



Bosnia and Herzegovina

**STATE ELECTRICITY REGULATORY COMMISSION**

**REPORT ON ACTIVITIES  
OF THE STATE ELECTRICITY REGULATORY COMMISSION  
IN 2006**

Tuzla, December 2006

## 1. INTRODUCTION

### 1.1 Reform of the Electricity Sector in Bosnia and Herzegovina

The process of the reform of the electricity sector in Bosnia and Herzegovina (BIH) was initiated by the signing the Statements of the entity governments on the electricity policy (in 2000) and was continued by the adoption of the Act on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina and the Entity laws on electricity (in 2002). During 2004, the adoption of the Law Establishing the Company for Transmission of Electric Power in BIH, and the Law Establishing an Independent System Operator for the Transmission System of BIH, Bosnia and Herzegovina commenced the reform of the electricity sector in practice.

*The State Electricity Regulatory Commission (SERC) is an independent institution of Bosnia and Herzegovina, which acts in accordance with the principles of objectivity, transparency and equality, and has jurisdiction over and responsibility for transmission of electricity, transmission system operation and international trade in electricity.*

*SERC is a non-profit institution and is financed by the regulatory fees which are paid by the licensed entities.*

The aforementioned laws identify the key entities for their implementation: the Ministry of Foreign Trade and Economic Relations of BIH, Entity Ministries in charge of energy, the State Electricity Regulatory Commission, the Entity Regulatory Commissions, and all of the power entities.

During the process of reform of the electricity sector, the “Independent System Operator in Bosnia and Herzegovina”, Sarajevo (ISO BIH) and “Elektroprijenos Bosne i Hercegovine“ JSC Banja Luka (the Company for Transmission of Electric Power in BIH) started to operate in July 2005 and in February 2006 respectively.

Laws adopted at the State and Entity levels created the conditions for restructuring, reform and deregulation of the electricity sector in Bosnia and Herzegovina.

During 2006 the State Electricity Regulatory Commission promoted the practice of a transparent and unbiased manner of issuance of rules and regulations. Such practice, i.e., such manner of conducting procedures, enabled the adoption of decisions on tariffs and licenses for transmission activity, and the operation of the independent system operator and international trade in electricity in a fully transparent manner.

The State Electricity Regulatory Commission cooperates and harmonizes its operation with the Regulatory Commission for Electricity in the Federation of BIH and the Regulatory Commission for Electricity of the Republika Srpska. SERC also cooperates with other regulatory bodies established on the state level, primarily with the Competition Council of BIH and the Communication Regulatory Agency in Bosnia and Herzegovina.

## 1.2 Energy Community

*The Treaty Establishing the Energy Community*, signed in Athens on October 25, 2005, provides for the creation of the biggest internal market in the world for electricity and gas, with effective participation of 34 parties: 27 members of the European Union (including Romania and Bulgaria) and Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, Romania, Bulgaria, and UNMIK Kosovo.

The signing of the Treaty is a result of the Athens Process, during which in 2002 and 2003 the Memoranda on Understanding were signed to establish a regional market in electricity and natural gas in South East Europe. The final goal is to gradually integrate this market in the energy market of the EU.

The political will of the signatory countries expressed by signing the Treaty transformed the non-binding obligations created by the memoranda into a legal obligation through ratification of the Treaty and its coming into effect. By July 1, 2006, the day on which the Treaty came into effect, the European Union had ratified and deposited the Treaty, and the same had been done by the following member states of South-East Europe: the Republic of Albania, the Republic of Bulgaria, the Republic of Macedonia, Romania and the Republic of Croatia as well as UNMIK-Kosovo.

The Presidency of Bosnia and Herzegovina adopted the Decision on Ratification of the Treaty Establishing the Energy Community on July 27, 2006 (“Official Gazette of BIH - International treaties” No. 9/06).

Through participation in this process, Bosnia and Herzegovina confirmed its commitment to the reform of the energy sector, liberalization of the energy market and harmonization of its policies with those of the EU members.

## 2. ESTABLISHMENT AND OPERATION OF THE STATE REGULATORY COMMISSION

Members of the Commission from the Federation of Bosnia and Herzegovina are:

- Mirsad Salkić, with five- year term (from July 1, 2003 to June 30, 2008) and
- Željko Topić, with three- year term (from July 1, 2003 to June 30, 2006).

The Member of the Commission from the Republika Srpska is:

- Vladimir Dokić, M.A. with four- year term (from July 1, 2003 to June 30, 2007).

Since the appointment or re-appointment of one member of the Commission from the Federation of BIH for the second term (from July 1, 2006 to June 30, 2011) has not been completed yet<sup>1</sup>, the Government of the Federation of Bosnia and Herzegovina temporarily appointed Mr. Topić as a member of the Commission on three occasions. The first time he was temporarily appointed on July 6, for a 60-day period, the second time on September 7 also for a 60-day period and, finally, on November 30 until the final appointment.

After appointment of the first Chairman of the Commission, Vladimir Dokić, M.A. (who was the Chairman until June 30, 2004), following the principle of rotation of the Members of the Commission in this position, the Commission was chaired by Mr. Mirsad Salkić (until June 30, 2005) and Mr. Željko Topić (until June 30, 2006).

The Chairman of the Commission from July 1, 2006 until June 30, 2007 is again Mr. Vladimir Dokić.

In the past two years, during which the State Electricity Regulatory Commission has operated in accordance with the adopted organizational chart, besides the performance of regular duties and tasks, the employees of the SERC went through the process of specialized training in the area of regulation of the electricity sector. This training took place through different seminars and conferences of energy experts, as well as through distance e-learning. In this regard, a special emphasis should be put on the programs organized by the Energy Regulators

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<sup>1</sup> At the time of the creation of this report, the procedure for appointment of the member of the Commission is in process before the Parliament of the Federation of Bosnia and Herzegovina. Subsequently, the nomination shall be submitted to the Council of Ministers of Bosnia and Herzegovina that shall propose the appointment to the Parliamentary Assembly of Bosnia and Herzegovina.

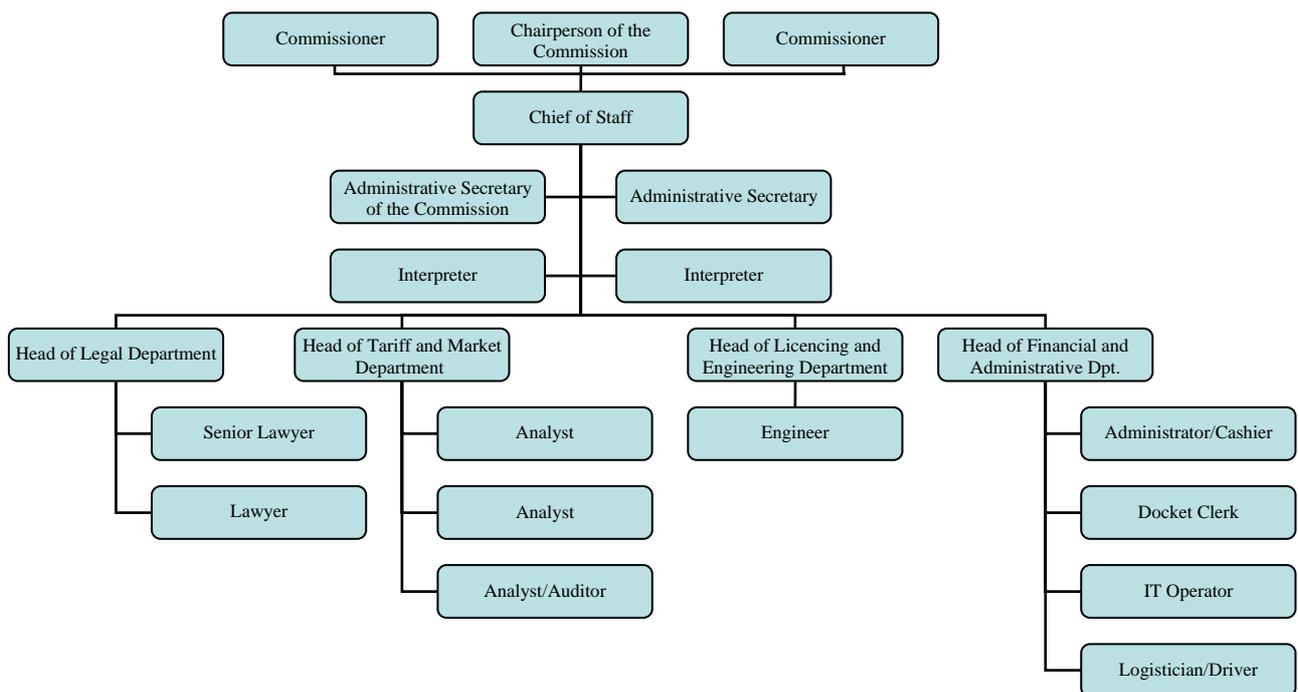
*The SERC was established by the Parliamentary Assembly of Bosnia and Herzegovina by adopting the Act on Transmission of Electric Power, Regulator and System Operator of BIH, and appointing Members of the Commission.*

Regional Association (ERRA) and the Florence School of Regulation (FSR). Significant support in specialized training was also provided by the United States Agency for International Development (USAID).

Besides training of its employees, SERC appropriately informed and exchanged experiences from regulatory practice with the employees of regulated companies, and also participated in specialized training of employees of other regional regulatory bodies.

