



Overview on Telecommunications Regulation Framework in South-Eastern Europe

C. Verikoukis, I. Konstas, D. Anastasiadou, P. Angelidis

Publication:	Journal Telecommunications Systems, Springer
Vol.:	32
pp.:	209-221
No.:	2-3
Date:	July 2006

This publication has been included here just to facilitate downloads to those people asking for personal use copies. This material may be published at copyrighted journals or conference proceedings, so personal use of the download is required. In particular, publications from IEEE have to be downloaded according to the following IEEE note:

©2007 IEEE. Personal use of this material is permitted. However, permission to reprint/republish this material for advertising or promotional purposes or for creating new collective works for resale or redistribution to servers or lists, or to reuse any copyrighted component of this work in other works must be obtained from the IEEE.

Overview on telecommunications regulation framework in south-eastern Europe

Ch. Verikoukis · I. Konstas · D. Anastasiadou ·
P. Angelidis

© Springer Science + Business Media, LLC 2006

Abstract Over the last few years all South-Eastern European (SEE) countries have started an effort that involves complete transition of telecom regulations, in order to comply with European Union rules. Towards this direction, the majority of the SEE governments have proceeded in the establishment of independent Regulative Authorities. In addition, a set of Telecommunications Acts was entered into force in all SEE countries, while the mobile market is fully liberalised. This paper presents an overview of the regulation and institutional telecommunications framework in the SEE region.

Keywords Southeastern Europe · ICT · Regulation Framework

I. Introduction

In recent years SEE countries, including Albania, Bosnia & Herzegovina, Bulgaria, Croatia, Former Yugoslavia Republic of Macedonia (FYROM), Romania, Cyprus, Serbia and Montenegro, Slovenia and Turkey have entered the process of performing a complete transition of their political, social and economic structures in order to build a democratic political system and a free market economy. More than 130 million residents, with different languages and religious beliefs, populate the SEE region, which is situated at the crossroads of three continents and of numerous cultures and traditions. The transitional efforts are common for most of these countries and yet, each of them presents specific characteristics and particularities.

The Information and Communications Technology sector of the SEE is no exception to the above description. The outdated infrastructures, the monopolistic character of the market, the lack of a clear legislative framework, as well as the inexperience in the operations of a free market

Ch. Verikoukis (✉)
Telecommunications Technological Centre of Catalonia (CTTC), Castelldefels, Spain
e-mail: cveri@cttc.es

I. Konstas · D. Anastasiadou · P. Angelidis
Southeastern Europe Telecommunications and Informatics Research Institute (INA), Thessaloniki, Greece
e-mail: [academy.projects,ina]@inatelecom.org

constitute shared obstacles. The main challenge for the Telecom sector is the development of a legal and a regulatory framework that promotes the production of new better products and services in affordable prices for the civil society, while it stimulates innovative research and economic development and ultimately promotes prosperity. Some of the countries, as Slovenia and Cyprus, have fulfilled the criteria for joining the European Union (EU) and since May 2004 are full members. Bulgaria and Romania are expected to join in 2007. Croatia and Turkey have started negotiations on 3 October 2005. In December 2005, the European Council decided to grant candidate country status also to the Former Yugoslav Republic of Macedonia, with whom accession negotiations have not started yet. Furthermore, Greece, even though geographically an SEE country, has pursued a different path, politically and economically, as a long-time member of the European Union. SEE countries have made some important steps in their development and their accession process to the EU, nevertheless still their ICT markets are lacking the level of innovation and competitiveness necessary to participate actively in the emerging global information economy.

The successful liberalisation of these countries' telecommunications market should be accompanied by the establishment of an adequate regulatory environment. Towards this direction and under the framework of the telecommunications *acquis communautaire*, the majority of the SEE governments have proceeded in the establishment of Independent Regulatory Authorities like in the case of Albania, Turkey and Romania, or Telecommunications Councils like in Croatia. The role of such a Body, along with the relevant Ministry, is to implement the best policy practices and support the development of a credible regulatory regime, which will boost investments in the telecommunications sector and promote public confidence in the telecommunications market through transparent regulatory and licensing processes. Greece, with the experience from a successful liberalisation of its telecom market, can constitute an example for these countries in the adoption of best practises.

