the interconnections is allocated by the Auction Operator in the form of commercial rights for transfer. The Auction Operator calculates and allocates the transfer capacities in line with the norms and rules of the European Network of Transmission System Operators for Electricity (ENTSO-E).

The electricity market in the country is operated by a model where part of the transactions for electricity sale are concluded at regulated prices, approved by the regulator, and the remaining part is traded on the liberalized market at freely negotiated prices, between the parties on the market. Under the Energy Act, parties to transactions on the liberalized market of electricity are producers, traders in electricity and consumers.

A certain share of the quantity of electricity output by individual (mainly large) producers, under the Energy Act and Directive 2003/54/EC, is sold to the Public Provider for protected consumers at regulated prices. The quantity of electricity purchased at regulated prices from producers, within a regulator-defined 'quota' for each producer, is determined on the basis of the principles of equality and transparency. Within this model, the regulated price for protected consumers is calculated as an average weighted mix of prices of electricity producers from various primary energy sources (nuclear, coal, water). Producers may, under the law, sell the rest of electricity output on the liberalized market as equal participants.

In 2011 the operation and implementation of two long-term contracts continued, signed between the Public Provider NEK EAD and electricity output companies TPP Maritsa Iztok 2 EAD and the privatized Energy Company Maritsa Iztok III.

For producers using renewable energy sources, the regulator annually defines preferential prices (feed-in tariffs) for their electricity output. The Public Provider and the public suppliers are required to purchase the electricity output of these producers at the respective preferential prices.

In May 2011 the new Law on renewable energy was adopted in accordance with Directive 2009/28/EC and implementing the principles and provisions of the Third Energy Package.

At this stage, in line with the Energy Act, electricity trade in the country is based on bilateral contracts between participants – producers, traders in electricity and consumers.

Electricity System Operator (ESO) performs the operational management and regulates the distribution of electricity loads of the electricity system, by accounting for



accepted and confirmed requests for transfer capacities of traders, based on the Electricity Market Rules and Auction Rules.

Simultaneously, ESO balances the energy system using technical and economic criteria, considering the bids and offers for the balancing market.

The effective cold reserve and ancillary services market is regulated by the Energy Act. Cold reserve and additional services transactions are concluded by ESO under the terms of Electricity System Management Rules and Electricity Market Rules. Quantities of purchased availability for cold reserve are determined on the basis of the necessary level of reliability of electricity supply, decided by Ordinance of the Minister of Economy and Energy. Under the provisions of the Electricity Market Rules, producers and operator sign contracts for cold reserve and ancillary services at a regulated price of availability. In 2011 the regulator licensed 15 new companies for ‘trade in electricity’, which increased the total number of licensed traders to 98. The number of active traders on the electricity market in 2011 was 46.

To facilitate consumers in their choice of a supplier, the regulator maintains a list of all licensed electricity traders and their addresses on its website.

There is no market monopolist among the 46 active traders on the domestic market in 2011. The largest share of purchased/sold energy by a trader was about 22 % of the total traded market volume.

At present the country does not have an organized power exchange and trade is done based on bilateral contracts at freely negotiated prices on a market, organized by ESO. Therefore, an objective sell/buy price margin for electricity cannot be determined.

The electricity market in the Republic of Bulgaria is national and well integrated with the neighbouring countries; therefore the country plays the role of a net exporter in the region.

At this stage of development of the domestic and regional electricity market, the transmission network in the country does not have major problems with congestion in the electricity system, including the cross-border transfer capacities. Some congestion appears in interconnections with some neighbouring countries, mostly during the winter.

Under the Energy Act the regulator has powers to control issues relating to possible denial of access to networks by the electricity system operator or the distribution system operator.

All disputes relating to the implementation of the provisions of Electricity Market Rules are referred to the regulator for resolution under the procedure of the Energy Act.

In the event of denial of registration by the operator, the trader has the right to dispute the denial in writing before the regulator within fourteen days of receipt of denial. In 2011 complaints of trade participants concerning this matter were not filed in SEWRC.

Rules on trade with neighbouring countries are in compliance with the effective European rules and bilateral agreements and the rules for cross-border exchange and trade in electricity. The latter refers inclusively to the coordination of interconnection transfer capacities between the Bulgarian TSO and neighbouring transmission systems.

In 2011 the electricity sector in the country and the participants on the electricity market did not register any significant mergers and acquisitions, influencing market competition. During the reported year the number of electricity traders grew, including such active on the market.

The electricity market in the country is organized and administered by the Electricity system operator. In compliance with the Energy Act, electricity trade in the country is carried out mainly on the base of bilateral contracts between the market participants – electricity generators, traders and consumers, as well as on the balancing market. ESO balances the electricity system according to technical and economic criteria taking into consideration the submitted bids and offers for the balancing market.

In 2011 free electricity market in the country encompassed the bigger part of the industrial consumers connected to high voltage (HV) networks and part of middle voltage (MV) network consumers.

### **3.2.1.2 Monitoring the level of transparency, including compliance with transparency obligations, and the level and effectiveness of market opening and competition**

- o Article 37(1)(i), Article 40(3) и Article 37(1)(u)
- o Article 37(1)(j)
- o Article 37(1)(k)
- o Article 37(1)(l)

By the EA amendment in art.21, para. 1, item 29 the SEWRC's power to contribute for the compliance of the data exchange processes concerning the most important market processes on a regional level, is explicitly stipulated, guaranteeing also the necessary information confidentiality level.

Regarding the later, SEWRC monitors weather limiting contractual practices and provisions for exemption exist, which may set an obstacle for households to conclude contracts simultaneously with more than one supplier or to limit their choice of suppliers.

The key principles underlying SEWRC activities in fulfilling the regulatory powers of the Commission are prevention and avoidance of limitation or violation of competition on the energy market, as well as balancing the interests of energy companies and consumers.

In exercising its powers, the Commission analyses the performance of controlled energy companies, in order to create an environment preventing abuse of monopoly and limiting/violating the competition on the energy market in Bulgaria. To that end, SEWRC has the right to inform the Competition Protection Commission, which in turn reviews the information and on a case by case basis may start a procedure under the Competition Protection Act.

The Regulation on licensing energy activities provides for another important power and obligation of a SEWRC in issuing a license and/or a permit or consent. If in the course of administrative proceeding, a need of permit from CPC is identified, the energy regulator suspends the proceedings, informs the applicant and notifies CPC on starting a procedure under the Competition Protection Act. Only after the entry into force of the CPC decision, SEWRC renews the proceedings on issuing the respective administrative document.

In addition, in exercising its powers for giving consent for transformation of licensees, permitting transactions, and management of unfinished construction site or property, or permission for pledge/mortgage on a property which is involved in licensing operations, SEWRC has the right to demand for the opinion of CPC on the specific case before making a decision or issue a permit.

Under the Energy Act, energy enterprises managing the electricity system, transmission of electricity or distribution of electricity, which provide a commonly offered service and have dominance on the market within the meaning of the Competition Protection Act, comply with the provisions of this act, unless it thwarts actually or legally the performance of their obligations.

SEWRC continuously monitors the market in view of the guaranteeing equal treatment among all market participants, as well as among the participants belonging to one and the same group and contribution to the effective competition and correct market functioning. In this regard, SEWRC applying its controlling functions, performs scheduled inspections of the energy companies, as well as unscheduled inspections on submitted complaints and signals.

Concerning its controlling powers, SEWRC is in close cooperation with the Consumers Protection Commission, and with a range of other non-governmental organizations for consumer protection likewise.

At this stage of electricity market opening in the country, public/end suppliers provide and sell at regulated prices power mainly to protected consumers. Supply contracts are concluded with consumers based on „Electricity supply common conditions”. Common conditions are elaborated and proposed to the electricity supply companies and are approved by the regulatory authority.

### **3.2.2 Retail markets**

o Article 37(1)(i) and Article 37(1)(j)

At this stage electricity market in the country operates following a model where part of the sales transactions are concluded at regulated prices approved by the regulator. The remaining part, under the current EA, is traded on the liberalized market at freely negotiated prices between the parties participating on the market.

End suppliers provide and sell electricity to protected consumers – households and small industrial consumers (pursuant to Directive 2003/54/EC) at regulated prices. In 2011 a draft law was elaborated envisaging the separation of MV industrial consumers from the regulated market and their entrance in the free market. From the beginning of 2013 it is envisaged only households and LV small industrial consumers to remain on the regulated market.

A certain share of the generated electricity from different resources, in pursuance of the Energy Act, is bought by the public provider for protected consumers at regulated prices, within the defined by the regulator “quota” for each producer. Producers’ quotas are defined on the basis of equal treatment and transparency principles according to a methodology adopted by the Commission.

Regulated price for protected consumers in the country is formed as a price mix of the different primary energy sources (nuclear, coal, HPP, wind and PV plants and biomass) electricity producers and they are in accordance with the relevant quantities needed to cover the regulated market needs. This, in turn, provides satisfactory level of equality among all consumers. The remaining part of the electricity generation (outside the defined quota), producers have the right to sell in the free market as equal participants.

Within the provisions of the amended EA in compliance with Directive 2009/72/EC and the third energy package, some requirements are analyzed and formed aiming power market enlargement in the sector of middle and small industrial consumers.

In pursuance of the EA and the currently in force *Ordinance for the electricity prices regulation* for protected consumers by a decision of the regulator the following prices are approved:

- prices of access to the electricity distribution networks;
- prices of transmission through the distribution networks;
- prices of end suppliers selling to household consumers and small businesses with less than 50 employees and annual turnover below €10 million.