During the aforementioned period, procurement of the necessary technical equipment required for the efficient operation of the State Electricity Regulatory Commission was continued.

### ORGANIZATION CHART OF THE SERC



### 3. KEY ACTIVITIES

During 2006, the State Electricity Regulatory Commission held 16 regular sessions, 15 internal meetings and organized 4 public hearings.

In the analyzed period, in a transparent manner, conducting adequate public hearings in which interested members of the public were able to give their comments, along with entities from the electricity sector, the Commission adopted several documents and realized a number of activities of which the most important ones are divided into the areas listed below.

*Regulations and proceedings from the regulatory competencies are being reviewed and determined in regular sessions, in accordance with the authorities prescribed by the law, and in internal meetings issues and documents of an organizational and administrative nature are reviewed and discussed.*

*With the view to soliciting comments of interested parties and members of the public on rules and regulations, or on any other document, SERC organizes general hearings; technical hearings, which are organized with the view to resolve technical issues during the proceedings, e.g. the processing of procedural or essential issues; and formal hearings, which are organized with the view to establish decisive facts based on which SERC might resolve certain applications or disputes.*

*Regular sessions and all types of public hearings are open to public.*

#### 3.1 General Rules

##### ***Rules of Third Party Access***

Pursuant to the Act on Transmission of Electric Power, Regulator and System Operator in BIH, one of the main SERC competencies is to establish, monitor and implement rules pertaining to fair and non-discriminatory third party access to the transmission network.

In addition to laws, the right of third party access to the transmission network, as a key component of European directives and rules of internal electricity market, is also regulated by the tariff pricing methodology, licensing conditions for the operation of “Elektorprijenos BIH” and ISO BIH, market rules, grid code and scope, conditions and time schedule of the electricity market opening in Bosnia and Herzegovina.

Emphasizing the importance of this fundamental principle, in the second half of the year SERC initiated activities on the issuance of a separate document that regulates this issue in an appropriate manner.

The essence of the document is based on a non-discriminatory treatment when gaining access to the transmission system using transparent procedures. The implementation of these procedures is provided by ISO BIH and “Elektroprenos BIH”, while the SERC monitors the realization of the rights of all market participants concerning access to the transmission system in accordance with the applicable rules and regulations.

*The Rules of Third Party Access* were adopted at the session of the Commission on December 7, 2006.

##### ***Rules of Confidential Information Protection***

*The Rules of Confidential Information Protection* describe general and special measures that are the basis for protection of confidential information in SERC. Namely, SERC is obligated to

ensure the integrity and efficiency of the protection of its own information of a confidential nature or information that, as confidential, is available to SERC while conducting its activities.

Pursuant to *the Law on Free Access to Information in BIH*, as a public authority, SERC is not free to declare any information confidential unless its content concerns legitimate goals of specific categories protected by the law. *The Act on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina* establishes the right of SERC to request data and information from companies for the performance of the activities that are within its competence. However, at the same time, SERC is obligated to protect the confidentiality of received data, especially of that whose disclosure may have an adverse affect on the competitive environment causing prejudice against some market participants or bringing advantage for others.

The Rules were adopted in December 2006.

### **3.2 Licenses**

#### ***Decision Establishing a Simplified Procedure for the Issuance of International Trade Licenses for Applicants with the Eligible Customer Status***

*The Licensing Rule* (“Official Gazette of BIH”, No. 38/05), envisaged that SERC may establish a simplified procedure for the issuance of international trade licenses for applicants with eligible customer status directly connected to the transmission network that request to import electricity exclusively for their own needs (Article 6).

As the entity regulatory commissions adopted rules of acquiring eligible customer status following SERC adoption of the decision on market opening, the right of eligible customers directly connected to the transmission network to import electricity for their own needs without a provider was made official by a SERC new decision.

The decision was adopted at the session of the Commission held on August 31, 2006 and published in the “Official Gazette of BIH”, No. 75/06.

#### ***Procedures for License Issuance***

“Elektroprenos BIH” was registered at the beginning of the year, or more precisely on February 1, 2006. SERC issued an interim license for the performance of electricity transmission activity to this Company, which invalidated interim licenses previously issued to the existing public utilities for electricity transmission

activity. By this act, the newly formed company took over all competencies for electricity transmission.

With regard to licenses for international trade in electricity, an interim license was issued to the “*Energy Financing Team*” Ltd. Trebinje (EFT), which is the first fully privatized license holder for this activity in Bosnia and Herzegovina, thus joining the Public Utility “Elektroprivreda Hrvatske zajednice Herceg Bosne” stock company Mostar, the Public Utility Elektroprivreda Bosne i Hercegovine, stock company Sarajevo and “Elektroprivreda” of the Republika Srpska, joint stock company Trebinje, that became license holders for the same activity last year.

In addition to this, the final stage of processing the application of the “*Ezpada*” company, Ltd. Čapljina in process, the completion being expected at the beginning of 2007. This increases the number of electricity market participants in BIH, and, in accordance with the objectives of the decision on market opening, improves the conditions for free and unlimited trade in electricity.

Pursuant to *the Decision Establishing a Simplified Procedure*, in November 2006 SERC issued an interim license for performance of the international trade activity – import of electricity for its own needs to “*Aluminij*” SC Mostar.

All procedures for the issuance of interim licenses were conducted in accordance with the shortened procedure, within 60 days after the complete application was filed. Although the procedures were shortened, all relevant elements envisaged by the prescribed procedures, including provisions on transparency, were complied with. Thus, the public had an opportunity to make comments on the applications, as well as on drafts and proposals of the documents used in the decision-making process relevant for the filed applications.

This manner of operation caused interest of a number of entities in conditions for the performance of the activity of international trade in electricity, which was a reason for holding several consultative meetings with potential applicants.

As temporary licenses determine that their holders are obligated to file applications for issuance of ‘permanent’ licenses, these procedures are currently in progress for ISO BIH and “Elektroprenos BIH”. As both procedures are at the initial stage of processing, their completion is expected in the middle of 2007.

During the year, SERC monitored the licensed entities and compliance of their operations with the conditions for use of interim licenses, especially for regulated activities performed by ISO and Elektroprenos. Namely, in addition to monitoring the compliance with the defined conditions, this process is also used to prepare the entities for issuance of ‘permanent’ licenses.

*The entity regulatory commissions (Regulatory Commission for Electricity of the Republika Srpska and the Regulatory Commission for Electricity in the Federation of Bosnia and Herzegovina) each, in their field, adopted the required secondary legislation and licensed activities over which they have jurisdiction (generation, distribution and supply) and conducted proceedings for the determination of tariffs in accordance with clear regulatory principles.*

### 3.3 Tariffs

#### ***Draft Decision on Amendments to the Tariff Pricing Methodology for the Services of Electricity Transmission, Independent System Operator and Ancillary Services***

In June 2005, the State Electricity Regulatory Commission set the structure and the manner of setting the tariffs for the services of electricity transmission, independent system operator and ancillary services. SERC based the then-adopted tariff methodology on the traditional tariff regulation methodology, in accordance with which the regulator approves a revenue requirement sufficient to cover justified costs of the regulated company's operation.

Transparent and non-discriminatory tariffs based on justified costs of operation and maintenance ("cost reflected"), reflecting regular standards of international practice, were meant to become an incentive to energy efficiency, stability of relations in the electricity market, development of regulated activities, and progress in the area of environment.

Taking into consideration the total progress in the electricity sector of Bosnia and Herzegovina, realized after the adoption of the Methodology up to date (formation of a single transmission company, independent system operator, commencement of electricity market liberalization, regional activities etc.), SERC estimates that the conditions for subsequent changes and adjustment of some elements with impact on tariffs for services of electricity transmission have been created.

Continuing to support and promote the process of creation and development of the electricity market in Bosnia and Herzegovina, aiming to ensure priority of supply and a better position in a single electricity market in BIH to domestic customers, and intending to slow down further increases of electricity prices for end-customers, at its session held on December 2006 SERC determined the *Draft Decision on Amendments to the Tariff Pricing Methodology for the Services of Electricity Transmission, Independent System Operator and Ancillary Services*.

Pursuant to regular practice, drafts of SERC decisions are given to the public for insight with a view to collect objections, comments and opinions of interested parties. Comments on the text of this decision may be provided during the hearing to be held in the middle of January 2007.

#### ***Procedures for Approval of Interim Tariffs for the Services of Electricity Transmission, ISO operation and Ancillary Services***

By its decision of December 28, 2005 ("Official Gazette of BIH", No. 01/06), the State Electricity Regulatory Commission

set the interim tariff for the operation of the “Independent System Operator in BIH” in the amount of 0.0343 pf/kWh. The approved tariff is to cover the cost of operation of the operator in the period until the creation of conditions for the state regulator to set a tariff based on *the Tariff Pricing Methodology for the Services of Electricity Transmission, Independent System Operator and Ancillary Services* (“Official Gazette of BIH”, No. 46/05).

In general, interim tariffs are set based on costs for the performance of regulated activities and the physical scope of services within the regulated activity, through analysis of data provided in the application for approval of an interim tariff.

Having continued to perform its activities related to the approval of tariffs, by its Decision of January 31, 2006 (“Official Gazette of BIH”, No. 7/06), SERC also set the initial interim tariff for transmission activity in the amount of 1.087 pf/kWh.