An overview of the regulation and institutional telecommunications framework in SEE countries is analysed in this paper. The role and the responsibilities of the National Regulation Authorities are presented in section I. In section III the Greek regulatory framework is analysed as a case study, while the regulatory framework in Slovenia and Cyprus, members of the EU since 2003, is also presented in the same section. Section IV analyses the framework in the four EU associate candidate countries, Bulgaria, Romania, Croatia and Turkey. The framework in the rest of the SEE countries is presented in section IV. Finally, a Strengths, Weakness, Opportunities and Threats analysis is included in section IV and some conclusions are mentioned in section VI.

Fig. 1 South-Eastern Europe Countries



II. National regulation authorities

The legislator's strategic view should be to separate the regulatory function of telecommunications from the policy one. This will result in a clear operating framework for telecommunications companies, implementing changes according to market conditions, in order to provide better services to the citizens. This process should facilitate and attract foreign investment in SEE countries.

The State needs to constitute a reliable partner for enterprises, active in the telecommunications sector, in the form of an independent Regulatory Authority, which should be assigned important decision-making responsibilities in the areas of licensing and verification of compliance with the law, as well as advisory responsibilities in relevant cases. The National Regulatory Authority (NRA) should also intervene to resolve disputes between involved parties, regardless of their nature (i.e. state, enterprises or users) and serve as an arbitration tribunal on the basis of the respective arbitration clause. Its role should be substantially strengthened to include both regulatory and monitoring responsibilities, the chief of which are:

- regulating all matters relating to general and special licences (granting, renewing, modifying, revoking, suspending, transferring and sharing) and fixing terms of competition (where required), organized for the awarding of special licences
- issuing billing regulations and establishing costing principles for access to and use of the local loop, leased lines and connections
- assigning numbers and domain names
- granting licenses for the manufacture of antennas, and assigning isolated radio frequencies or bands
- drafting the National Numbering Plan and the National Radio Communications Regulations, as well as the conditions for Open Network Provision and any probable limitations to network access caused by substantive requirements drawing up the list of organizations with substantial market force, and of those that are obliged to provide leased telephone lines
- safeguarding implementation of Universal Service, including matters relating to financing
- issuing regulatory or individual acts or offering advice to the legislature on proposed legislative measures
- checking contracts for connections, provision of voice telephony and mobile communications services, and use and application of the National Regulation for the Allocation of Frequency Bands
- arbitrating differences between telecommunications organizations or between telecommunications organizations and the state, users and private individuals
- representing the country on European and/or international organizations and committees in areas relating to its sphere of responsibility.

III. European union members

A. Greece

Year 2000 and 2001 were turning points in the telecommunications sector in **Greece**, marked by the entry into effect of the new regulatory framework. This framework is basically defined by Law 2867/2000 (Government Gazette A 273, 19/12/2000), which replaced the much-amended Law 2246/94 with regard to provisions on telecommunications. Another law passed in the year 2000 was Law 2801/2000 on the regulation of matters pertaining to the competence of the Ministry

of Transport & Communications and other provisions relating to licensing for the manufacture of antennas.

It should be noted that the institutional and regulatory framework is further supplemented by the various Ministerial Decisions and Presidential Decrees, as well as by the decisions now issued by the EETT (National Telecommunications and Post Commission). Law 2867 is a framework law, which traces the basic guidelines that will underlie the adoption of the regulatory acts necessary for its implementation, in order to take account of the need for adjustment to continuously changing market requirements. The new law radically changes the role of the state from that of entrepreneur and business owner to that of market organizer and regulator.

The central concept of this law is the free exercise of all telecommunications activities, that is, those activities relating to telecommunications networks, telecommunications services and telecommunications equipment. On the basis of the new institutional framework, the basic principles governing the organization and operation of the telecommunications sector are as follows: the protection of the consumer, the protection of competition, the protection of personal data, the provision of Universal Service, and the development of telecommunications infrastructures and services. Greece was the last EU country to transpose the 2003 *acquis* on 17 January 2006.