The price of network services through the distribution networks is differentiated into transmission through the distribution networks price and access to the electricity distribution networks price. The regulated by SEWRC access and transmission prices of the distribution companies, in pursuance of *Ordinance for the regulation of electricity prices*, are defined based on the admitted by the regulator revenue requirements for maintenance and operation of the relevant distribution network.

A new element in the definition of access tariff in 2011 was the introduction of an access price for part of the industrial consumers (in the territory of South-east Bulgaria), which was formed based on contractual available capacity (firm capacity), in BGN/kWh/day. The introduction of this new tariff was in connection to the application of the principle of „fair prices“, i.e. every customer to pay the costs which he/she incurs. By this change in the tariff structure it is expected an effective utilization of the firm capacities to be achieved, which concerns also the distribution network operational and maintenance costs optimization. What is more, the aim is a better security and network development to be achieved in reply to the real needs of consumers.

The main groups of consumers connected to the electricity distribution networks in 2011, were as follows:

- Economic consumers of medium voltage;
- Economic consumers of low voltage;
- Household consumers connected at low voltage;

End prices paid by these consumers in the regulated market include apart from the energy and network prices the following:

- price of access to the electricity transmission system;
- transmission price of electricity through the transmission network;
- price of access to the electricity distribution network;
- price of transmission to the electricity distribution network, split into voltage levels – respectively MV and LV.
- green energy top-up to the transmission price and
- top-up of the high-effective combined generation transmission price.

Prices approved in 2011 were as follows:

The price of access to the electricity transmission network paid to ESO by all users of the network was 0.00357 EUR/kWh.

The price of transmission through the transmission network paid to the Transmission Operator by all users of the network was 0.00477 EUR/kWh.

The green energy top-up to the transmission price, which was paid to the transmission company by all consumers as a public obligation was 0.001902 EUR/kWh.

The top-up of the high-effective combined generation transmission price paid to the transmission company by all consumers as a public obligation was 0.001462 EUR/kWh.

HV end - consumers purchase electricity only in the free market.

In pursuance of the requirements of the Electricity Market Rules, in 2011 a complete unbundling of the energy price from the network services was achieved for the regulated market consumers, thus certain prerequisites for the enlargement of the free market share were created. In the table below some average values of the different tariffs by consumers groups are presented, approved in 2011.

Approved by SEWRC prices in 2011 in EUR/kWh			
Tariffs	Economic consumers MV	Economic consumers LV	Households
Average energy price	0.0394	0.0496	0.0355
Network services MV and LV	0.0072	0.0232	0.0232
Network services HV	0.0080	0.0080	0.0080
Green energy to-up	0.0019	0.0019	0.0019
Highly effective combined	0.0015	0.0015	0.0015

<b>generation top-up</b>			
<b>Common average sell price</b>	0.0580	0.0842	0.0702

*\*The presented price values are without VAT and excise duty for economic consumers.*

MV and LV network services values include the access price to the distribution network and the transmission price for the relevant voltage price.

HV network services include the access price to the distribution network and the transmission to the transmission network.

Green energy and highly effective co-generation top-ups are classified as public obligation duty costs and are paid by all consumers in the country, electricity traders and export.

### **3.3 Consumer protection**

- o Compliance with Annex 1 (Article 37(1)(n))
- o Public service obligations
- o Vulnerable customers definition
- o Ensuring access to consumption data (Article 37(1)(p))

Commercial metering devices and tariffs managing devices as well are located in such a place for the consumers to be able to monitor the commercial metering devices' readings. In order to secure the life and health of citizens, the property, electricity quality, electricity supply continuity, as well as security and reliability of the electricity system, the commercial metering devices sometimes are located at a place with difficult access. The distribution company is obliged to ensure at its own expense a possibility for a visual control within 3 (three) days after the written application by the consumer.

Apart from this, energy companies have opened in every district town in the territory, specified in their license, a customers' service centre and web sites with access for every customer.

Another main branch of the distribution companies' investment policy is related to the improvement of clients' services. A significant part of these services aim at the development of a uniform informational system for all companies of CEZ, EVN and E-ON in Bulgaria, which enables clients to use the services of the customers' service centres and to pay electricity bills from every contact point in the territory of Bulgaria, regardless the consumption address. The total number launched customers service centres was as follows: CEZ -31 customers service centres, EVN-39 and E-ON-10. A uniform telephone centre for information and reference was established servicing all customers at each licensed territory.

In 2011 social protection measures for the support of socially weak people and their families were a priority of the Ministry of labour and social policy with the active participation of the Ministry of economy, energy and tourism.

Target heating aids are defined in Bulgaria in pursuance of Ordinance № ПД-07-5 of 16 May 2008 for the "Terms and conditions of granting target heating aids", issued by the Minister of labour and social policy, regardless the type of used heating energy.

The right to receive target heating aids is acquired by persons and their families with monthly income of the last 6 months before the application month lower or equal to a differentiated minimal heating income and matching the conditions of Rules for the application of Social Support Law (RASSL).

The base for determination of the differentiated minimal heating income is the guaranteed minimal income, which monthly amount is defined by an act of the Council of Ministers. The monthly amount target heating aid is set on the base of the lev (BGN) equivalence of 350 kWh electricity, of which 250 kWh - day electricity and 100 kWh - night electricity, at the average end sell price for a household in the beginning of the heating season.

With the amendment of EA a new notion for this customer group was introduced whereas in § 1, item 66B from the Additional provisions, vulnerable customers are household customers receiving target electricity, heating or natural gas aids, under the Social Support Act. It is also explicitly envisaged the obligation of the energy companies providing public services to define special procedures for the provision of consumption and disconnection information to the vulnerable customers in the common terms and conditions of supply and using the networks and in the Rules for work with energy services customers.

### **3.4 Security of supply (if and in so far as NRA is competent authority)**

Implementation of safeguard measures Article 42

By a tradition, Bulgaria is a net electricity exporter for the region and in 2011 the share of net exports in the regional market amounted at more than 31 % of the net electricity output of the country.

The presented in the previous sections of the report established regional cooperation and operational agreements for the coordinated allocation of transmission capacity with the neighbouring system operators, as well as the agreed mutual support at emergencies, ensure the safe and reliable operation on the internal and external electricity markets.

### **Monitoring balance of supply and demand**

o Article 4

In pursuance of EA, ESO EAD elaborates short-term and long-term forecasts and electricity system development plans aiming the provision of the electricity balance of the country. Based on the forecasts and plans ESO EAD shall provide to the Minister of the economy, energy and tourism an electricity balance project and a list of the needs for the country resources, including the needed new generating capacities and interconnection lines.

At this stage of development of the domestic and regional electricity market, the electricity transmission network of the country does not face significant problems related to security of supply and congestions in the electricity system, including the cross-border transfer capacities. As a result of the considerable in 2011 increase of the RES electricity capacities in the country, mainly wind power in north-east Bulgaria, some difficulties occurred regarding the connection of new capacities to the transmission and distribution networks due to limited capacity. In this regard, in the Ministry of economy, energy and tourism, under the currently in force EA, and in SEWRC an Electricity Transmission Network Development Plan of Bulgaria for the period 2010 – 2020 is in process of reviewing and approval. Under the current legislative framework SEWRC reviews and approves investments and schedules for the network expansion of electricity distribution companies.

## **4 Natural gas market**

### **4.1 Network regulation**

#### **4.1.1 Unbundling**

o Articles 10,11 2009/72/EC and Article 3 Regulation (EC) 715/2009

o Article 26

A decision of SEWRC allowed transformation of Bulgargaz EAD representing the unbundling of Bulgargaz EAD and Bulgartransgaz EAD into independent economic entities, thus enforcing the legal, functional, and accounting unbundling of natural gas transmission

and public provision of natural gas. The transformation is in compliance with the main provisions of Directive 2009/73 of the EU, namely achieving a domestic market with non-discriminatory access to gas transmission systems and fair pricing of natural gas.

The requirement of the Directive for the independence of the operators was satisfied after TSO Bulgartransgas EAD was unbundled in an independent legal entity within the vertically integrated undertaking Bulgargas-holding EAD.

In relation to the implemented amendments of the Energy Act and the *Ordinance for licensing the activities in the energy sector*, after the accession of Bulgaria to the European Union, SEWRC has approved the independence programme of Bulgartransgas EAD. The requirement for the independence of the operators has been satisfied, for the persons in charge of the management, including the operational management, are not allowed to participate in the management of the other companies in the vertically integrated undertaking. The activities down the chain are unbundled horizontally: extraction, import, transmission, storage, distribution, supply and trade of natural gas. The liberalized market requires a further deployment of the provided for in the EA possibilities for direct contracts between consumers and gas suppliers – whether traders or distribution companies and direct suppliers.

By the amendment of EA, published in State Gazette issue 54 of 17 July 2012, art.21, para. 1, item 27, the power of SEWRC is regulated to certify the transmission system operators: it certifies the electricity and natural gas distribution network operators for compliance with the independence requirements; to monitor fulfillment of these requirements and to send the respective notifications to the European Commission. In art.81 a, para.1, SEWRC's power is further developed by introducing the possibility to open a certification procedure officially or at the request of the transmission operator, as well as at the motivated request of the European Commission. Certification or the reject of certification is adopted by a draft decision by the regulator within four months of the date of submission of the certification application or of the proceedings initiating at the operator's request or at the request of the European Commission. In case the Commission does not act expressly in the cited period, it shall be considered that the draft decision for the certification is adopted.

Regarding the natural gas distribution companies, paragraphs 1, 2 and 3 of art.26 of the Directive are not applied in Bulgaria, due to the fact that all 27 of them provide services to less than 100 000 connected consumers.