Due to several reasons, on March 21, 2006, SERC revised the transmission tariff, separating it into the transmission tariff for customers in BIH (0.980 pf/kWh), transmission tariff for declared electricity import from the countries that within the Inter-TSO compensation mechanism (ITC mechanism) have the so-called *perimeter* country status (countries that are not signatories of ITC agreement) (0.398 pf/kWh), and the transmission tariff for declared electricity export (0,578 pf/kWh).

Pursuant to Article 9.2 of the *Act on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina*, “Aluminij” SC Mostar, “Elektroprivreda” RS JSC Trebinje and the Public Utility Elektroprivreda BIH SC Sarajevo initiated separate proceedings before the Court of Bosnia and Herzegovina by filing lawsuits with regard to the tariff decision.

During the year, in accordance with the obligation imposed by SERC , “Elektroprenos BIH”, JSC Banja Luka, the Company for Transmission of Electric Power, installed missing devices for measuring of capacity, active and reactive energy at the border points between the transmission and distribution networks and generating units, thus creating prerequisites for SERC to establish a two-part tariff in the subsequent tariff proceedings that would be based on the capacity and energy components as provided by the applicable Methodology.

#### ***Procedures for Approval of Tariffs for the Services of Electricity Transmission, ISO operation and Ancillary Services***

In November 2006, the Steering Boards of the “Independent System Operator in BIH” and “Elektroprenos BIH” filed applications for approval of tariffs for operation in 2007. SERC shall determine crucial facts, based on which it shall decide upon the filed applications by holding formal hearings, in which

*“Taking into account the fact that the introduction of VAT and a new manner of tariff pricing caused an increase of electricity price, the House proposes to the Council of Ministers BIH, the Government of the Federation of BIH and the Government of the RS to develop a program for protection of vulnerable categories of the population...”*

*(Excerpts from the Conclusions of the 74th session of the House of Representatives of the Parliamentary Assembly of BIH held on February 14, 2006)*

the presiding officer, the applicant and third parties shall participate, the latter only if they provide evidence of having a special interest in the proceedings.

Intensified SERC activities on assessing formal prerequisites for the review of filed applications are in progress at the time of the creation of this report.

### **3.4 Consumer protection**

Consumer protection becomes an even more important issue of the regulatory policy in all countries in which processes of deregulation and liberalization are ongoing. For that purpose, regulatory bodies are increasingly obligated to review and achieve the basic goals of consumer protection in an open electricity market, protection of power entities and the environment through transparent and impartial resolving of the issues from the field of regulation.

At the beginning of 2006, the State and Entity Regulatory Commission adopted decisions on tariffs for electricity supplied and tariffs for services provided by companies from the power sector that are directly linked to that supply. As on numerous occasions before, in the proceedings for approval of these tariffs, the need for solving problems of vulnerable categories of the population was raised. A contribution to the establishment of a position on such topic was also provided by the State Electricity Regulatory Commission. In letters sent to the Council of Ministers of Bosnia and Herzegovina, the Government of the Federation of BIH and the Government of the Republika Srpska, this Commission expressed, *inter alia*, its readiness to directly participate in the development of a program for protection of this category of the population. The objective of such a program is linked to the creation of conditions that would enable even the poorest categories of the population to meet their obligations, including also their obligation pertaining to the electricity consumed. Unfortunately, this program has not become a reality yet.

We point out that the Directives 2003/54/EC of the European Parliament and Council on the common rules for the internal electricity market introduce an obligation to member countries to undertake relevant measures of end-user protection, especially the socially vulnerable population. The goal of this protection is to eliminate a possibility of disconnection of customers from the power network due to the inability to pay for electricity consumed.

Due to the actualization of this problem, the European Energy Regulators Group for Electricity and Gas (ERREG) provided special support to the establishment of a working group for the

protection of customers in South-East Europe that worked intensively during 2006 on an analysis of the customer protection programs. SERC had also contributed to the performance of this group and to the qualitative approach in handling of this issue. It does not mean that this program will be sufficient by itself and that it will be directly applicable in all environments. The result of the ERGEG activity will be *the Guidelines for Customer Protection* that will have to be concretely developed further in all environments.

We point out that the priority tasks of the Energy Community for the next year also include the adoption of the *Memorandum of Understanding* on Social Issues. This observation is also confirmed by the meeting of the Ministerial Council of the Energy Community held in November 2006, the conclusions for which stated that the ministers “*confirmed their commitment to the social dimension of the energy market reform and adopted a political declaration underlining their readiness to develop this dimension, especially by the adoption of the Memorandum of Understanding.*”

The issue of customer protection, in the regional context, is also one of the activities of the United States Agency for International Development (USAID), which is reflected through the creation of the *Supported Residential Affordability Study*, which will be presented at the Athens Forum in April 2007.

In the past few years electricity prices in Europe constantly increase due to imbalance between supply and demand in the market. It is estimated that the trend of increasing prices will also continue in the forthcoming period. Annex B includes benchmarking data on electricity prices in Europe for households and industrial customers in accordance with the Eurostat methodology, for characteristic days (January 1 and July 1, 2006).

According to the Inception Report of the ERGEG Working Group for Customer Protection in South-East Europe, only Bosnia and Herzegovina and Montenegro have not adopted any program for protection of vulnerable customers.

If forecasts, recommendations and observations from the available studies and documents are consolidated, they lead to the conclusion that vulnerable categories of the population in Bosnia and Herzegovina would be additionally burdened in the forthcoming years. Therefore, at the end of November of 2005, in its initiatives SERC indicated some possible directions of activities in the field of electricity customer protection, as transitory solutions until an overall model of social protection in Bosnia and Herzegovina is drawn up.

In all its activities focusing on the protection of vulnerable electricity customers, SERC will actively cooperate and provide adequate contributions within competences entrusted to SERC by law.

*“Electricity prices in the European Union in July 2006 compared to July 2005 are 7% and 15% higher for households and industrial customers respectively\*.”*  
Eurostat 18/2006

*“Electricity prices in the European Union in January 2006 compared to January 2005 are 5% and 16% higher for households and industrial customers respectively\*.”*  
Eurostat 11/2006

*\* In the Eurostat methodology a few categories of typical customers are defined, and benchmarking data are usually provided for the household category Dc, with annual consumption of 3500 kWh, of which 1300 kWh during night hours, and industrial customer 1e with annual consumption of 2 GWh and maximum capacity of 500 kW.*

### 3.5 Market Opening

#### *Decision on Scope, Conditions and Time Schedule of Electricity Market Opening in Bosnia and Herzegovina*

The Act on Transmission of Electric Power, Regulator, and System Operator in Bosnia and Herzegovina emphasizes its intention to “enable and expedite the creation of the electricity market in Bosnia and Herzegovina and the regional electricity market”. The introduction of competition in the energy market and the liberalization of the same market require the undertaking of major structural and regulatory reforms and the preparation of adequate regulation.

Some fundamental conditions that enable customers to freely choose their supplier, and to suppliers to freely provide services to their customers, are: choosing and creating an efficient model of an effective and competitive internal market, market rules, grid code, metering rules, setting and publishing network fees, and determining all functions of the Independent System Operator and Market Operator. Some of the conditions are realized or are about to be realized in Bosnia and Herzegovina.

After the signing of the Treaty Establishing the Energy Community, in June 2006, SERC officially commenced the realization of the overall competitive market development obligations of Bosnia and Herzegovina by the adoption of the Decision on Scope, Conditions and Time Schedule of Electricity Market Opening in Bosnia and Herzegovina.

This Decision conditions the acquisition of the status of the eligible customer that is entitled to choose its supplier with a specified level of annual consumption of electricity, along with other conditions set by the relevant regulatory commissions.

In this context, in September 2006, the Electricity Regulatory Commissions in the Federation of BIH and the Republika Srpska adopted separate acts regulating the conditions, criteria and procedures for the acquiring of the eligible customer status, the rights and the obligations of eligible customer and suppliers, the gradual time schedule of market opening in accordance with the level of the realized annual electricity consumption.

End-customers may acquire the eligible customer status in accordance with the following time schedule:

- customers with annual consumption of electricity higher than 10 GWh as of January 1, 2007, creating the level of market opening of 33%,
- all customers, except households, as of January 1, 2008 (market opening of 57,5%),
- all customers as of January 1, 2015.

In accordance with the adopted laws and international

*A relatively high percentage of market opening in Bosnia and Herzegovina of 33% in the first year is a result of the existence of dominant customer - “Aluminij” SC Mostar, whose consumption comprises around 20% of total consumption in BIH.*

obligations, as of January 1, 2007 Bosnia and Herzegovina is joining the other countries in the region that have already opened their electricity markets.

The transition period of market opening, introduced by entity regulators, during which all eligible customers are entitled to choose the manner of supply will last until January 1, 2012.

The creation of the single market will be significantly supported by mutual standardization and compatibility of conditions and criteria that are to be implemented by the competent regulatory commissions as binding in the process of the market liberalization. Therefore, SERC will continue to monitor this process and analyze all its impacts.

### **3.6 Grid Code and Market Rules**

SERC carefully monitored developments and progress of activities initiated by ISO BIH at the end of November pertaining to the creation of key documents for the operation of the power system and electricity market in BIH – the Grid Code and Market Rules.

The Grid Code defines the manner of planning and development of the transmission system, conditions for connection, the manner of operational planning and operational activities, measures in extraordinary situations and other necessary technical measures for qualitative and reliable operation of the transmission system. This document defines the relationships in the power sector and increases the quality of services provided by individual market participants.