B. Slovenia

In **Slovenia** during January 2001, the government established a new Ministry of Information Society (MID), placing it in charge of two main segments: Telecommunications and IT application uptake (ESIS2002a). The first activities of the MID were focused on adoption of the “*Telecommunications Act*” and concurrent establishment of the Agency for Telecommunications and Broadcasting. In May 2001 the “*Telecommunications Act*” was entered into force and completed the reform towards liberalisation of the telecommunications services and network market. The *Act* installs the legal framework for the harmonisation with the *acquis communautaire*, which encompasses over 100 acts (directives, recommendations, decisions and resolutions). Its adoption led to the establishment of the Agency for Telecommunications and Broadcasting, which became operative in July 2001. The Agency is politically and financially autonomous as a regulator of the telecommunications services market. It is, therefore, responsible for ensuring the impartial and transparent functioning thereof, supervising the implementation of the *Act* and regulating relations between operators.

C. Cyprus

In **Cyprus** some key decisions were taken as far back as in October 1998 by the Council of Ministers, resulting in the establishment of a National Regulatory Authority in the Telecommunications Sector. These decisions included separation of the Regulatory and Operational function and responsibilities, establishment of a National Regulatory Authority (NRA), granting of licenses to provide telecommunications services and determination of the rules (technical and financial) governing telecom networks. Even though relevant legislation was originally introduced in December 2000, a telecommunications regulator was appointed much later, during 2002, whose responsibilities comprised of granting new telecommunications and postal licences and authorisation of telecom networks & services (ESIS2002b). The Cyprus Telecommunications Authority (CYTA) will forfeit its regulatory role, since it is being transferred to the new regulator, whose independence of the Government and the CYTA is required. Cyprus’s legislation on telecommunications is not yet fully in conformity with European Community laws; however, progress has been made. In this framework the Cypriot Government has committed with a political decision to the immediate establishment of a National Regulatory Authority,

independent of the Government and the telecommunications network operator (CYTA), and to the adoption of the new telecommunications legislation.

IV. E.U. candidate countries

A. Romania

Since November 2002, **Romania** uses the new *acquis communautaire*, adopted at the beginning of 2002 (COM2002). The completion of the regulatory framework, initiated by the Ministry of Communications and Information Technology (MCIT), led to the full transposition of the *acquis communautaire* on the regulatory framework for electronic communications networks and services. At the end of May 2002, the Government approved an Emergency Ordinance creating the general framework for communications regulation. The Ordinance regulates the access to the electronic communications networks and to the associated facilities, as well as their interconnection. The above legislation created the National Agency for Communications Regulation (ANRC), which initiated operation in July 2002. ANRC is independent from operators, service providers and equipment suppliers and there constitutes an effective structural separation of the regulatory function from activities associated with the exercise of rights deriving from the state's position as a shareholder in communications companies. Although the European Commission recognizes significant progress in the field, it continues to point out those previous assessments, which report that a considerable amount of training and financial investment is necessary to ensure adequate administrative capacity for the new regulatory authority, remain valid.

B. Bulgaria

In **Bulgaria** the Telecommunications Act, effective since 15 August 1998, provides the legal regulation of telecommunications. Substantial amendments to the Act were introduced in 2001, entered into force on 5 February 2002. The Law defines the terms "telecommunication" and "telecommunication activity" and specifies the regimes for operation of the telecommunications operators. According to the Telecommunications Act, the sector's activities and services are liberalized with the exception of fixed voice service provision (local, long-distance, international and transit) between terminal points of the telephone network, leased lines provision and real-time trans-border voice transmission for the purpose of international voice services provision by public telecommunications operators. The basic formulation in the Telecommunications Act is the separation of the functions of state governance (in the form of the Ministry of Transport and Communications, the Council of Ministers (CM) and the National Radio Frequency Spectrum Council (NRFSC)) from telecommunications market regulation (appointed to the CRC). Clear definition of the rights and responsibilities of the institutions engaged in shaping the policy and accomplishing the regulation in telecommunications is also included in the Act. The general legal framework for the issuance of licenses for telecommunication activities performance follows the European Union regulatory framework outlined by Council Directive 97/13/EC of 10 April 1997 on a common framework for general authorizations and individual licenses in the field of telecommunications services.

The monopoly of the incumbent operator BTC over provision of fixed voice service, provision of leased lines and cross boarder transmission of voice has expired since January 2003, while 65% of BTC was sold in 2004. Furthermore, 11 alternative operators have been licensed to offer

fixed voice telephony in 8 licensed carriers. The mobile market is fully liberalised since 2000, currently comprising 3 operators that offer mobile services in the local market.