Each gas distribution company must apply separate accounting by types of operations within the company, under the provisions of the Energy Act. For the purposes of unbundled accounting in gas distribution companies, the Uniform Chart of Accounts was adopted, which provides separate accountability for regulatory purposes of the activities – distribution, supply and non-regulated. Subject to regulation by the State Energy and Water Regulation Commission are the activities of natural gas distribution and supply.

Each activity has special characteristics which allow their accounting unbundling. This allows their monitoring, measurement and control, by the accounting mechanisms for the purpose of regulation. The consolidation of regulated activities allows comprehensive management of the process and control.

All gas distribution companies are legally unbundled. Activities related to natural gas distribution may be unbundled by ownership and organizations from natural gas supply to end consumers from other activities of gas distribution companies, when the gas distribution system connects at least 100 000 end consumers of natural gas.

#### **4.1.2 Technical functioning**

- o Balancing services (Article 41(6)(b), Article 41(8), Security and reliability standards, quality of service and supply (Article 41(1)(h))
- o Monitoring time taken to connect and repair (Article 41(1)(m))
- o Monitoring access to storage, linepack and other ancillary services (Article 41(1)(n))
- o Monitoring correct application of criteria that determine model of access to storage (Article 41(1)(s))
- o Monitoring safeguard measures (Article 41(1)(t))

- In pursuance of the requirements of art. 41, § 6, (b) of Directive 2009/73/EC, by a Decision №P-119/26.08.2010, SEWRC approved "Methodology for determining the price of imbalance of the gas transmission operator", which Bulgartransgaz EAD has announced to the public, under the requirements of Article 7, § 3 of Regulation. Prices of imbalance reflect as accurately as possible costs, providing at the same time appropriate incentives for the network users to balance the filling and withdrawal of gas from the system and prevent mutual subsidization among network users and do not obstacle the entrance of new market participants.

By the amendment of EA, published in State Gazzette issue 54 of 17 July 2012, art.21, para. 1, item 36, the power of SEWRC to promote market integration and to support the related research activities is regulated.

In compliance with the provisions of art.21, para.1, item 9 and 10 of the amended and entered into force EA, at the proposal of the energy companies SEWRC adopts Electricity Market Rules and Natural Gas Market Rules, as well as Technical Rules of the Relevant Networks and Systems, including Security and Reliability Rules, controls their observance and carries out a review and control of the outcomes of previous periods; the Commission also adopts and controls the observance of the electricity supply by end suppliers rules and the last resort suppliers and natural gas supply by public provider and end suppliers as a part of the rules under item 9, including service and supply quality standards, as well as rules for the district heating supply, including service and supply quality standards.

At this stage of market development, there is no system congestion, neither on national, nor on cross-border level, since the transmission system projected capacity is 8 billion m<sup>3</sup>. The actual annual consumption does not exceed 50% of the maximum projected consumption. The allocation of available capacities is on the 'first come first served' principle.

Transit transmission is carried out by the System Operator on the basis of long-term contracts. There are old contracts with priority access to cross-border capacities. The ratio of capacity needed to serve old contracts to total cross-border capacity is 100%. These contracts are valid until 2030.

In the new EA, as part of the Third energy package, the natural gas transit transmission license, issued to Bulgartransgaz EAD, is amended into a natural gas transmission license for the till the term of the natural gas transit transmission license expires.

- The obligation under art. 41, §1 (m) of the Directive is transposed into the new EA, namely in art. 76, para. 4, items 10, 11 and 12 as part of SEWRC's controlling powers: the Commission continuously monitors the fulfillment compliance of the licensed activity with the license conditions, including: timing period in which electricity and natural gas transmission/distribution networks operators complete connections to the networks, maintenance and interconnection lines; observance of the rules for work with energy services consumers; observance of the requirements defined in Regulation (EC) № 714/2009 and Regulation (EC) № 715/2009;



- In regard to the requirement of art. 41, §1 (n) of the Directive, art. 761 para. 4, item 2 of EA stipulates the continuous control of the network access provision obligation observance, access to the storage and services facilities concerning the temporary natural gas storage, as well as the correct application of the conditions for procurement of access.

The operator of UNS Chiren developed in 2011 „Rules for the provision of access to underground natural gas storage Chiren“, which arranged the terms and conditions for the provision of access according to art.172 6, para.1 of Energy Act and were adopted by a decision of the Board of directors of Bulgartransgaz EAD.

Applying the Rules should not result in obstruction of the storage’s users and is based on the following principles: storage’s users equal treatment; transparency and non-discrimination at the provision of a storage access.

#### **4.1.3 Network and LNG tariff for connection and access**

- o Article 41(1)(a), Article 41(6)(a), Article 41(8), Article 41(10) и Article 41(12)
- o Prevention of cross-subsidies (Article 41(1)(f))
- o Regulated and negotiated access to storage 41(1)(s)

The price of transmission on the system is calculated by the method ‘Rate of Return’. The tariff model applied to the transmission company is „post stamp”. It is expected the TSO to implement the tariff model „entry-exit”, in pursuance of the requirements of the Third energy liberalized package.

In the new EA art.197, para.9, the access and the terms for the usage of foreign gas facilities is regulated. The connected to the gas transmission network customers ( in case of technical possibility and free capacity) may provide their own facilities to the relevant distribution network operator, a license holder, for the purposes of natural gas distribution to other customers in the territory defined in the license. The usage is to be provided after the concluding of a contract at a negotiated price defined through methodology approved by the Commission. In the contract with the licensee the terms and conditions of the usage are negotiated, including the terms and conditions of the operative management and natural gas metering, supplied to each of the customers, including the person providing usage, to guarantee the unified operative management and metering of the supplied to the customers natural gas. At the absence of consent, the Commission shall order provision of usage and payment of the price defined by SEWRC following the methodology.

In the Additional provisions of EA the set time limits for the price formation are: within 6 months since the entrance into force of the EA the Commission shall issue Guidelines for the access and transmission network price formation or approves an access and transmission network price formation methodology, when at the date of entrance into force of the law such prices or methodology are not established, as in compliance with the requirements of Regulation (EC) № 715/2009, in pursuance of art. 41, §1 a.

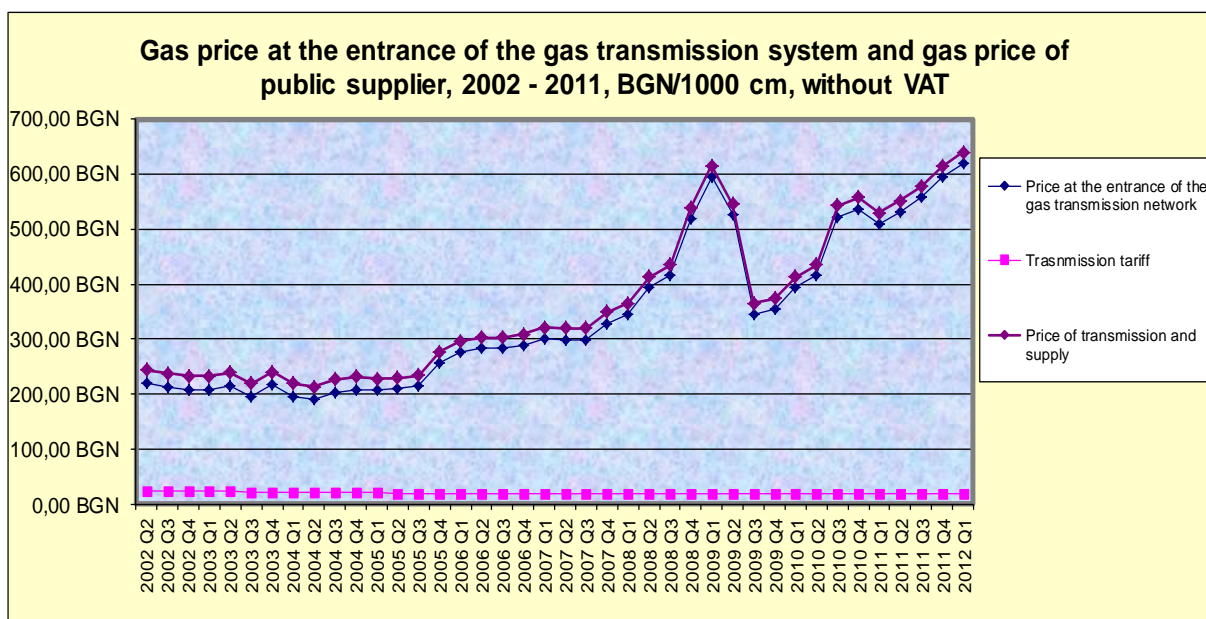
The price of natural gas at the network entry is calculated by the Public Provider as average weighted value taking into account the demanded quantity of natural gas from import to the domestic market and from local extraction enterprise to sell in a future period; the contract terms for transmission of natural gas to the Bulgarian border, and the exchange rate of the Bulgarian National Bank for USD or another foreign currency paying for the imported natural gas. On this price a charge of 2% is calculated.

On 30 Dec 2009 a Decree No 325 of the Council of Ministers was adopted for the amendment and supplement of *Ordinance for regulating the natural gas prices*, adopted with Decree No 131 of the Council of Ministers of 2004 (promulgated SG issue 35 of 2004;

amended and supplement SG issue 64 of 2007.), and entered into force on 01 Jan 2010. Art.17 of the Ordinance is amended with that DCM, which article concerns the method used in defining the natural gas purchase prices when buying from the Public Provider.

Under the amendment the natural gas purchase prices, when end suppliers and consumers connected to the gas transmission network buy from the Public Provider, are formed based on cost estimates for the supply of quantities of natural gas imports for the domestic market, of domestic extract enterprises, of natural gas storage and a charge within 2%.