On the other hand, the Market Rules define the relationships between the ISO BIH and licensed participants in the electricity market by defining the participants themselves, the scope of their activities and commercial relationships in the electricity market. The Market Rules also define how the ISO BIH will fulfill its obligations related to management and operation of the balancing mechanism, management of contracts for purchase of ancillary services, provision of data for power transaction settlements (commercial metering), congestion management, allocation of fees for unplanned deviations with neighboring control zones, collection and delivery of elements for invoicing for ancillary services and balancing, etc.

Considering the current situation in Bosnia and Herzegovina, the Market Rules should enable transition of the current processes and technical equipment of all market participants towards a more developed market design, in accordance with technical possibilities.

SERC approved both documents in its session held on June 8, 2006.

### 3.7 Other Issues

Analyzing the current situation and the expressed need to regulate problematic issues, SERC initiated the creation of the Rules of Connection which shall define the connection of new users to the transmission network in a uniform and clear manner. The Rules are currently in a preliminary draft form, and further activities on the collection of public comments through open public hearings are expected.

Through appropriate licensing conditions SERC worked out in detail the activities on the adoption of *the Rule of Safety Zones* (envisaged by the Act on Transmission of Electric Power, Regulator, and System Operator in BIH). This document is in the development stage, and its adoption is expected to regulate the protection of electricity facilities as well as the environment and the population from impacts of the construction and utilization of power facilities.

Pursuant to the law and the previously mentioned Grid Code, the ISO BIH developed and submitted to SERC *the Indicative Generation Development Plan* for the period from 2007 to 2016, based on the available data in the power sector. It must be stressed that the data made available to the ISO BIH were insufficient for a more serious and ambitious Indicative Development Plan. Since BIH does not currently have a long-term energy development strategy, additional efforts of all key entities in the power sector and those responsible for planning activities in Bosnia and Herzegovina, the Federation of BIH and the Republika Srpska, will be required in the forthcoming period in order to make the next Indicative Plan for the period from 2008 to 2017 as qualitative and realistic as possible. Participation of expert and scientific institutions in the creation of development policies and goals in BIH will also be necessary. This is all necessary because this plan is used as the grounds for development of a Long-term Development Plan for the Transmission Network based on which concrete annual and multi-year investment plans are created.

At this point it should be noted that in November 2006, a one-year activity on the development of *the Study on the Energy Sector in BIH* was initiated. Based on historical and empirical indicators, starting from 1990, and scientific findings, this Study will be a good basis for the projection of the energy balance by 2020. The Study will also include the analysis of all power sub-sectors, with an estimate of required investments. The Study is also expected to define recommendations for efficient integration of BIH into the EU energy sector. The coordinator of these activities is in the BIH Ministry of Foreign Trade and Economic Relations.

SERC suggests that the system of long-term planning be also worked out in more detail by legal regulations.

## 4. INTERNATIONAL ACTIVITIES

### 4.1 Energy Community



*The Presidency of Bosnia and Herzegovina adopted the Decision on Ratification of the Treaty Establishing the Energy Community on July 27, 2006 (“Official Gazette of BiH – International contracts” No. 9/06).*

*Mr. José Manuel Barroso, Chairman of the European Commission: “We expand the EU energy market beyond our borders through the Energy Community... Interest in this Community expressed by so many countries from Norway to Turkey is welcome... It is my intention to present energy as the main issue at all EU summits with third countries during 2007.”*

*Brussels, November 20, 2006*

*Mr. Andris Piebalgs, EU Commissioner for energy issues, announcing the most important EU energy package: “The internal energy market should develop progressively to include our neighbors.”*

*Brussels, September 22, 2006*

The Treaty Establishing the Energy Community, signed in Athens on October 25, 2005, provides for the creation of the biggest internal market in the world for electricity and gas, with effective participation of 34 parties: 27 members of the European Union (including Romania and Bulgaria) and Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia and UNMIK Kosovo.

The signing of the Treaty is a result of the Athens Process, within which in 2002 and 2003 the Memoranda on Understanding were signed to establish the regional market in electricity and natural gas in South East Europe. The final goal is to gradually integrate this market into the EU internal energy market.

**The Treaty Establishing the Energy Community entered into force on July 1, 2006.** Prior to July 1, 2006, the European Union ratified and deposited the Treaty, and the same was done by the following member states from South-East Europe: the Republic of Albania, the Republic of Bulgaria, the Republic of Macedonia, Romania and the Republic of Croatia as well as UNMIK – Kosovo. The political will of the signatory countries expressed by signing the memoranda and Treaty becomes a legal obligation through the ratification of the Treaty and its entry into force.

The main goals of the Treaty are the creation of a stable and single regulatory framework and market space that ensures reliable energy supply and attracts investments in the electricity and gas sectors. In addition, it assumes the development of alternative sources of gas supply and improvement of the condition of the environment, with the implementation of energy efficiency and the utilization of renewable sources.

By signing the Treaty, the contracting parties from the region are obligated to establish a common electricity and gas market which will operate in accordance with the standards of EU energy market with which it will integrate. It is to be achieved by gradual transposition of the EU *Acquis Communautaire* pertaining to energy, environment and competition, which means the implementation of the relevant EU directives and regulations pertaining to energy and environment.

By participation in this process, Bosnia and Herzegovina confirms its commitment to the reform of the energy sector, liberalization of the energy market and harmonization of its policy with EU members.

It is important to note that the following countries are in the process of joining the Energy Community: Moldova, Norway, Turkey and Ukraine, which, at the time of the creation of this report, have observer status.

## ***Acquis communautaire* taken over by signing of the Treaty**

### *Acquis on Energy*

- Directive 2003/54/EC of the European Parliament and of the Council of June 26, 2003 concerning common rules for the internal electricity market
- Directive 2003/55/EC of the European Parliament and of the Council of June 26, 2003 concerning common rules for the internal natural gas market
- Regulation 1228/2003/EC of the European Parliament and of the Council of June 26, 2005 on conditions for access to the network for cross-border electricity trade

The deadline for implementation of these directives is July 1, 2007, ensuring that all customers but households have the eligible customer status by January 1, 2008 at the latest, and as of January 1, 2015 all customers.

### *Acquis on Environment*

- European Community Council Directive 85/337/EEC of June 27, 1985 on assessment of the effects of certain public and private projects on environment, with subsequent amendments of March 3, 1997 (Directive 97/11/EC) and Directive 2003/35/EC of the European Parliament and the Council of May 26, 2003; implementation after entry into force of the Treaty
- Directive 2005/53 of the European Parliament and of the Council of July 6, 2005, amending Directive 199/32 of April 26, 1999 relating to the reduction of sulfur content of certain liquid fuels; implementation by December 31, 2011.
- Directive 2001/80/EC of the European Parliament and of the Council of October 23, 2001 on limitation of emissions of certain air pollutants by large combustion plants ( $\geq 50\text{MW}$ ); implementation by December 31, 2017.
- Article 4(2) of the European Community Council Directive 79/409/EEC of April 2, 1979 on conservation of wild birds; implementation after entry into force of the Treaty
- Endeavour to accede to the Kyoto Protocol and implementation of the Directive 96/61/EC of September 24, 1996 on pollution prevention and control

### *Acquis on Competition*

The following activities are not allowed and shall be assessed pursuant to Article 81, 82 and 87 of the Treaty Establishing the Energy Community:

- Prevention, restriction or distortion of competition,
- Abuse of dominant position,
- Any public aid which distorts or threatens to distort competition.

In particular, with regard to public undertakings and undertakings to which special rights have been granted, six months following the date of entry into force of the Treaty, provisions of the Treaty Establishing the Energy Community, in particular Article 86, shall be upheld.

### *Acquis on Renewable Energy Sources*

- Directive 2001/77/EC of the European Parliament and of the Council of September 27, 2001, on promotion of electricity generated by using renewable sources in the internal market
- Directive 2003/30/EC of the European Parliament and of the Council of May 8, 2003 on promotion of use of bio-fuels or other renewable fuels in transportation

The Energy Community members shall prepare a plan for implementation of the *acquis* on renewable energy sources by July 1, 2007.

In accordance with the interest expressed, the following countries participate in work of the Energy Community bodies: Austria, Czech Republic, Greece, Italy, Cyprus, Hungary, Germany, Slovakia, Slovenia and the United Kingdom (of Great Britain and Northern Ireland). As of January 1, 2007 these countries, the so-called Participants from the European Union, as well as Bulgaria and Romania, directly participate in the work of the Energy Community bodies, and in the voting procedure their positions are expressed by votes of the European Commission.

*To ensure an adequate process of establishing and functioning of the Energy Community, the Treaty establishes the Ministerial Council, the Permanent High Level Group, the Regulatory Board, the Electricity Forum (Athens Forum), the Gas Forum and the Secretariat.*



The Ministerial Council, as the highest body of the Energy Community, ensures the achievement of goals that are determined by the Treaty Establishing the Energy Community. The Ministerial Council consists of one representative of each Contracting Party and two representatives of the European Union.

At the meeting held in November 2006, the Ministerial Council reviewed the state of play of the Treaty implementation. In this regard, the Ministerial Council “*expresses its appreciations to the proposed Road Maps<sup>2</sup> on the energy market reforms for all Contracting Parties as a basis for further steps*”. The importance of the timely fulfillment of obligations and assistance in the monitoring process for following the obligations under the Treaty and the Road Maps was strongly underlined.