C. Croatia

The 1999 Telecommunications Act in **Croatia** established an independent authority with the responsibility to regulate the telecommunications sector, removing this role from its former holder, the Ministry of Maritime Affairs, Traffic and Communications. The Telecommunications Act was amended in 2001 and, additionally, a set of guidelines for the provision of telecommunications services was produced, regulating the duration of particular concessions and introducing standards for telecom services. The 2001 amendments have also reinforced the legal, structural and operating status of the independent regulatory authority, which was rendered unable to perform any significant intervention in the spectrum of its responsibilities until then. Therefore, the Telecommunications Council (TC) was established as the independent telecommunications regulator in 2000, on the basis of the Telecommunications Act that regulates its position, its jobs and responsibilities. The TC is autonomous in performing its mission specified by law, and reports to the Croatian National Parliament and the Government of the Republic of Croatia. According to the law on telecommunications of year 2003, the Croatian Agency for Telecommunications shall achieve the following principle objectives: to provide for the interest of users of telecommunications services, to ensure high level of protection for telecommunications services users, to promote access to transparent information about prices and conditions for using public telecommunications services, to stimulate access to the market for new services providers and to promote the use of telecommunications services in state and public services.

The liberalization of the telecommunications market in Croatia concluded its designated Stage I of liberalization by joining the Marakesh Act on *The Foundation of the World Trade Organization*. Stage II has also been completed since 31 December 2002, when the exclusive rights of Hrvatske Telekomunikacije on real-time voice transmission and the respective infrastructure roll-out expired and the market was opened to new fixed services' providers. Stage III will be completed with the unbundling of the local loop, starting at the beginning of year 2005. Furthermore, two new fixed operators Optima and Portus became operational in Spring 2005, putting an end to the monopoly of Croatian Telecom. The licence for a third mobile operator was granted in February 2005 and basic market opening rules (carrier selection/carrier pre-selection, number portability, and the reference unbundling offer) entered into force in April 2005.

A complete regulation of the telecommunications market requires a series of subordinate laws based on the Telecommunications Act (Croatia—Legislation NN 122/03, 158/03, 60/04, 70/05). By now two such ordinances have been enacted, the Ordinance on Addressing, Numerating and Charging in Public Telecommunications (NN 177/03) and the Interconnection and Network Access Plan (NN 185/03).

D. Turkey

Privatization of Turkish Telecom has been on the government's agenda since 1993. Two tenders to privatize Turk Telecom failed to attract any interest from international investors. As a consequence, the company has been undergoing restructuring in preparation for sale. On November 2004 Turkey launched an attempt to sell a 55 percent block of Turk Telecom shares. After a difficult process and legal problems a venture led by Saudi Oger Telecom that includes Telecom Italia got the 55 percent controlling share of Turk Telekom, while the Turkish government retains a 45 percent stake in the company. The Telecommunications Authority was founded on 27 January 2000 as a public judicial entity with a private budget, having administrative and

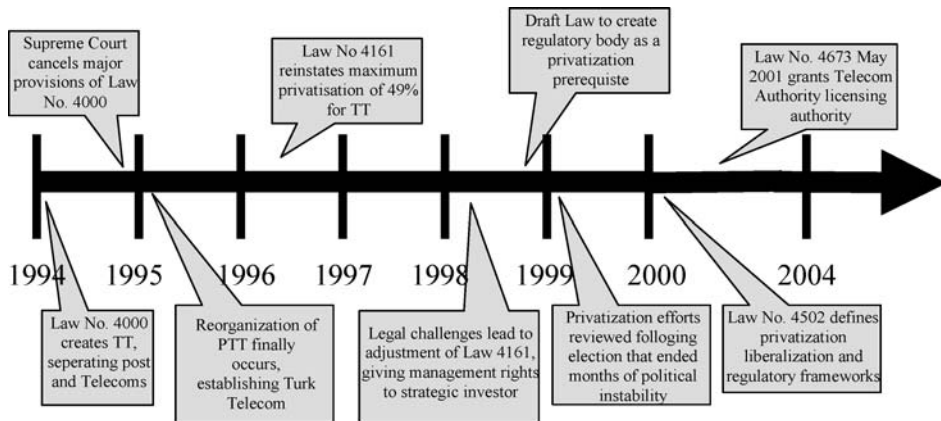


Fig. 2 Turkish Telecommunication Regulation Path (Evci2004)