Under the effective contracts of Bulgargas EAD with external suppliers, the entry price changes every quarter, which is four times per year and reflects to the whole chain of connected consumers.



The price for end consumers connected to the gas distribution network is calculated by adding the price for distribution and supply for the specific consumer group or subgroup to the price of natural gas at the entry of gas transmission system and the transmission tax (BGN 19.73).

For consumers connected to the transmission network, the price for 1000 m<sup>3</sup> is equal to the entry price of the gas transmission system, to which the transmission tax (BGN 19.73) is added.

The price of natural gas for distribution and supply in gas distribution systems is calculated by the 'price cap' method.

The 'price cap' method involves approval by the Commission of prices set by the gas distribution companies for natural gas transmission through the gas distribution network and for natural gas supply from end supplier for the first year of the defined regulatory period, and change at the end of each year of the regulatory period by an inflation index, reduced by efficiency of improvement rate.

The Commission may change approved prices at the end of each year of the regulatory period, and based on shortage or excess revenue, due to difference between projected and actual quantity of natural gas from the preceding pricing period and investments.

With regard to the above, incentive regulation is applied to companies licensed for distribution and supply by end supplier.

The regulatory period for which prices of gas distribution companies are defined, is in accordance with the business plan of the respective company, usually five years.

Regulation using the ‘price cap’ method have been applied since 2008, and pricing corrections for the reported 2011 for the activities of natural gas distribution and supply, have not been applied yet.

When regulating the prices for natural gas distribution and supply SEWRC takes into account the characteristics of the market, including the fact that the needed natural gas distribution infrastructure in the country is still in process of construction and the consumers connected to the natural gas distribution network are few. SEWRC applies a regulatory mechanism, which ensures balanced incentives for the natural gas distribution enterprises to continue the development of the networks and the connection of new consumers aiming the increase of consumption. One of the incentives is the defined higher rate of equity for the activities distribution and end supply, the price formation of the regulatory period as annuity prices and the promotion cost tariff structures. The tariff structure is part of the pricing application, where the company may propose differentiation of consumers into groups and subgroups, depending on similar characteristics of consumption and/or another feature, for which it may request approval of separate prices. The companies justify and prove individual tariffs in front of the Commission where the highest price is paid by those groups of consumers whose natural gas end supply costs are highest. The types of tariffs in force of the gas distribution companies end consumers are separated depending on the type of consumption (industrial, publicly administrative and households), evenness and unevenness of consumption and the relevant consumption.

The prices are formed under the “Guidelines of the State Energy and Water Regulation Commission for pricing of transmission of natural gas through gas distribution networks and natural gas supply by end supplier” and “Guidelines for pricing of transmission of natural gas and natural gas storage and the form and content of information needed for pricing”. The Guidelines constitute both the general and specific requirements of SEWRC regarding the price calculation methods, types of costs, assets incl. investments and all other pricing factors.

Annual data is collected to report the operations of licensed companies regarding investments, constructed network, number of consumers, consumption; and are compared with data in the approved business plans.

Annual information is collected from all licensees regarding: number of interruptions, durations of interruptions, number of complaints, complaints response time, and time for correction of metering errors.

At this stage, quality of supply does not reflect the tariffs.

Transmission and distribution system operators submit updated information regarding effective tariffs for transmission, provision, storage, distribution, supply and connection.

***Average gas distribution network prices for connection, 2011:***

*Non-household consumers: 1245 EUR/consumer*

*Household consumers: 253 EUR/ consumer*

***Average gas distribution network prices for distribution, 2011:***

*Non-household consumers: 63.93 EUR/1000 m<sup>3</sup>*

*Household consumers: 117.93 EUR/1000 m<sup>3</sup>*

In the new Bulgarian legislation, particularly art.30 of EA, in line with the requirements of the Third package, SEWRC’s obligation to regulate the natural gas access and storage in a storage facility prices is established and supplemented. In art.21, para.1, item 13 it is stipulated that SEWRC determines electricity and natural gas transmission network

access rules, respectively electricity and natural gas distribution network and storage facilities access rules, including supplies and services quality standards, and if necessary, revise them to ensure the effective access. According to art.22, para.1, it is stipulated the obligation of the Commission to review network and facilities users complaints against transmission and distribution networks operators, extraction enterprises, gas storage facilities operators and LPG facilities operators, regarding the fulfillment of their obligations under the law. In relation to its controlling powers SEWRC monitors the fulfillment of the obligations for the provision of access to the storage facilities and gas temporary storage services, as well as the correct application of the conditions for provision of access.

#### **4.1.4 Cross-border issues**

- o Access to cross-border infrastructure including allocation and congestion management (Article 41(6)(c), Article 41(8), Article 41(9), Article 41(10) и Article 41(12))
- o Cooperation (Article 41(1)(c))
- o Monitoring investment plans and assessment of consistency with Community-wide network development plan Article 41(1)(g)

The transmission system operator has the duty to provide sufficient cross-border capacity aiming the European gas transmission infrastructure satisfying all economically feasible and technically realistic capacity requests keeping in mind the observance of gas supply security requirements. SEWRC has the power to establish cooperation concerning cross-border issues with regulatory authorities of other countries – Member states and with ACER, and to conclude cooperation agreements with NRAs. For the reported 2011, no cooperation agreements were signed.

At this stage of market development, there is no system congestion, neither on national, nor on cross-border level, since the transmission system projected capacity is 8 billion m<sup>3</sup>. The actual annual consumption does not exceed 50% of the maximum projected consumption. The allocation of available capacities is on the ‘first come first served’ principle”.

Transit transmission is carried out by the System Operator on the basis of long-term contracts. There are old contracts with priority access to cross-border capacities. The ratio of capacity needed to serve old contracts to total cross-border capacity is 100%. These contracts are valid until 2030.

In the new EA, as part of the Third energy package, the natural gas transit transmission license, issued to Bulgartransgaz EAD, is to be amended into a natural gas transmission license for the till the term of the natural gas transit transmission license expires.

After the new EA came into force, pursuant to provision of art. 21, para. 1, item 30, SEWRC acquired the power to monitor the fulfillment of the gas transmission network operators’ investment plans and to present in its annual report an assessment of the operators’ investment plans regarding their compliance with the ten-year network development plans in the European Union.

#### **4.1.5 Compliance**

- o Compliance of regulatory authorities with binding decisions of the Agency and the Commission (Article 41(1)(d)) and with the Guidelines (Article 43))
- o Compliance of transmission and distribution companies, system owners and natural gas undertakings with relevant Community legislation, including cross-border issues (Article 41(1)(b), Article 41(1)(s), Article 41 (3) and Article 41(5)) + imposing penalties (Article 41(4)(d))

- o Power to carry out investigations and impose measures to promote competition etc. (Article 41 s(4)(b) + 41(5)(a))
- o Power to ask any information from gas undertakings (Article 41(4)(c))

In art.21, para. 1, item 31, EA the power of the regulator under art. 41, §1 d of the Directive is transposed, namely to apply and monitor the European Commission and ACER binding decisions fulfillment. The regulator also, has the duty to ensure the obligation observance under the Directive, the Regulation (EC) № 715/2009 and the relevant Community legislation of the transmission and distribution system operators, as well as of all natural gas undertakings.

A certification procedure is to be done for the model of an independent transmission operator, and within six months of the entrance into force of EA „Bulgartransgaz“ EAD is obliged to submit at SEWRC a certification application and within the statutory time limit of four months SEWRC has the duty to issue the relevant certificate. After the completion of the certification process, a monitoring procedure concerning the ITO duties shall start, as well as the imposing penalties procedure in case of duties non- fulfillment. In line with art. 21, para. 3, concerning the power to regulate the independent transmission operator activities, the Commission:

1. imposes sanctions about a discrimination conduct of the operators in benefit of the vertically integrated undertaking;
2. monitors the communications between the operator and vertically integrated undertaking, to ensure the duties fulfillment of the operator;
3. acts as an authority to settle disputes between vertically integrated undertaking and the operator;
4. asks information and documentation relating to commercial and financial relations, including loans between vertically integrated undertaking and the operator;
5. approves commercial and financial agreements between vertically integrated undertaking and the operator in case they affect the market development conditions;
6. asks justification by the vertically integrated undertaking concerning the presented by the compliance responsible decisions about the network development plan or particular operator's investments, including in relation to the non-discrimination conduct of the operators in benefit of the vertically integrated undertaking;
7. carries out on-site inspections in the vertically integrated undertaking and the operator;
8. approves ten-year transmission network development plan, monitors and control its fulfillment at the terms and conditions of the Ordinance under art. 60;
9. assign all and certain tasks to the independent transmission operator from the tasks of the independent system operator, by the proposal of the network owner, in case the operator systematically breaks its independence duties, according to chapter eight „a“, section II, including systematic discrimination conduct in benefit of the vertically integrated undertaking.

#### **4.1.6 Dispute settlement**

- o Article 41(11) and Article 41(4)(e)

Dispute settlement is regulated in art. 22 of EA. Under para. 1, SEWRC reviews complaints of:

1. network and facilities users against transmission and distribution networks operators, extraction undertakings, natural gas storage facilities operators and LPG facilities operators, concerning their duties under this Act, and of consumers against W & S operators,

concerning the regulated matter under the Law for regulation of the water supply and wastewater services;

2. customers against power and natural gas suppliers, including end suppliers, having obligations under this act;

3. licensees against licensees, having obligations under this act, as well as W & S operators against W & S operators, concerning the regulated matter under the Law for regulation of the water supply and wastewater services;

4. Members of the board of the transmission network operator, of the compliance responsible persons at the transmission network operator and persons under art. 81e, para. 9 in the event of termination of their employment relations in the provided for under this law cases.