The work of the State Electricity Regulatory Commission in this field was carried out with the good cooperation of the Ministry of Foreign Affairs and Economic Relations of Bosnia and Herzegovina, then, through participation in the achievement of different projects supporting the establishment of the Energy Community,

<sup>2</sup> The Road Map of Bosnia and Herzegovina for Electricity and Gas is available at the websites of the Energy Community ([www.energy-community.org](http://www.energy-community.org)) and SERC ([www.derk.ba](http://www.derk.ba)).



and in particular, through work in different groups which include energy regulators from the region and the European Union.

The Energy Community Regulatory Board (ECRB), seated in Athens, is comprised of representatives of the regional state regulatory bodies, and the European Union is represented by the European Commission, with the assistance of one regulator of the EU participants and one representative of the European Energy Regulators Group for Electricity and Gas (ERREG). ECRB considers the issues of regulatory cooperation and may become a body issuing regional regulatory decisions and serving as a dispute resolution institution. The Regulatory Board has a key role in the expanded market operation. According to the opinion of the European Commission, this supranational body may become a role model for other parts of the world.

The formal establishment of the Regulatory Board of the Energy Community, in which Bosnia and Herzegovina was represented by the State Electricity Regulatory Commission, took place on December 11, 2006 in Athens.

According to the ECRB Indicative Work Plan for next year, the activities will be focused on the issues relating to cross-border electricity and gas trade and customer protection.

## 4.2 ERRA



*The goals of ERRA are improvement of energy regulation in the member countries, development of independent and stable energy regulators, improvement of cooperation among regulators, exchange of information, research and experience among the members, better access to energy regulatory information and sharing of experience around the world.*

*The Energy Regulators Regional Association (ERRA) is an organization composed of independent energy regulatory bodies in Central and East Europe and newly independent states in the region. ERRA has 22 full and 4 associate members, all established at the national level. National Association of Regulatory Utility Commissioners, USA is ERRA affiliate member.*



The State Electricity Regulatory Commission is a full ERA member as of May 19, 2004, since SERC actively participates in the work of the General Assembly and Investment Conference, as well as in the work of standing committees and working groups with particular emphasis on the Standing Licensing/ Competition Committee, Standing Tariff/Pricing Committee, Legal Regulation Working Group and EU Integration Working Group.

By providing the relevant information on the power sector of Bosnia and Herzegovina, in particular on the applicable regulatory practice, the State Electricity Regulatory Commission fulfills its role acquired by full ERA membership.

### 4.3 CEER



SERC participated in the work of the *Council of European Energy Regulators* (CEER) through the activities of the *South East Europe Energy Regulation Working Group* – (SEE WG).

In 2006 the most important results of this Working Group include, *inter alia*:

- *The Survey of Capacity Support Mechanisms in the Energy Community*), realized with support of the World Bank and presented at the 8<sup>th</sup> Athens Forum (June 2006),
- *Tariffs Benchmarking in the Countries of South-East Europe*. This activity coincides with the realization of the task *Harmonization of tariffs in the region*, which is realized through the USAID *South East Europe Regional Energy Market Support Project* – (*SEE REMS Project*). The results of the Tariff Benchmarking were presented at the 8<sup>th</sup> and 9<sup>th</sup> Athens Forum (June and October 2006).

### 4.4 ERGEG



The State Electricity Regulatory Commission follows the work of the *European Energy Regulators Group for Electricity and Gas* (ERGEG).

Membership in ERGEG is open to EU regulators, and observer status may be acquired by regulatory authorities from the member countries of the European economic area.

ERGEG assists in consistent implementation of the relevant European directives and rules on cross-border trade and enables a transparent platform for mutual cooperation of national energy regulators, as well as cooperation of regulatory authorities with the European Commission.

The work of ERGEG, a body established on December 17, 2003, is open to all market participants, in particular to consumers and end-customers.

In 2006, SERC was particularly proactive in the work of the ERGEG Group for Customer Protection in South-East Europe.

#### **4.5 International Energy Regulation Network - IERN**



*International Energy Regulation Network – (IERN)* is a web platform ([www.iern.net](http://www.iern.net)) that aims to facilitate information exchange on electricity and natural gas market regulation, to the benefit of regulators, but also of other interested users. Through IERN, regulators and other energy market stakeholders exchange information about themselves, the sectors they are involved in and the way these sectors are regulated.

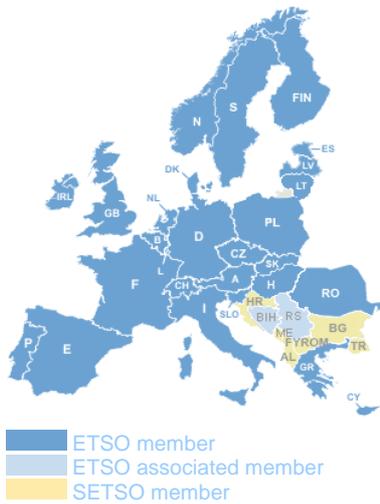
IERN is also a place where regulators can exchange information about training courses, conferences and online resources on energy regulation. Longer term, IERN aims to become not only a vector for exchanging existing information, but also a producer of in-house working papers on best practices.

In order to guarantee the quality of the data to be found in the website, IERN is supported by the main regional associations of regulators worldwide, individual energy regulators and by some international institutions. SERC directly participated in the creation of the Network, which made the data on the power sector and regulatory practice in BIH accessible in this manner.

The idea for creation of IERN was initiated at the 2<sup>nd</sup> World Forum on Energy Regulation held in October 2003 in Rome, and the Network was inaugurated at the 3<sup>rd</sup> World Forum on Energy Regulation held in October 2006 in Washington.

#### **4.6 Inter-TSO Compensation Mechanism (ITC Mechanism)**

The mechanism of inter-TSO compensation (ITC mechanism) has been implemented in Western Europe since 2002, and in South East Europe since 2004, under the previously-used term CBT mechanism (cross-border trade mechanism). The ITC mechanism is a method of compensation for costs on the national transmission network caused by electricity flows due to cross-border trade. In this manner, an important platform has been created that enables electricity trade in the region of South East Europe, as well as between the region and the European Union.



*The ITC mechanism is implemented by most of the countries of South East Europe through their system operators: Albania (OST), Bosnia and Herzegovina (ISO BIH), Bulgaria (NEK), Montenegro (EPCG), Romania (Transelectrica), Macedonia (MEPSO) and Serbia (EMS).*

It is in the jurisdiction of the regulator to approve the implementation of the mechanism, which involves the implementation of Regulation EC 1228/2003 of the European Parliament and of the Council of June 26, 2003 on conditions for access to the network for cross-border electricity trade.

The organization of the South East Transmission System Operators (SETSO), in which Bosnia and Herzegovina is represented by the Independent System Operator in BIH, continued to implement the ITC mechanism during 2006. Due to its geographic position as a transit country in the region and the structure of the transmission network, Bosnia and Herzegovina, after receiving revenue of approximately 1.2 million EUR in 2004, realized revenue of 4.4 million EUR in 2005. The realization of revenue by Bosnia and Herzegovina, based on the implementation of the ITC mechanism, in the first ten months in 2006, amounts 2.6 million EUR.

In November 2006, the Independent System Operator in BIH, as a representative of Bosnia and Herzegovina, became an associate member of the Organization of European Transmission System Operators (ETSO).

In 2007, the merger of ITC mechanism of SETSO and ETSO countries, i.e. funds, is planned, but due to still undefined ITC model to be implemented, at the time of the creation of this report the date of the merger remains unknown. At a special ETSO Assembly meeting held in December 2006, it was decided to continue in January 2007 with the implementation of the same model as in 2006, with a possibility of a two-month extension, in order to agree on an acceptable model for the forthcoming period for ETSO countries, which would also be joined by SETSO countries including Croatia which has not participated in the ITC mechanism so far.

During 2006, in the dry run period, a uniform *mechanism of coordinated explicit capacity auctions* in South-East Europe was carried out aimed at overcoming the problem of interconnector congestion. In one of the 9<sup>th</sup> Athens Forum conclusions (October 2006), it was emphasized that continuation of the dry run of this mechanism in 2007 is of utmost importance. The Forum stressed the need to elaborate proposals for allocation of potential coordinated auction revenues and supported the proposal to form a single regional Auction Office, while the European Bank for Reconstruction and Development pointed out that it is considering financing the establishment of such an office.

Close and continuous cooperation between the regional system operators and regulators is required in order to treat the issues of ITC mechanism and coordinated auctions in an appropriate manner.

## 4.7 UCTE



*UCTE, December, 2006*

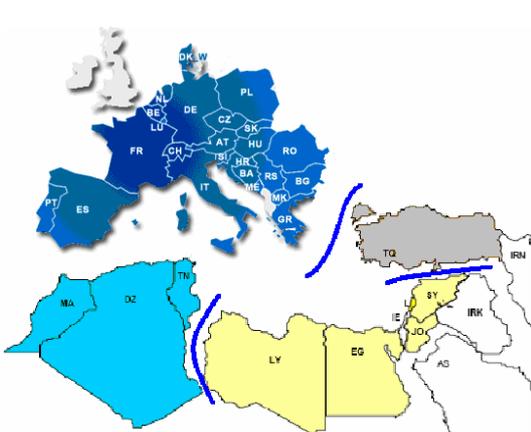
*The UCTE member from our country is the Independent System Operator in BIH.*

The Union for the Coordination of Transmission of Electricity (UCTE) coordinates the operation and development of the electricity transmission network from Portugal to Poland and from the Netherlands to Greece. UCTE, an association of transmission system operators in 23 European countries provides a reliable market platform for all participants in the internal electricity market and beyond, i.e., provides security of electricity supply for more than 430 million people in one of the biggest electricity synchronous interconnections world-wide.