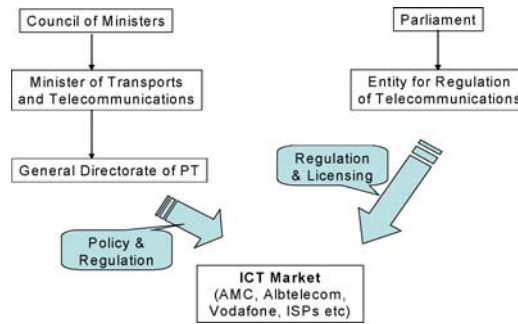
financial autonomy, and became effective on 15 August 2000 (Turkish 2001). The Authority works under the auspices of the Ministry of Transportation. The Telecommunication Authority executes, among others, the task of establishing a dynamic telecommunication sector, based on fair and free competition and protecting consumer rights. The right to issue task agreements, concession agreements, telecommunication licenses, general authorizations and regulations is also among the Authority's responsibilities. The Telecommunication Services Ordinance was published and put into practice in early 2001 by the Ministry of Transport. Through this law all obstacles for the privatization of Turkish Telecom have been lifted by means of constitutional amendments. Accordingly, 100% of the company's shares can be sold, with the exception of one share retained by the state, providing it with veto rights to protect national interest (Evci2004). Other public institutions and organizations in need of cooperation and coordination with the Authority and entitled to the task of strategy making, arrangement and application and their general scope of tasks are the Communication Supreme Board, the Supreme Council of Radio and Television and the Competition Authority. The market has been officially liberalized since January 2004. However, no voice licenses have been awarded by the Turkish Authority yet. The regulatory path is shown in Fig. 2.

V. Non E.U. see countries

A. Albania

In **Albania**, the first step towards an open telecommunications market was made in 1998 with the establishment of the Telecommunications Regulatory Agency (TRA), which is responsible for licensing privately-owned broadcasting stations and telecom services of all types. The object of this self-financed entity is to guarantee and safeguard public interests and to create a transparent legal and regulatory environment. In June 2000 the introduction of the "Law for Telecommunications" led to the liberalisation of the Albanian telecom market, where a regulatory regime that promotes open competition has been put into action. This Law, sets licensing regulations including licensing of rural operators, Internet Service Providers, etc. In addition, "open network provision", "non-discriminatory prices" and "universal service" were considered. Considering ISPs, this law requires only that licensees should have sufficient capital and

Fig. 3 Telecommunications Regulation Structure in Albania



knowledge to establish and operate Internet Access Points. In Fig. 3 the telecommunications regulation framework in Albania is depicted (ESIS2002c).

The radio spectrum was allocated consistently with international standards, and licensing arrangements encouraged the entry of two GSM operators, AMC (Cosmote Greece and Telenor Norway) and Vodafone Albania, in the market. As a result, the telecom market lost its monopolistic character and incumbent networks face open competition as new carriers are taking advantage of these arrangements to offer services to the public. Furthermore, voice services in rural areas are fully liberalized, while international voice services liberalization have been postponed until 2005. The Albanian ICT strategy 2004–2008 which was approved on 2003 is based on the guidelines prepared by the Stability Pact. Alblecom’s privatisation, fixed telephony incumbent—first announced in 1999—was postponed following the disturbances of the Kosovo conflict. In June 2005 the former government announced a privatization deal for Alblecom with a consortium comprising Turk Telecom and Calik Enerji that offered 120 m euros in May to buy 76% of Alblecom. The new Berisha government cancelled the deal and announced its intention to activate the mobile license of Alblecom and start a new process for privatization. Eagle Mobile is the third mobile telephone company that will launch operations in Albania within 2006. Eagle Mobile, which is a subsidiary of the state-own fixed telephony Alblecom, will add value to the company’s sale process.