Within two months from the complaint application submission under para. 1, item 1, 2 and 3 and para. 2, the Commission may assist the amicable settlement of the dispute. The time limit may be prolonged with another two months, if the nature of the dispute necessitates the collection of additional data and information by the Commission. When amicable settlement of the dispute was not achieved or at the refusal of one of the parties for amicable settlement, the Commission takes a decision about the complaint within two months of its submission. The time limit may be prolonged with another two months, if the nature of the dispute necessitates the collection of additional data and information by the Commission. With the consent of the appellant the prolonged time limit may be prolonged with another two months. In the event the Commission assumes a complaint to be justified, it issues a decision together with mandatory guidelines concerning the application of the law.

SEWRC also reviews complaints of:

1. the independent transmission operator against the vertically integrated undertaking and of vertically integrated undertaking against independent transmission operator – after the assignment of independent transmission operator;

2. the independent system operator against transmission network owner and the transmission network owner against the independent system operator – after the assignment of independent system operator, and the Commission takes a decision about the complaint within two months of its submission; the time limit may be prolonged with another two months, if the nature of the dispute necessitates the collection of additional data and information by the Commission. With the consent of the appellant the prolonged time limit may be prolonged with another two months.

## **4.2 Promoting competition**

### **4.2.1 Wholesale markets**

#### **4.2.1.1 Price monitoring**

o Article 41(1)(i) and Article 41(1)(j)

In pursuance of art.21, para. 1, item 35 of the new EA, respectively art. 41, §1, item (i) and (j) of the Directive, the Commission monitors the level and efficiency of opening of the market and the competition in the wholesale and retail market, and monitors the integration with other energy markets of other countries – Member States.

The price of transmission on the system is calculated by the method ‘Rate of Return’. The tariff model applied to the transmission company is „post stamp”. It is expected the TSO to implement the tariff model „entry-exit”, in pursuance of the requirements of the Third energy liberalized package.

In the Additional provision of EA the time limits for the new price formation are set: up to 6 months after the entrance into force of the Act, the Commission issues Guidelines for access and transmission over the natural gas transmission network or approves a methodology

for the prices of access and transmission over the natural gas transmission network, when at the date of entry into force such prices were not set or methodology was not implemented, which to be in line with the requirements of Regulation (EC) № 715/2009, in pursuance of art. 41, §1 a.

#### **4.2.1.2 Monitoring the level of transparency, including the compliance with transparency obligations, and the level and effectiveness of market opening and competition**

As it is laid down in art.21, para.1, item 29 of EA, SEWRC contributes to the compliance of the data exchange processes concerning the most important market processes on regional level, guarantying the necessary information confidentiality level.

Under the EA, the Rules for provision of access to the natural gas transmission and /or distribution networks, and in pursuance of the European Directives about the full electricity and natural gas market liberalization, since 01 July 2007 all consumers have the right to chose their natural gas supplier, or the market is 100% liberalized.

The new controlling powers of SEWRC, namely art.76, para.4, item 9, comprise of monitoring the presence of limiting contract practices and exemption provisions, which may hinder household consumers to conclude contracts at one and the same time with more than one supplier or to hinder their choice of suppliers.

The natural gas public provision activity is performed by Bulgargaz EAD, which is a natural gas public provision license holder. Bulgartransgaz EAD is a license holder of the activities of transmission, transit transmission and natural gas storage. The entry natural gas is provided by three external suppliers (Overgas Inc., Wintershal and Gazexport) and two internal (Melrose resources OOD and „Exploration and extraction of oil and gas” AD). The natural gas transmission network is owned by Bulgartransgaz EAD and some distribution companies and about 400 directly connected consumers are connected. The natural gas supply on the territory of the republic of Bulgaria is carried out through natural gas transmission network owned by Bulgartransgaz EAD and through distribution networks owned by the relevant distribution companies. On the territory of the country a transit gas pipeline has been constructed owned by Bulgartransgaz EAD, which transits through the relevant sections natural gas to the territories of Greece, FYROM and Turkey.

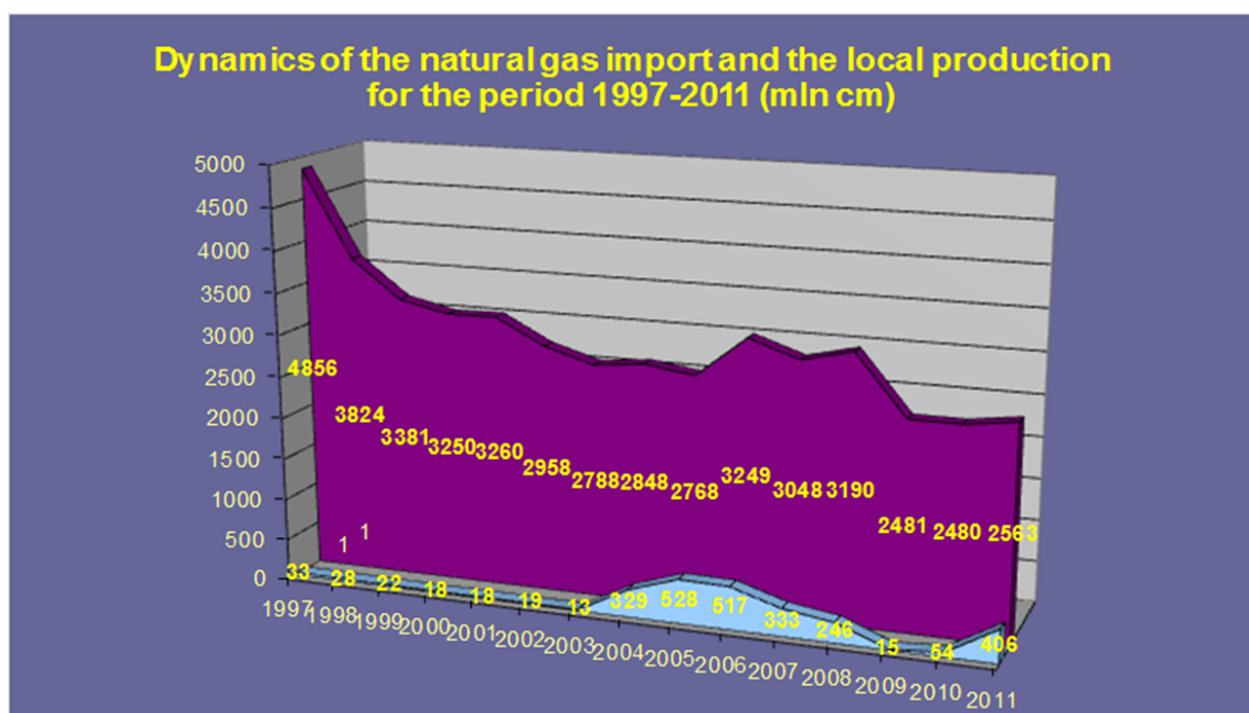
Import is carried out by a single importer – Bulgargaz EAD, which is a part of the Bulgarian Energy Holding (BEH EAD). BEH EAD was established in September 2008 with 100% state share and activities comprising generation, production, transmission, transit transmission, storage, management, distribution, sale and/or purchase of natural gas, electric power, heat energy, coal, as well as all kinds of energy and resources for the generation of energy. BEH EAD encompasses the bigger energy companies including Bulgartransgaz EAD (functioning as combined operator performing the activities of storage, transit transmission and transmission of natural gas) and Bulgargaz EAD, acting as a natural gas public provider.

Under art.176, para.1 of EA, extraction undertakings or natural gas traders on one hand, and the natural gas public provider, natural gas end suppliers, natural gas storage facilities operators, liquid natural gas facilities operators, natural gas traders or customers on the other, conclude transactions among them at freely negotiated prices. For the reported 2011 the quantities traded at freely negotiated prices by the sole in the country natural gas trader Dexia Bulgaria OOD, are 32 M m<sup>3</sup>, provided by the extraction undertaking Melrose resources OOD.

Wholesale natural gas trade is carried out by regulated access of third parties – producers. Natural gas import is performed based on long term contracts with RAO Gazprom

for internal consumption and for transit transmission through the transit pipelines. Natural gas supplies for the consumers from South-East Bulgaria through the transit pipeline for Greece and FYROM is made based on contract with Gazexport OOO. Bulgartransgaz EAD owns and manages the transmission and transit pipelines – high pressure, as well as the underground natural gas storage facility Chiren.

Bulgargaz EAD is the sole public provider, who trades at regulated by SEWRC prices, with market share of 84.16 % of the total resource for 2011, and the rest 15.84% are of local extraction. The maximum hour natural gas flow from import was 0.0048 TWh/h. Local natural gas production in 2011 was 406 M m<sup>3</sup>, realized by Melrose resources OOD and „Exploration and extraction of oil and gas” AD. To compare, extraction in 2010 was only 54 M m<sup>3</sup>. The considerable growth of the extracted natural gas in the country is a result of the developed by Melrose resources OOD two new gas fields in Kaliakra and Kavarna. The Bulgarian country operates the underground natural gas storage facility Chiren with active gas capacity of about 450 M m<sup>3</sup>/year. In 2011, 349 M m<sup>3</sup> of natural gas were pressurized in the facility, and the extracted quantity was 368 M m<sup>3</sup>.