After the European electricity market liberalization, which significantly increased cross-border flows and unbundling of activities in the sector, there is a need for European standards of security and reliability to become applicable for all interconnected system operators, and at a later stage, for all network users.

As pointed out in previous annual reports, on October 10, 2004, reconnection of the former first and the second UCTE synchronous zones was completed. Reconnection has had important technical and commercial effects, contributing to increased operational safety, frequency stability and reliability, improvement of voltage profile and quality of electricity supply as well as to the scope of electricity trade. The UCTE continues to carefully monitor the system stability of the reconnected network, since experience from the reconnection process in South East Europe will be useful for further development of the UCTE synchronous area.

UCTE is working on studies on the possible extension of its synchronous area, which, in the first place, refers to the area of Turkey, then to interconnection of Maghreb countries (that are already in the synchronous operation with UCTE), with Libya and East Mediterranean, and to the IPS/UPS system which includes the Baltic countries (Latvia, Lithuania, Estonia) and Azerbaijan, Belorussia, Georgia, Armenia, Kazakhstan, Kirgizstan, Moldova, Russia, Tajikistan, Ukraine and Uzbekistan.



*UCTE, expansion plans: Turkey and the Mediterranean ring (left) and integration with IPS/UPS (right)*

## 5. AUDITING REPORT

Pursuant to the Act on Transmission, the State Electricity Regulatory Commission is obligated to prepare accounting reports in accordance with international accounting standards, including the auditing performed by an independent auditor, and publication of the report with a view to provide information to interested persons and a wider public.

*“In our opinion, the financial reports realistically and objectively show the financial standing of the State Electricity Regulatory Commission (SERC) in all relevant aspects on December 31, 2005, business results and cash flows for the period of time concluded at that point, in accordance with the International Financial Reporting Standards (“IFRS”).*  
(“REVIK”, March 17, 2006)

Acting in accordance with the provision of the Law on Public Procurement, SERC concluded a Contract on performing auditing services with the Auditing, Accounting and Consulting Company “REVIK” Ltd. Sarajevo, which conducted the audit in accordance with international auditing standards applicable to auditing of financial reports and submitted a Report on the completed audit.

Through the conducted audit the independent auditor, evaluating the overall presentation of the financial reports, recognizing and measuring transactions and business occurrences, determined that SERC financial reports for 2005 objectively and authentically present the state of play of assets, liabilities, capital and financial results of performance.

Pursuant to the Act on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina and international accounting standards, the Report was published in the “Official Gazette of BIH”, number 33/06.

## 6. MAIN ACTIVITIES IN 2007

*Additional information on the operation and procedures conducted by the State Electricity Regulatory Commission may be obtained on the internet at [www.derk.ba](http://www.derk.ba), or by phone on 035 302060 and 302070, fax 035 302077, e-mail [info@derk.ba](mailto:info@derk.ba) or at the seat of the SERC in Tuzla, M. Jovanovića Street 4/II.*

The State Electricity Regulatory Commission will continue its activities on the creation of conditions for free trade and unhindered electricity supply in accordance with the previously defined quality standard to the benefit of the citizens of Bosnia and Herzegovina, and in compliance with the relevant European directives and the rules of internal electricity market.

Through its activities SERC is focused on:

- Licensing activities within its jurisdiction,
- Monitoring licensed entities, in particular analysis of the state of play with regard to measuring energy values,
- Design of a single electricity market,
- Issuance of tariffs in its jurisdiction,
- Social aspect within the field of the regulatory practice,
- Monitoring the implementation of the ITC mechanism and establishment of the mechanism for coordinated explicit capacity auctions,
- International activities pertaining to regulation of the electricity market,
- Sharing information on regulatory practice with the regulated entities and the public.

The most important activities in the forthcoming year include conducting of the proceedings for issuance of ('permanent') licenses and approval of tariffs for the transmission and ISO activities.

While conducting its activities, SERC shall take into account, within the competencies entrusted to SERC by law, customer protection (see Section 3.4 of this report) and provide its full contribution to finding the best feasible solutions in the forthcoming period.

SERC emphasizes that the harmonization of secondary legislation and efficient coordination among the authorities that participate in its development and creation are in the interest of all key entities for implementing power sector reform in Bosnia and Herzegovina, the goal being the creation of a clear and reliable legislative framework based on the European directives and rules of internal electricity market.

With regard to international plans, SERC shall continue its work in international bodies and carefully monitor their activities. Special attention will be given to the content of the most ambitious proposal of measures so far for the new European energy policy (*EU Strategic Energy Review*), expected on January 10, 2007.

*The State Electricity Regulatory Commission expresses gratitude to USAID and the law firm Pierce Atwood.*

## ATTACHMENT A.1: Basic Data on the Power System of Bosnia and Herzegovina

### Major generation facilities

(used ISO BIH data)

Hydro power plants	Capacity of power unit (MW)	Total installed capacity (MW)
Trebinje I	3×60	180
Trebinje II	8	8
Dubrovnik (BIH+Hr.)	2×105	210
Čapljina	2×210	420
Rama	2×80	160
Jablanica	2×25+4×30	170
Grabovica	2×58,5	117
Salakovac	3×70	210
Mostar	3×25	75
Jajce I	2×30	60
Jajce II	3×10	30
Bočac	2×55	110
Višegrad	3×105	315
Peć-Mlini	2×15	30

Thermal power plants	Installed capacity (MW)	Available capacity (MW)
TUZLA	779	709
G1	32	29
G2	32	29
G3	100	91
G4	200	182
G5	200	180
G6	215	198
KAKANJ	578	514
G1, G2, G3 i G4	4×32	4×29
G5	110	100
G6	110	90
G7	230	208
GACKO	300	276
UGLJEVIK	300	279

### Basic data on the transmission system

*Transmission lines*

No	Nominal voltage of transmission lines	Length (km)
1	400 kV	992
2	220 kV	1691
3	110 kV	3649
4	110 kV – cable line	31

*interconnectors*

No	Nominal voltage of transmission lines	No. of interconnections
1	400 kV	4
2	220 kV	8
3	110 kV	17
	Total	29

*Transmission sub-stations*

No	Type of sub-station	No. of substations	Installed capacity (MVA)
1	TS 400/x kV	8	5861,5
2	TS 220/x kV	7	1277,0
3	TS 110/x kV	119	4873,5

*transmission transformers*

No	Transmission ratio of transformers	No. of transformers	Installed capacity (MVA)
1	TR 400/x kV	14	4900
2	TR 220/x kV	12	1800
3	TR 110/x kV	205	5196

**ATTACHMENT A.2: Basic Power Indicators**

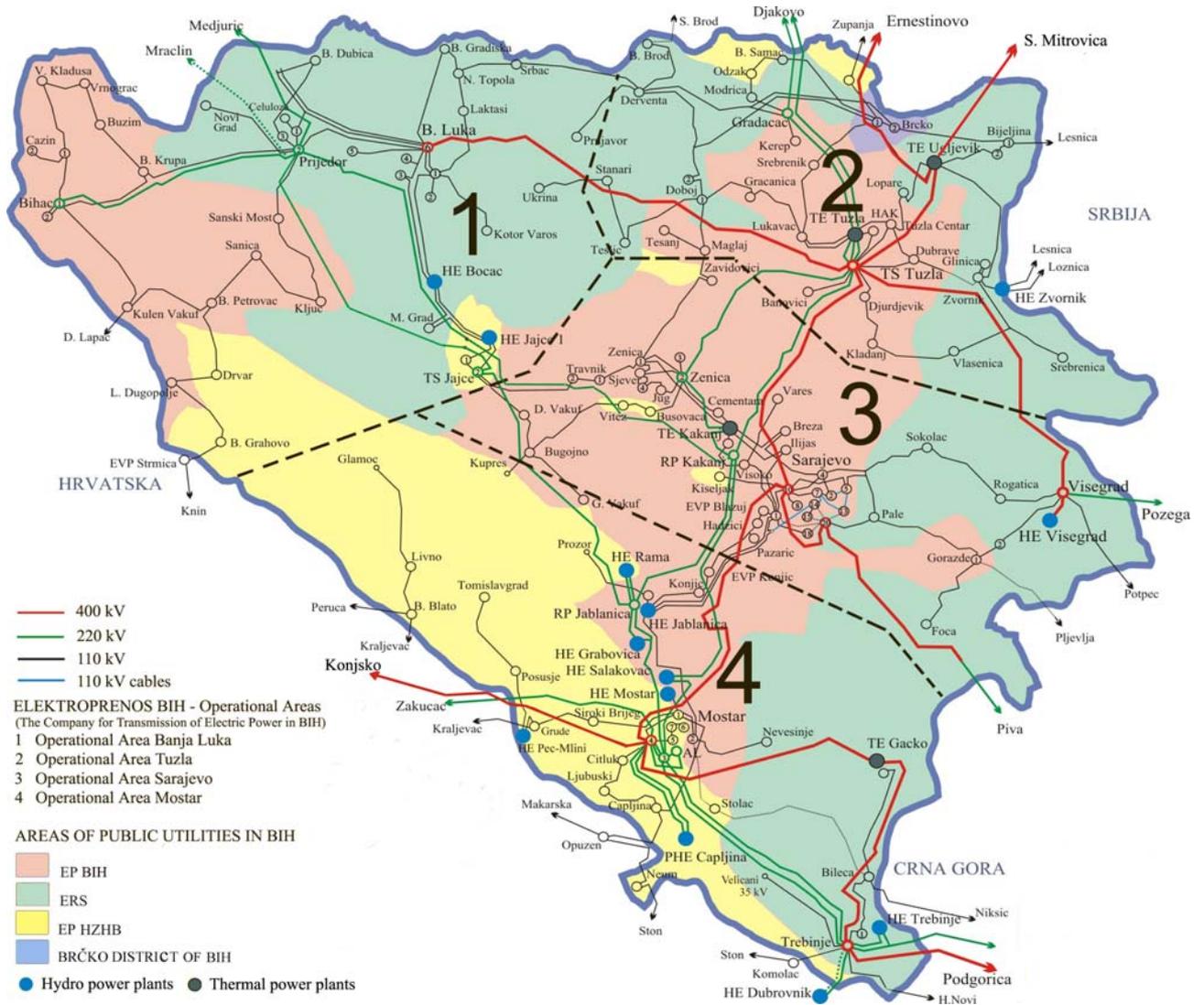
(GWh)