B. Bosnia-Herzegovina

Because of the duality that exists in the state structure of the **Bosnia-Herzegovina** (BiH), the institutional framework in ministerial level is complicated. Each of the two entities’ governments has its own Ministry of Transport and Communications. Both ministries act under the umbrella of the Ministry of Civil Affairs and Communication of the BiH government. Each entity’s ministry is responsible for communication systems, radio communications, infrastructure, coordination, policy management and other tasks under its jurisdictions. The country’s ministry is responsible for the same issues but its jurisdiction concerns international aspects. The “Communications Law” of 2002 includes provisions on the radio frequency spectrum, telecommunications infrastructure, telecommunications services, market competition, numbering, universal telecommunications services and the existence of the Communications Regulatory Agency (CRA), among other issues. The CRA is an independent state institution, with country-wide jurisdiction, responsible for regulating telecommunications, broadcasting and frequency spectrum management. It was strictly under international administration until 2003, whereas today, it is locally governed.

The “Communications Law” was developed along European Union policy lines with the support of the International Telecommunication Union (ITU). The legal framework does not specifically deal with liberalization of telecommunications, although interest has been indicated

by the government to privatize the telecommunications operators. However, the Law on Competition has been adopted at a governmental level.

One of the major conditions for any improvement in the BiH regulatory framework is a simplification of the duality system. Bosnia and Herzegovina, since it is impossible for operators to deal with legislation systems on three levels. The only way of making it simpler is strengthening the state level. This process is important for legislation related to telecommunications development in BiH, since most of relevant laws and regulations make sense only if they can be applicable and enforced in BiH state as a whole.

C. F.Y.R.O.M.

In **F.Y.R.O.M.** the new Law on Electronic Communications entered into force on March 5th 2005. Pursuant to the new Electronic Communications Law the Telecommunications Directorate has been transformed into the Agency for Electronic Communications as an Independent Regulatory Authority. The bodies of the Agency are: Commission and Director. The Agency for Electronic Communications commenced its operations on 1st of July 2005. The Agency within the scope of its activities promotes efficient competition in the provision of electronic communications networks and services.

The new regulatory framework provides better conditions for ensuring the needs of the communication services, protection for the interests of the users, acceleration of the process of creating a competitive market, preventing abuse by the operators and the electronic communication service providers having significant market power, especially in the cases when the market is not sufficiently competitive or failure of market mechanisms to ensure fair competition, conditions for ensuring universal services at affordable prices and quality, promotion of the development and incentives for investments in the electronic communications by introducing new technologies and services and transparency and non- discrimination in the regulatory process.

Fixed telephony is fully liberalised in F.Y.R.O.M. since January 2005 with no clear Reference Interconnection Offers policy. Data transmissions, value added services, internet services provision, equipment provision and mobile communications are fully liberalised as well. The mobile telecommunications market currently comprises of two GSM operators.

D. Serbia-Montenegro

In **Serbia-Montenegro** the regulatory environment is under a transitional phase, as is the whole political and economical framework. Although the two republics (Serbia and Montenegro) operate under a common federation, new rules in the telecommunication sector have not been implemented at a federal level.

After two years debate, the “Telecommunications Law” was adopted during 2003 in **Serbia** and its enforcement provided the legal ground for radical reform in this sector. The new Law was developed in line with EU, determining conditions and ways of conducting operational activities and defining the Telecommunications Agency (TA). The TA is an independent, regulatory body having wide range of responsibilities, such as regulation, coordination, development, tariff regime and maintenance of information systems. It is also responsible for issuing technical approvals and licenses for public telecommunication networks and services and broadcasting operations. The TA is not yet been effectively in operation due to problems of finance and organization. The Serbian Government promised to provide financial and other organizational assistance but there are still problems. However the “Telecommunications Law” defines the termination of Telecom Srbija’s monopoly in June 2005. Recently The Agency for Telecommunications decided to issue licenses to new telecommunication operators and possibly introduce competition.