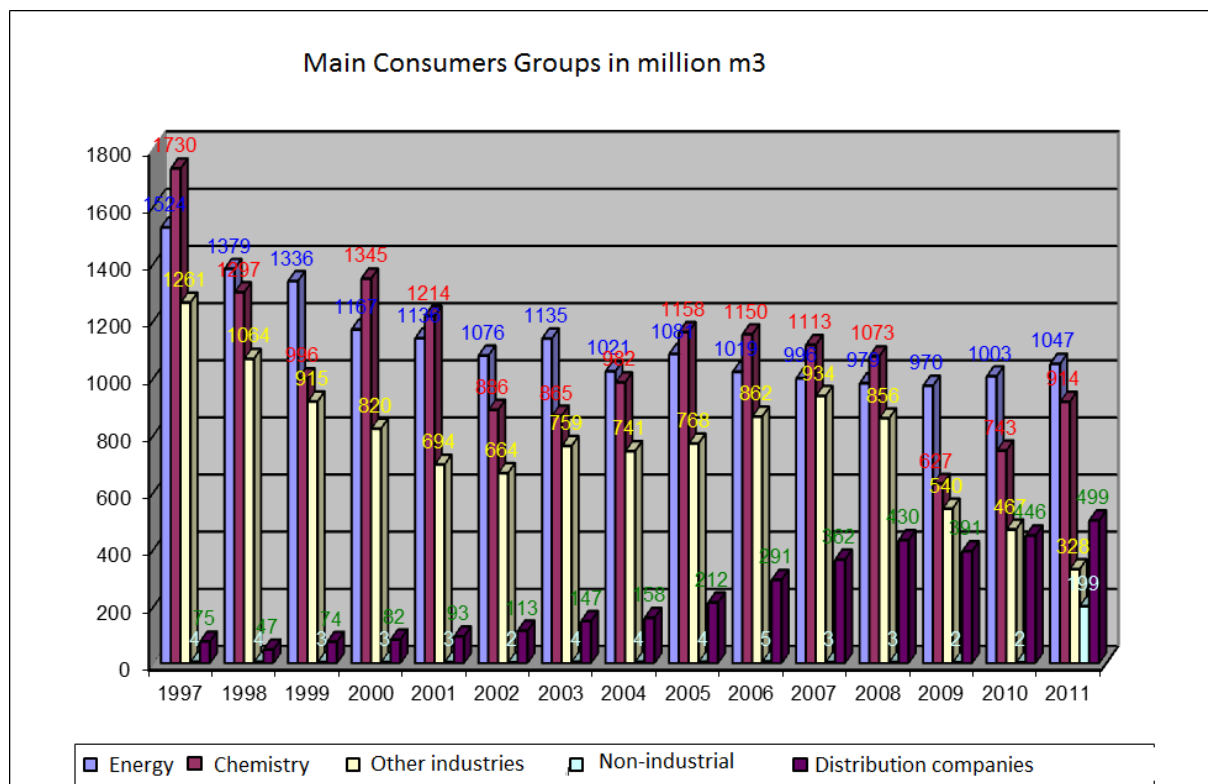


16.71% of natural gas consumption (including local production quantities) in the country is realized by 33 natural gas distribution companies, servicing 5 natural gas distribution regions (Dunav, West, Thracia, Mizia, Dobroudja) and 66 municipalities outside these regions.

Total natural gas consumption by consumers of Bulgargaz EAD was 2 987 M m<sup>3</sup>, and the consumption structure by sectors in 2011 was the following:

- Energy – 1047 M m<sup>3</sup>, or 35.05 %
- Chemical industry – 914 M m<sup>3</sup>, or 30.5 %
- Other industries – 328 M m<sup>3</sup>, or 10.98 %
- Non-industrial – 199 M m<sup>3</sup>, or 6.66 %
- Distribution companies – 499 M m<sup>3</sup>, or 16.71 %





### **Main consumer groups in M m<sup>3</sup> - Energy, Chemistry, Other industries, Non-industrial, Distribution companies**

Active natural gas maximum volume for 2011 in the only one at present utilized gas storage amounted at 518 M m<sup>3</sup> (within a year varies from 170 M m<sup>3</sup> to max 518 M m<sup>3</sup>), and the buffer gas volume was 749.954 483 M m<sup>3</sup>. Active natural gas quantity was about 17 % of total annual consumption in the country. Maximal extracting capacity from the storage was 160 000 m<sup>3</sup>/hour. Up to now, there is 1 filed application for an access to the storage service, which application received no answer from the operator UGS Chiren. Storage capacities are reserved only by the public provider Bulgargaz EAD, and in past periods by other industrial consumers as well. There are two methods for allocation of available storage capacities, namely 'first come first served' and the proportionate method of allocating requests according to quantities. The second method is in process of amendment as part of the Natural Gas Market Rules. There is no storage capacities trade on the secondary market.

The five gas distribution companies with largest market share in sales to end consumers are the following:

- Rilagaz EAD – 14.59 %
- Citygaz Bulgaria AD – 14.26 %
- Overgaz East AD – 13.83 %
- Sofiagaz EAD – 12.08 %
- Overgaz North EAD – 11.57 %

For gas distribution companies, shares of consumer groups are as follows:

- Industrial consumers – 8.55 %, 5 370 consumers;
- Household consumers – 91.45 %, 57 427 consumers.

In compliance with the European directives for full liberalization of electricity and natural gas markets as of 01 July 2007 all consumers have the right to select their natural gas supplier. However, there are practically no procedures yet for switching the end supplier. This is caused by the fact that each gas distribution company has a price, approved by SEWRC, for transmission of natural gas through the gas distribution networks, owned by the companies. In switching the end supplier, the consumer is to pay additional transmission price of each 1 000 m<sup>3</sup> transmitted natural gas to the gas distribution company, whose licensed territory it crosses.

In 2011 SEWRC approved natural gas transmission prices through the gas distribution networks, prices of natural gas supply by end supplier, and prices of connecting consumers of 6 (six) licensed companies, according to the new pricing method 'Price Cap'.

#### **Average weighted prices of natural gas for 2011 (without VAT)**

Dimension	BGN/1000 m <sup>3</sup>	BGN/GJ	BGN /KWh	EUR/KWh	ct/KWh
2011 price for sale by Public Provider	546.44	16.31	0.059	0.03	3.00
Industrial consumers	557.33	16.64	0.06	0.03	3.06
Public-administrative and commercial	730.25	21.80	0.08	0.04	4.01
Household consumers	749.52	22.38	0.08	0.04	4.12

SEWRC conducted scheduled inspections and concluded that companies have made considerable efforts to improve the quality of services they offer and to achieve rapid solution of consumers' complaints.

SEWRC demands annual information on complaints received in gas distribution companies. The number of complaints received in gas distribution companies is negligible – 0.3‰ (for each 1000 consumers).

In 2011 at the gas distribution companies 228 consumer complaints were received. The main themes of complaints were measurement of consumed natural gas volumes and problems with connection of new consumers. In some cases the problem was about non-fulfillment of licensing terms. Satisfied complaints are 201 in number or 80 % of filed complaints.

In 2011 there were 6 inspections in gas supply companies, of which 2 surprise inspections related to consumers' complaints. The main themes of complaints were: price, measurement of consumed natural gas volumes and problems with connection of new consumers. In some cases the problem was about non-fulfillment of licensing terms. The inspections drew up statements and made binding instructions with time limits for action.

Balancing the natural gas market is done by the gas available in the system, purchased from the Public Provider at regulated prices. To compensate the seasonal irregularity of consumption, the extraction and injection capacities in Underground Gas Storage Chiren are used. The gas is owned by persons other than the operator and the contract terms are fulfilled.

Balancing the natural gas market in the Republic of Bulgaria is in process of development and harmonization with the European Regulation (EC) № 715/2009 on terms of access, and the ERGEG's Guidelines for Good Practices for Gas Balancing.

## **4.2.2 Retail market**

### **4.2.2.1 Price monitoring**

When regulating the prices for natural gas distribution and supply SEWRC takes into account the characteristics of the market, including the fact that the needed natural gas distribution infrastructure in the country is still in process of construction and the consumers connected to the natural gas distribution network are few. SEWRC applies a regulatory mechanism, which ensures balanced incentives for the natural gas distribution enterprises to continue the development of the networks and the connection of new consumers aiming the increase of consumption. One of the incentives is the defined higher rate of equity for the activities distribution and end supply, the price formation of the regulatory period as annuity prices and the promotion cost tariff structures. The tariff structure is part of the pricing application, where the company may propose differentiation of consumers into groups and subgroups, depending on similar characteristics of consumption and/or another feature, for which it may request approval of separate prices. The companies justify and prove individual tariffs in front of the Commission where the highest price is paid by those groups of consumers whose natural gas end supply costs are the highest. The types of tariffs in force of the gas distribution companies end consumers are separated depending on the type of consumption (industrial, publicly administrative and households), evenness and unevenness of consumption and the relevant consumption.

The prices are formed under the “Guidelines of the State Energy and Water Regulation Commission for pricing of transmission of natural gas through gas distribution networks and natural gas supply by end supplier” and “Guidelines for pricing of transmission of natural gas and natural gas storage and the form and content of information needed for pricing”. The Guidelines constitute both the general and specific requirements of SEWRC regarding the price calculation methods, types of costs, assets incl. investments and all other pricing factors.

Annual data is collected to report the operations of licensed companies regarding investments, constructed network, number of consumers, consumption; and are compared with data in the approved business plans.

Annual information is collected from all licensees regarding: number of interruptions, durations of interruptions, number of complaints, complaints response time, and time for correction of metering errors.

At this stage, quality of supply does not reflect the tariffs.

Transmission and distribution system operators submit updated information regarding effective tariffs for transmission, provision, storage, distribution, supply and connection.