<b>Estimate for 2006</b>	EP BIH	ERS	EP HZHB	Brčko District	BIH
Generation	6460.00	5405.00	1884.00		<b>13749.00</b>
Gen. in hydro power plants	1505.00	2470.00	1884.00		5859.00
Gen. in thermal power plants	4870.00	2860.00			7730.00
Gen. in small and industrial PPs	85.00	75.00			160.00
Consumption	4250.00	3324.00	3287.00	270.00	<b>11521.00</b>
Distribution consumption	3830.00	3054.00	1065.00	270.00	8219.00
Transmission losses					390.00
Large consumers	420.00	220.00	2200.00		2840.00
Pumping and mines consumption		50.00	22.00		72.00

<b>Realization in 2005</b>	EP BIH	ERS	EP HZHB	Brčko District	BIH
Generation	5778.53	5200.64	1768.69		<b>12747.86</b>
Gen. in hydro power plants	1477.69	2747.10	1768.69		5993.47
Gen. in thermal power plants	4218.88	2384.44			6603.32
Gen. in small and industrial PPs	81.97	69.10			151.07
Consumption	4190.57	3458.33	3469.83	252.47	<b>11371.20</b>
Distribution consumption	3641.86	3254.65	1232.47	252.47	8128.98
Transmission losses	163.78	136.47	83.72		383.97
Large consumers	384.93	20.77	2133.31		2539.01
Pumping and mines consumption		46.43	20.33		66.76

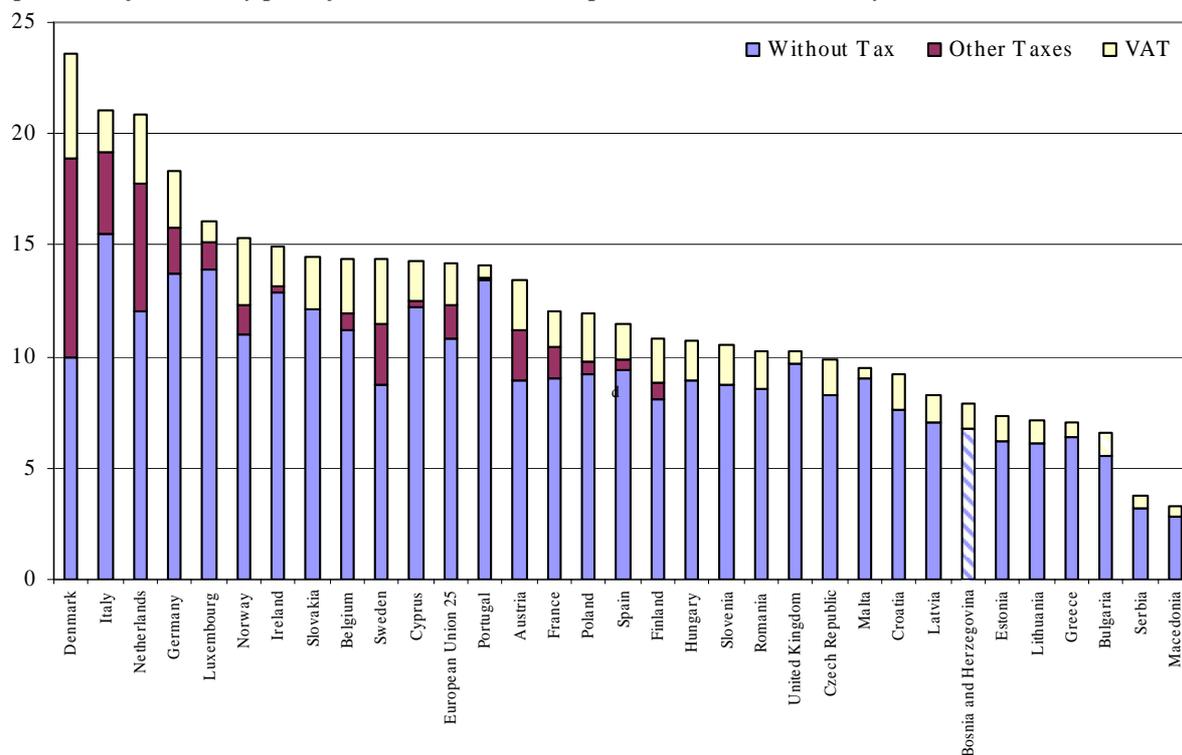
<b>Realization in 2004</b>	EP BIH	ERS	EP HZHB	Brčko District	BIH
Generation	6113.02	4960.19	1669.49		<b>12742.70</b>
Gen. in hydro power plants	1610.52	2699.14	1669.49		5979.15
Gen. in thermal power plants	4435.17	2189.87			6625.04
Gen. in small and industrial PPs	67.33	71.18			138.51
Consumption	3847.00	3291.60	3351.78	229.58	<b>10719.96</b>
Distribution consumption	3529.50	3117.7	1463.17	229.58	8339.95
Transmission losses	143.33	119.17	59.17		321.67
Large consumers	174.17		1829.44		2003.61

**ATTACHMENT A.3: Map of the Power System of Bosnia and Herzegovina with Operational Areas of “Elektroprenos BIH” (the Company for Transmission of Electric Power in BIH) and Areas of Public Utilities**

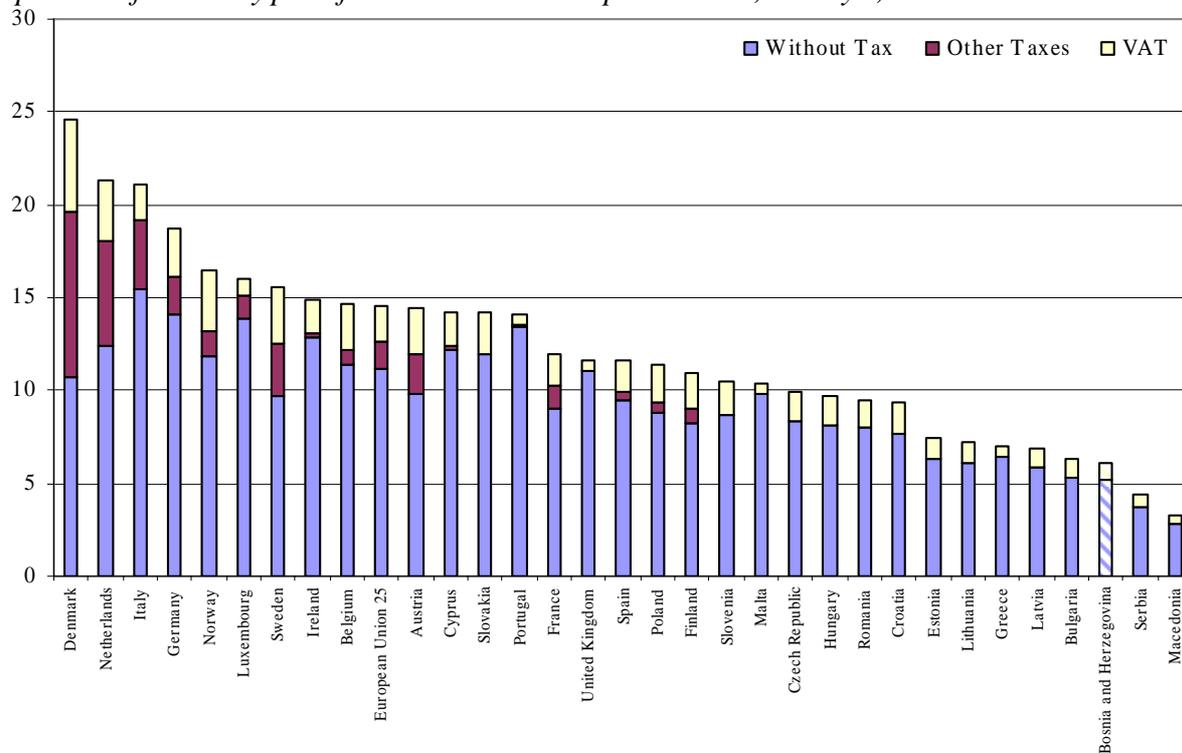


## ATTACHMENT B: Benchmarking Data on Electricity Prices for Households and Industrial Consumers<sup>3</sup>

Composition of electricity price for household Dc in € per 100 kWh, on January 1, 2006 Source: Eurostat11/2006