In **Montenegro**, the Law on Telecommunications was adopted by Parliament in December 2000 in order to provide a clear regulatory framework for the respective sector in that region. Despite the fact that this law has been adopted, there is still no document reflecting an appropriate policy for development of telecommunications as an integral portion of a comprehensive telecommunications policy. The Agency for telecommunications was established in March 2001 as an independent regulatory agency in accordance with the law on Telecommunications. The agency operates based on ITU references and is responsible for promoting competition and access to networks, issuing licenses to operators and regulating tariffs in accordance with the mentioned Law. The Agency's activities include the following rules:

- Overall contact terms of interconnection,
- The way of issue and registry of overall and specific licenses,
- The conditions of services providing of public telephone booths,
- Amateurs radio communications

During the last three years, Montenegro has realized just a portion of its obligation as determined by law and postulated as necessary for liberalization. In order to realize the necessary legislative and regulatory environment, it is required that Montenegro accedes to modifications of and supplements to the existing law. The Agency of Montenegro for Economic Restructuring and Foreign Investments announced on October 2004 a public tender process for the sale of 51% of Telecom Montenegro shares, currently owned by the Government of Montenegro. Matav has emerged as the top bidder for a majority stake in Montenegro's state-owned Telekom, Montenegrin authorities said Wednesday. Matav, which is majority-owned by Deutsche Telekom AG (DT), offered EUR114 million for 51.12% of the telephone, cell phone and Internet service provider. Matav also offered EUR67.28 million in future investment if it eventually buys the company, mostly to improve infrastructure, land lines, Internet connections and related services.

It is worth mentioning that **Kosovo**, part of the Serbia and Montenegro territory, which is under United Nations supervision, has established an independent regulatory body and launching two GSM licenses. The Law on Telecommunications was signed by the UN Special Representative of the Secretary General (SRSG) on May 2003 and introduced the following division of authorities and responsibilities for the entities:

- The Ministry shall develop policies for the sector, and implement legislation.
- The Telecommunication Regulatory Authority (TRA) will implement the policies of the PISG and Ministry pursuant to the Law on Telecommunications. The TRA is established as an independent, non-profit body within the Ministry, to implement the policies of the PISG and the Ministry pursuant to the Law, and all other implementing legislation enacted pursuant to telecommunications.
- United Nations Interim Administration Mission in Kosovo (UNMIK) will keep the authority to manage publicly owned telecommunications assets, including Management of essential PTK assets through the Kosovo Trust Agency (KTA) in cooperation with the Provisional Institutions of Self-Government (PISG).
- Management of radio frequencies will be carried out by the Frequency Management Office (FMO). Some specific administrative functions will be implemented by the PISG and the respective independent regulatory body.

Table 1 SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Good network digitalisation • Political Commitment to privatize Incumbent Operator • Promising growth rate of mobile penetration • Newly established National Regulatory Agencies (NRA) • Market liberalisation • Human Capital • Leapfrog potential 	<ul style="list-style-type: none"> • Need for a clearer legal framework for Telecommunication • Lack of statistical data concerning Telecommunications • Low market potential in terms of market size and GDP per capita • Insufficient competition (Fixed telephony) • Low Internet and IT penetration • Low usage of Telecommunications capabilities by public bodies (e-government) • Weak NRAs
Opportunities	Threats
<ul style="list-style-type: none"> • Geographical position • Developing backbone infrastructure • ISDN and Internet connections and services • Internet and PC market growth • Demand in Telecom systems and hardware in public services (education & health sectors) • Strong Growth Potential • EU assistance and potential membership 	<ul style="list-style-type: none"> • Limited investments in Telecom • Need for deregulation of Telecommunications legal framework • Market in transition • Limited funding opportunities • Regional instability

VI. Strengths, weaknesses, opportunities and treats analysis

On the road to implementing a credible regulatory regime, it is important for SEE countries to regularly assess progress, locate possible risks and adapt the original strategy suitably. A valuable tool for this procedure is performing a so called Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, table 1.

Analysing the strong points of the Telecommunications environment in South-Eastern Europe, it is safe to report about a satisfactory level of network digitization, which establishes solid ground for further development of the market. Political commitment towards privatization of the respective incumbent operator is present in all countries of the region and in some cases has already been implemented. The mobile market is well into full liberalization with penetration levels that indicate promising growth rates. Moreover, as analysed in the previous sections, important steps have been taken towards establishing an independent National Regulatory Authority (NRA), responsible for safeguarding a smooth transition into a liberalized telecommunications market in the respective SEE country.