#### ***Average gas distribution network connection prices, 2011:***

*Non-household consumers: 1245 EUR/consumer*

*Household consumers: 253 EUR/ consumer*

#### ***Average prices for distribution over the gas distribution network, 2011:***

*Non-household consumers: 63.93 EUR/1000 m<sup>3</sup>*

*Household consumers: 117.93 EUR/1000 m<sup>3</sup>*

#### 4.2.2.2 Monitoring the level of transparency, including compliance with transparency obligations, and the level and effectiveness of market opening and competition

The Energy Act regulates the obligation of the transmission undertakings to connect to their network at a defined by it point the distribution companies, extraction companies and companies for natural gas storage. The obligation of distribution companies to connect and provide the gas supply to consumers at conditions of equal treatment is regulated in EA, with complying with the technical requirements of reliability and safety. Conditions of connecting to the transmission and distribution networks, general conditions of contracts, natural gas prices and rules for work with consumers are approved by SEWRC and are publicly available, and are placed at a prominent place in the clients' centers of the companies and on the internet pages of the gas transmission and gas distribution companies.

The Law does not require issuance of a license for trade with natural gas, thus giving a full freedom for traders. Natural gas trade market is 100 % open.

SEWRC permanently monitors the market with the view to ensure non-discrimination between all market participants, as well as between the participants of one and the same category and to promote efficient competition and correct market operation. Regarding the latter, when exercising its controlling powers, SEWRC carries out scheduled inspections of the energy companies, as well as surprise inspections in case of filed complaints and signals.

Regarding its controlling powers, SEWRC is in a close cooperation with the Consumer Protection Commission and with some other non-governmental organizations for consumer protection.

SEWRC monitors the energy companies' obligations related to provision of information about: ways of payment, disconnection or restoring of supply prices, prices for maintenance services and other services prices concerning licensed activities; change of supplier procedure and information about the lack of additional payments for energy services consumers when shifting supplier; real consumed quantities and costs incurred and no additional payments owed for this service; elaboration of final equalizing bill at each supplier shift; every energy source share in the total supplied energy by the supplier during the previous calendar year in a comprehensible and clearly comparable way.

Every year SEWRC requires information on filed complaints at the gas distribution companies. Number of complaints submitted at the gas distribution companies was insignificant – 0.8% (per 1000 consumers).

Complaints submitted at the Commission, Gas supply sector were 26 or 0.97 % of total number of filed complaints.

The Commission monitors and inspects the gas distribution companies in respect of the fulfillment of the set in their approved business plans parameters connected with their duties under the licenses for the activities of natural gas distribution and supply. After an analysis it was find out that the business plans' performance is satisfying, at the background of the general economic situation in the region of South-East Europe.

Gas distribution companies 2011	Constructed network	Investment	Number of consumers		Natural gas consumed, thousand norm m <sup>3</sup>	
	m	Thousand BGN	Non-households	Households	Non-households	Households
<b>Total</b>	<b>304 832</b>	<b>51 732</b>	<b>5 370</b>	<b>57 427</b>	<b>437 694</b>	<b>69 227</b>

#### **4.2.4 Carry out investigations and imposing measures to promote effective competition**

In 2009 an infringement procedure against Bulgaria was opened by a letter of formal notice of the European Commission of 26 June 2009 for paying attention to the level of implementation of Regulation (EC) № 1775/2005 of 28 Sep 2005 regarding the conditions of access to the gas transmission and the Guidelines adopted under art. 9 of the Regulation (infringement № 2009/2183 EC inventory).

Bulgarian authorities answered EC on 26 Aug 2009, through the Constant Representation of the Republic of Bulgaria to EU, introducing the Bulgarian point of view on the issues mentioned. The European Commission sent a reasoned opinion on breach № 2009/2183 on 28 June 2010. The Republic of Bulgaria presented a reply on the reasoned opinion on 27 Aug 2010.

On 26 Apr 2012 a statement of claim was submitted at the Secretariat of the European Union Court, in compliance with provisions of art. 258 of the Functioning Agreement of the European Union by the European Commission against the Republic of Bulgaria. The case was entered into the register of the Court under № C-198/12. The letter of formal notice and the reasoned opinion cited the violations of the provisions of Regulation (EC) № 1775/2005, which did not form the subject of the statement of claim.

In the letter of formal notice and the reasoned opinion as the basis of non compliance with the obligations under Regulation (EC) № 1775/2005 about the provision of maximum capacity of the network in line with art 5, para 1 and art 4, the Commission cited non provision on the side of Bulgartransgaz EAD at the points, where the system connected to the systems of Romania and Greece, of transmission capacity in the reverse direction at a regime of supply interruption. Among others, according to the Commission, when non provision of transmission capacity in the reverse direction occurs, it would violate also the duties for application of allocation capacities mechanisms - art. 5, para 2.

In its reply on the reasoned opinion, Bulgaria stated its arguments on the duty of provision of maximum capacity.

#### **4.2.3 Recommendation on supply prices**

In the past 2011, the Bulgarian regulatory authority gave some recommendations concerning the prices of the supplied natural gas within the approved prices of the public provider. When forming the natural gas prices at the sale of the public provider Bulgargaz EAD to form the average weighted price, SEWRC recommended buying quantities on the contracts with the lowest supply prices from import and local extraction. What is more, the Regulator studies the local production prices and gives opinion on their formation.

SEWRC publishes information on the approved in force marginal prices, statistics and analyses.

#### **4.3 Consumer protection**

- o Compliance with annexe 1 (Article 41(1)(o))
- o Ensuring access to consumption data (Article 41(1)(q))
- o Public service obligations
- o Vulnerable consumers definition

In the EA a new section has been created Section VI – Measures to protect the end consumers, in pursuance of the requirement of art. 41 of the Directive.

Article 38 a, para. 1 regulates: Agreements between energy services consumers and the energy companies providing services of public interest, which compulsorily contain: data identifying the energy company, including address; the services provided and the conditions and terms of their provision; the means used to receive the up-to-date information for all applied prices of the proposed services; duration of agreement, conditions on temporary suspension, termination of their provision and of the agreement; terms on the unilateral termination of contract by the user of the energy services and the possibility of such termination without additional payment; terms and conditions on set-off and recovery of amounts at non-compliance with the quality requirements of the contracted services, including incorrect or delayed invoicing; energy services consumers rights, including information on procedures of handling and solving complaints; other terms as provided for in this law.

In art. 38 b it is provided for that energy companies under art. 38 a, para. 1 provide to their energy services consumers information on: ways of payment, prices for disconnection and restoration of supply, service prices for maintenance and other service prices connected to the licensed activity; the supplier shifting procedure and information on lack of obligations of the consumers about additional payments when making the shift; real consumed quantities and costs incurred without obligation of additional payments owed for this service; elaboration of final equalizing bill at each supplier shift; every energy source share in the total supplied energy by the supplier during the previous calendar year in a comprehensible and clearly comparable way; existing resources of public information about the environment impact concerning at least the carbon dioxide emissions and radio active waste – a result of the different energy sources power generation, in the total supplied energy provided by the supplier in the previous year; information on dispute settlement means.

The above depicted information is being presented in the bills or together with them in informational materials and on the web page of the energy companies. Following this procedures, power and natural gas suppliers provide energy services and a controlling list adopted by the European Commission containing practical information on consumers' rights.

Energy companies elaborate and present for approval by the Commission Rules for work with their energy services' consumers. These rules regulate the terms and time limits for applying, reviewing, inspection and reply of the filed complaints, signals and proposals, the consumption data form and the procedure which consumers and suppliers follow in order to obtain access to them. Rules are approved by the commission and are published in one central and one local daily newspaper, as well as on the web page of the licensee and enter into force after their publication. Rules represent part of the common conditions of the contracts approved by the commission, whereas such conditions are provided for in the law.

The energy companies providing services of public interest define special procedures of providing information to vulnerable customers concerning consumption and disconnection in the common conditions of supply and network usage and in the rules for work with energy services consumers.

In item 66 c of Additional provision of the new EA a definition is provided for concerning vulnerable consumers, namely: „Vulnerable consumers “ are household clients, who receive electricity, heat energy or natural gas target aids under the Law on social support and its secondary legislative acts on its application.“

#### **4.4 Security of supply**

##### **Article 5**

Bulgarian State has defined the Ministry of economy, energy and tourism to be the competent authority concerning the security of supply. In line with art.72 a of EA, the

Minister of economy, energy and tourism after consultations with natural gas companies and organizations representing the household and non-household customers' interests and with the commission, introduces at national level:

1. preventive action plan containing the measures needed for the removal or limitation of the identified risks impact in compliance with the risk assessment;

2. emergency action plan containing the measures needed for the removal or mitigation of natural gas supply interruption impact.

Risk assessment has been carried out based on components defined in Regulation (EC) № 994/2010 of the European Parliament and the Council of 20 Oct 2010 by MEET in collaboration with SEWRC's experts and energy companies' representatives.

#### **4.4.1. Monitoring balance of supply and demand**

Natural gas supplies for the Bulgarian gas market are ensured by contracts concluded with:

- Overgas Inc. AD
- WIEE
- GAZPROMEXPORT OOO
- Melrose resources AD

Contract conditions grant possibilities for Bulgargaz EAD to obtain quantities amounting at the volumes needed to meet clients' consumption, including daily and monthly.

The period of the contracts with Overgas Inc. AD and WIEE expires in the end of 2012. Meanwhile, by a Memorandum of December 2006, GAZPROMEXPORT OOO engaged to guarantee the gas supplies for the Bulgarian market till 2030. Currently negotiations are held on the contract conditions of a new supplies contract for the Bulgarian market.