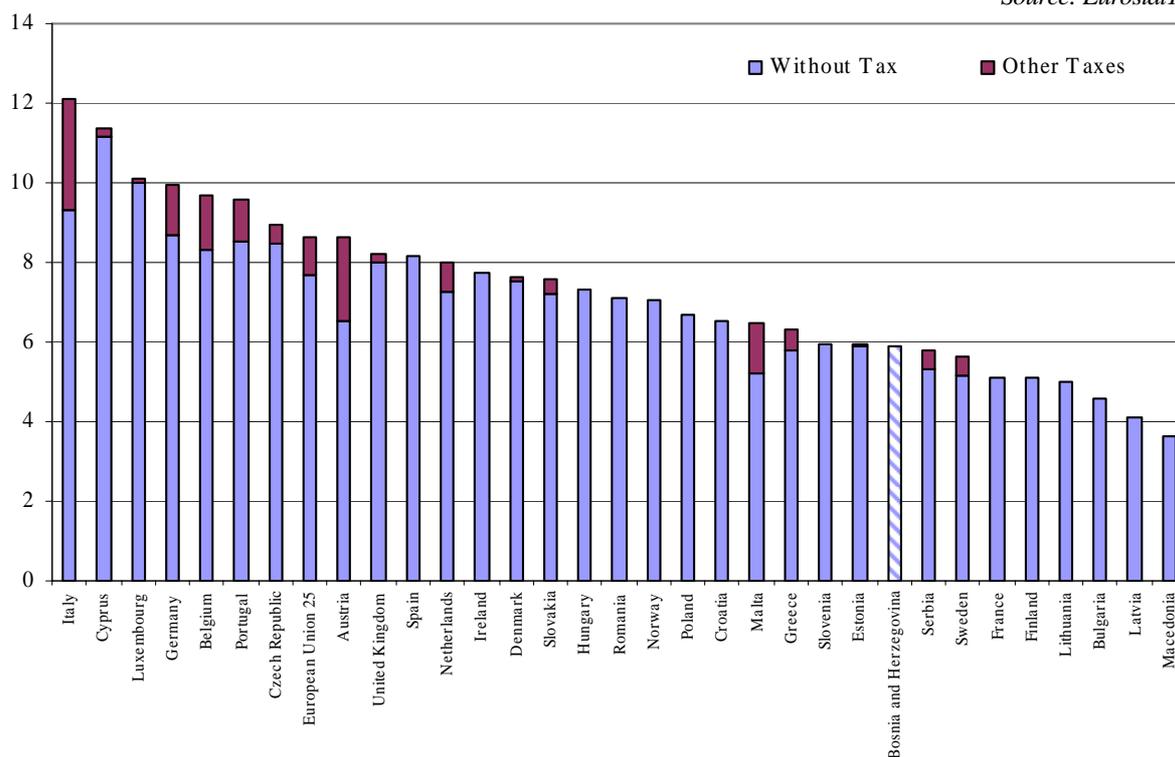
Composition of electricity price for household Dc in € per 100 kWh, on July 1, 2006 Source: Eurostat18/2006



<sup>3</sup> According to the Eurostat methodology – In the Eurostat methodology a few categories of typical customers are defined, and benchmarking data are usually provided for the household category Dc, with annual consumption of 3500 kWh, of which 1300 kWh during night hours, and industrial customer Ie with annual consumption of 2 GWh and maximum capacity of 500 kW.

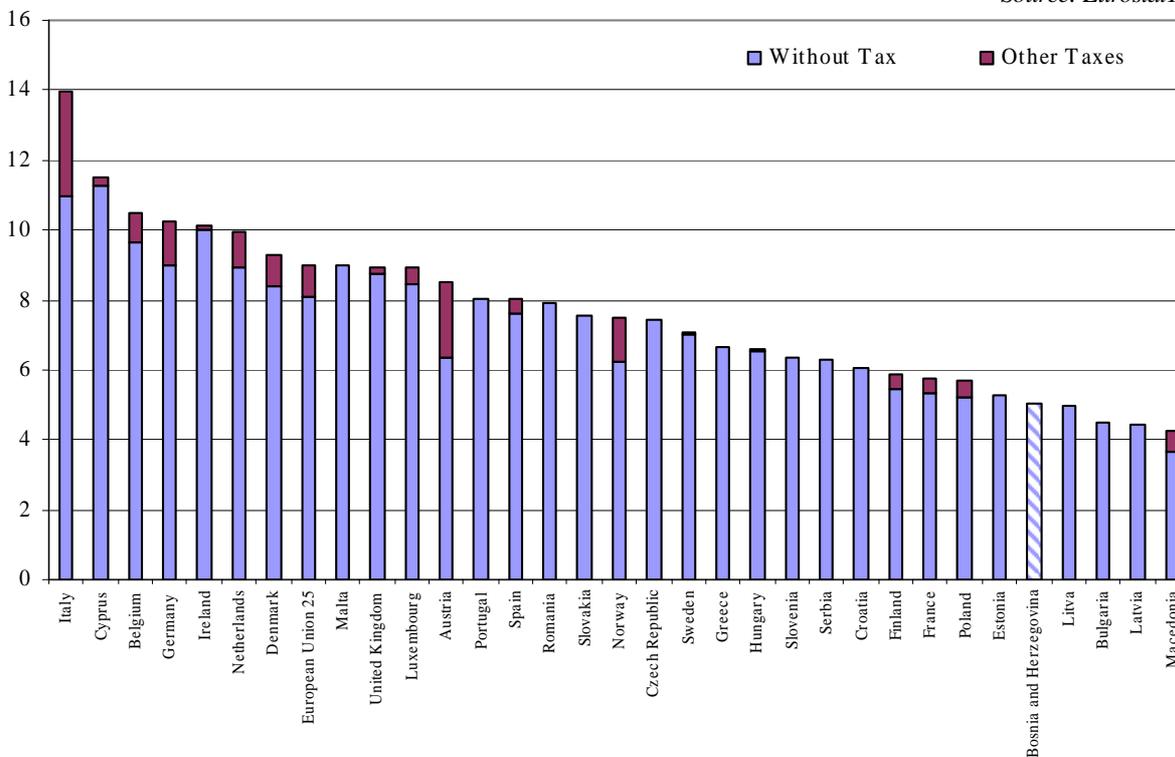
Composition of electricity price<sup>4</sup> for industrial customer Ie in € per 100 kWh, on January 1, 2006

Source: Eurostat11/2006



Composition of electricity price for industrial customer Ie in € per 100 kWh, on July 1, 2006

Source: Eurostat18/2006



<sup>4</sup> The charts for industrial consumers do not include VAT as it may be deductible.

**ATTACHMENT C: Reflections from the Parliamentary Assembly of Bosnia and Herzegovina**  
*(Excerpts from discussions<sup>5</sup> on the Report on Activities of the State Electricity Regulatory Commission in 2005)*

*“In many elements SERC competencies are wider than the competencies of the Council of Ministers, and this requires a serious discussion...congratulations (to SERC) for a lot of issues which it has done positively...I want it to become an issue why electricity prices increase when the goal was the rationalization and efficiency of the system.”(Martin Raguž)*

*“We said to SERC representatives to state, in our further joint work, what prevents us from having cheaper electricity.” (Selim Bešliagić)*

*“I think that we have done relatively enough, there are also some objective problems in our whole structure, from the entity one and higher, they did not write it down in the report in order to avoid political connotations.” (Muhamed Morankić)*

*“They have completed the task given to them when it comes to the organization and unbundling of electricity transmission and generation.” (Ruža Sopta)*

*“My suggestion is to adopt this report because it is sufficiently qualitative and good.” (Izet Hadžić)*

*“I think that this is an example of good and correct cooperation with the House of Representatives of the Parliamentary Assembly of BIH.” (Nikola Špirić, President of the House of Representatives talking about cooperation of the House and SERC)*

*“What is it in the SERC report that is not good, and that has not been done properly by the Commission? I would like to know concretely what it is.” (Miloš Jovanović)*

*“We have expected that by the establishment of the State Electricity Regulatory Commission somehow we have control of the BIH area, to make it in a way synchronous and to have a more uniform transmission company since we entered the west European electricity transmission system...So even today we have e.g. the “Aluminij” company which pays 50% higher electricity prices compared to the previous year when we did not have the state agency, when we did not have the transmission company and when there was no cooperation among the public utilities...” (Ivo Lozančić)*

*“The commission assessed the report as detailed, precise, technically done in an excellent manner, the main theme was followed in the methodology, and, what, in our opinion, is the most important, the achieved results are important.” (Hasan Čengić, President of the Commission for Foreign and Trade Policies of the House of Peoples)*

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<sup>5</sup> From unauthorized transcripts of discussions held in the session of the House of Representatives of February 14, 2006, and in the session of the House of Peoples of March 10, 2006.