At this stage of development, natural gas supplies are made by sole supplier (Russian Federation) on one route – through the territories of Ukraine, Moldova and Romania. Bulgargaz EAD in its role of public provider has at its disposal gas reserves stored at UGS Chiren available in UGS, owned by Bulgargaz EAD to 1 Jan 2009 - 563 M m<sup>3</sup>, 1 Jan 2010 - 523 M m<sup>3</sup>, 1 Jan 2011 - 397 M m<sup>3</sup>, към 1 Jan 2012 – 379 M m<sup>3</sup>.

#### 4.4.2 Expected future demand and available supplies as well as envisaged additional capacity

**FORECASTS for the expected natural gas consumption in the Republic of Bulgaria in the period 2012-2017**

PERIOD	Milliard m <sup>3</sup>	Including by sectors							
Sector	Annual	Energy		Chemistr y	Metallu rgy	Building materials and cement	Gla ss and por cela in	Distribution companies	Others and non- material sector
Year	volume	Total:	Including electricit y					Total	
2012	2.900	1.081	0.442	0.763	0.093	0.045	0.188	0.455	0.275
Average daily in M m <sup>3</sup>	7788.414	2903.198	1187.062	2049.159	249.646	120.884	505.785	1221.975	737.767
2013	3.100	1.098	0.443	0.835	0.103	0.045	0.263	0.493	0.262
Average daily in M m <sup>3</sup>	8415.373	2980.671	1202.584	2266.721	279.567	122.674	715.209	1338.316	712.215
2014	3.300	1.237	0.590	0.853	0.133	0.041	0.268	0.533	0.235
Average daily in M m <sup>3</sup>	9067.449	3398.920	1621.150	2343.798	366.344	112.785	736.019	1464.530	645.053
2015	3.900	1.565	0.951	1.056	0.140	0.042	0.268	0.572	0.257
Average daily in M m <sup>3</sup>	10639.068	4269.267	2594.296	2880.732	381.604	113.582	731.461	1560.397	702.026
2016	4.000	1.622	1.035	1.052	0.143	0.042	0.268	0.623	0.250
Average daily in M m <sup>3</sup>	10988.877	4455.990	2843.372	2890.075	392.333	115.938	737.326	1711.518	685.698
2017	4.300	1.802	1.216	1.066	0.147	0.043	0.268	0.675	0.299
Average daily in M m <sup>3</sup>	11656.942	4885.072	3296.475	2889.837	398.190	116.290	726.645	1829.869	811.039

#### 4.4.3 Measures to cover peak demand or shortfalls of suppliers:

- *Configuration of network, real gas flows, including possibilities of physical flows in both directions*

There are possibilities for reverse physical flow of natural gas from Greece and Turkey (2.4 M m<sup>3</sup>/day in the event of complete interruption of supplies of Russian gas). Reverse flow from Greece was realized at the end of the gas crisis of January 2009, based on



signed agreement. Correspondence has been exchanged and a technical agreement is to be signed with Turkey. The configuration of network allows relatively large linepacks to cover the peak consumption because not the entire capacity of the network is used.

- *Natural gas storage*

Natural gas storage activities are realized in the underground gas storage facility Chiren and the available stored natural gas at the beginning of the autumn – winter period 2011 —2012 amounts at 504 m<sup>3</sup>. These amounts are intended mainly for compensating the intermittent consumption as well as for guaranteeing security of supplies in the event of deficit.

- *Natural gas role in producing heat and power and in the proper industrial sector functioning*

The main part of natural gas realization is for industrial purposes, within 60 % to 70 %, and this share we expect to be the same in the next years. The share of the energy sector consumption is from 30 % to 40 % of the total realized natural gas and the trend is for increase the share of electricity output. Household sector consumption is very low and the expected growth for the period 2012-2017 is from 1.9 to 2.5 % of total natural gas consumption in the country.

Measure: billion m <sup>3</sup>						
Year	2012	2013	2014	2015	2016	2017
Total:	3.200	3.300	3.800	3.900	4.000	4.300
Industry and others	3.140	3.233	3.725	3.804	3.903	4.192
Household	0.060	0.067	0.075	0.096	0.097	0.108
% household share	1.88	2.03	1.97	2.47	2.44	2.51

Big part of the consumers does not maintain reserve and permanent or prolonged interruption of supplies would negatively impact these consumers in the country.

- *Interconnections construction projects*



#### ➤ *Gas Interconnection Bulgaria - Greece*

The construction of a natural gas interconnection Bulgaria - Greece /planned route (about 160 km) of the interconnection is Stara Zagora – Dimitrovgrad – Komotini/ will be realized by a mixed company with the participation of Bulgarian Energy Holding EAD and IGI Poseidon (50 % Depa and 50 % Edison). On 14 July 2009 a Memorandum of Understanding at corporate level was signed. In addition, after the approval from the relevant Ministries of the three countries, on 15 July 2009, a collaborated proposal for grants was sent within the European Energy Programme for Recovery. In line with a decision of EC, a grant up to 45 million Euros shall be provided to realize the project, which total value amounts at proximally 160 million Euros. The feasibility study provided by Jacobs Consultancy UK Ltd., showed that the project was economically, technically and ecologically feasible. At the end of 2010 a project company was established – ICGB AD and at the beginning of 2011 a two-stages procedure was announced for the selection of a technical project contractor, EIA and Detailed plot plan. In August 2011 a design contract was signed. The Environment Impact Assessment has started and the on – site activities were realized for the period autumn - winter. It is expected a preliminary detailed plot plan (DPP) project to be elaborated in 2012 and also a selection of route to be made for further detailed studies. The envisaged capacity of the facility is up to 3 billion m<sup>3</sup> with possible future enlargement of up to 5 billion m<sup>3</sup> per year. In accordance with the elaborated road map about the project realization, it is expected for the interconnector to be launched into operation in Dec 2014.

#### ➤ *Gas Interconnection Bulgaria - Romania*

The project envisages construction of a natural gas interconnection between Bulgaria and Romania. The total length of the pipeline will be 25 km and its construction will cost about 28 M Euros. The project is elaborated by Bulgartransgaz EAD and S.N.T.G.N. “Transgaz” S.A. – Romania. The proposal for a grant within the European Energy Programme for Recovery was done on 13 July 2009. EC approved the grant of up to 8.9 M Euros about the project. The envisaged capacity of the pipeline is 1.5 billion m<sup>3</sup> per year. At present, the terrestrial part of

the project has validated version of DPP by the Ministry of agriculture, coordinated with the municipalities and the operation companies under the Law on territory planning. The first stage of the compulsory archeological investigations has been done and a second stage is being prepared. In Feb 2012, a public consultation of DPP in Russe municipality was envisaged. A contractor for the underwater part of the project was selected – the transition under the bottom of the Danube river. Under the internal procedure of the company, it is expected a draft contract with the selected contractor to be introduced for approval by the Board of Directors of BEH EAD. According to the elaborated road map for the realization of the project, it is envisaged the interconnector to be put into operation in Feb 2013.

➤ *Gas Interconnection Bulgaria - Serbia*

Interconnector Pipeline Bulgaria - Serbia shall provide possibilities for the natural gas supplies from other resources (different from Russia) through the Bulgarian national gas transmission system, which is to be rehabilitated, modernized and enlarged till the countries of Central and East Europe (CEE). The project is a priority for Bulgaria and also has a significant impact on ensuring the security supplies in the region. The interconnection pipeline is about 50 km long on Bulgarian territory and 100 km on Serbian territory. Technical capacity of the facility is envisaged to be at the range of 1.8 – 4.5 billion m<sup>3</sup> per year. The cost of the Bulgarian territory segment is expected to amount about 48 M Euros. In the period July 2011 – Nov 2011, a procedure had been carried out under the Law on Public Procurement with the following subject: „A selection of a consultant for the feasibility study for the interconnection pipeline Bulgaria - Serbia on Bulgarian territory”. In Jan 2012, a contract was signed with the selected consultant who is to elaborate the feasibility study for a period of maximum 12 months. Meanwhile, with a view to ensure the financing of the project, as well as compliance with the deadlines for its realization, actions were taken for the transfer of the project to OP „Competitiveness Development of Bulgarian Economy”. According to the elaborated road map for the realization of the project, it is envisaged the interconnector to be put into operation in the end of 2015.

➤ *Gas Interconnection Bulgaria - Turkey*

The main benefit of the Interconnector Pipeline Bulgaria - Turkey (ITB) project is that the Bulgarian country shall obtain direct access to the Turkish national gas transmission system – the main transit country of the Caspian natural gas, which possesses six entry points and two more is expected to be constructed. ITB would supply Bulgaria with natural gas by alternative sources and entry points like Azerbaijan and LNG terminals „Marmara Eleglisi” and “Aliaga” (with possible supplies from the LNG spot market) and in future – from Egypt, Iraq, Turkmenistan and others. On 29 Jan 2010 Bulgaria and Turkey signed a Memorandum of Understanding supporting the realization of the project. A preliminary study of the Bulgarian segment of the pipeline has been developed by Interagency working group established by the Minister of economy, energy and tourism. The preliminary study in general for the whole project is in process of preparing in collaboration between Bulgartransgaz EAD and Botash. On 01 Feb 2012 Minister Traicho Traikov sent to Minister Taner Yildiz a proposal for the signing of a Memorandum of Cooperation at the construction of a new interconnection pipeline between the two countries. The length of the pipeline shall be 75 km on Bulgarian territory. Maximum technical capacity in the first stage of the project is to be up to 3 billion m<sup>3</sup> per year (possible enlargement up to 9 billion m<sup>3</sup> per year within the second stage of the project). The cost of the Bulgarian territory segment is expected to amount about 50-80 M Euros for the first stage of the project development. It is envisaged the interconnector to be put into operation in the end of March 2014.