Nevertheless, the need for establishment of a clear regulatory regime with a suitable legal framework still constitutes an important weakness of the regional environment. The NRA's limited authority fails to provide the necessary guarantees. Development is hampered by the lack of statistical data describing the telecommunications market situation by means of international benchmarking indicators. Moreover, motivation for investment in the Telecom market is limited for reasons related to the small size of the market on a country level, in terms of Gross Domestic Product (GDP) per capita, and the heterogeneity of the regulatory framework in the region.

Fig. 4 Fixed lines penetration in SEE (2004)

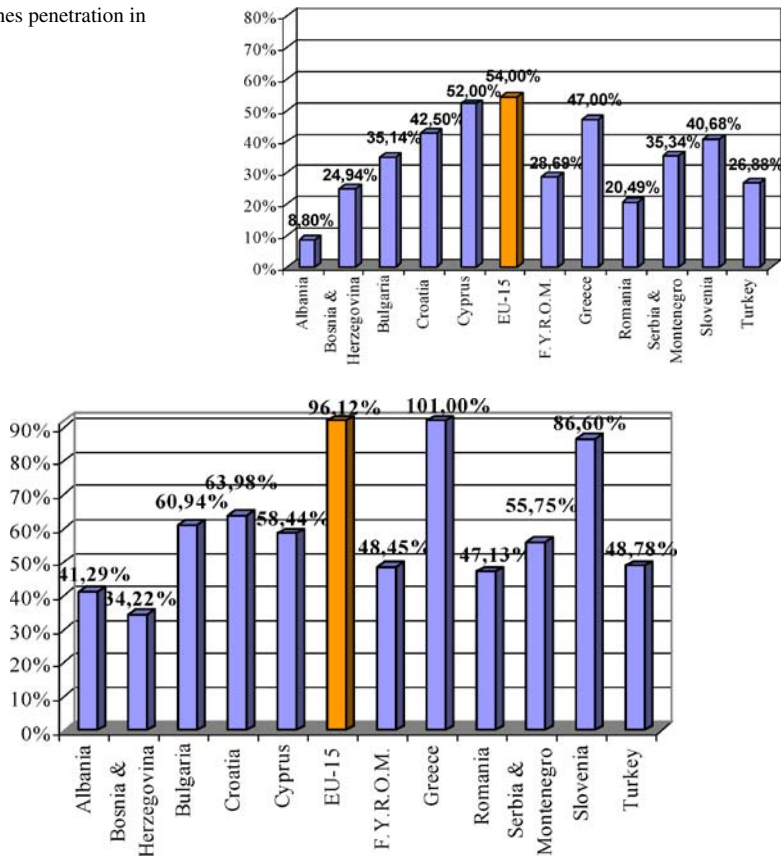


Fig. 5 Mobile Penetrations in SEE (2004)

Threatening factors are also present in the south-eastern part of Europe, where stability is not well established and regional cooperation is hindered by decades of conflicts and disputes. The Telecommunications market is undoubtedly in transition and needs prompt deregulation of the legal framework to allow for the establishment of a prosperous, competitive environment. Development in the telecommunications sector is threatened by the lack of funding and investment, which might ultimately deprive the region of its leapfrogging potential.

A graphical representation of fixed lines penetration and mobile penetration in SEE countries in 2004 is presented in Fig. 4 and 5 respectively (ITU2005). This graphical comparison exhibits the current telephony penetration levels in SEE with reference to the respective average penetration level in EU when considering 15 member states.

VII. Conclusions

Liberalisation of the Telecommunications market is one of the most important challenges that the National Regulatory Authorities and the respective governments have to face. It is a process that requires adequate planning and forethought. All participants of the regional market should take part in the consultation procedures and transparency on all levels should be safeguarded. Policy

makers need to be focused on serving the best interest of their country by maintaining a clear view of the final objectives, which include the establishment of a stabilized regulatory framework and a competitive telecommunications environment, offering low prices and quality of services to the user, while providing an attractive investment field to the business world. Political vision and courage is critical in the process of development, since policy makers need proper empowerment to implement a far-sighted strategy and not resort to fast privatization measures.

South-Eastern European countries are already on their way to realizing what will hopefully be an open and dynamic regional telecommunications market. Nevertheless, key factor in the success and speed of the development process is the ability to provide regionally unified regulations and standards to potential investors, overcoming the liability of being fragmented into several small national markets with limited investment potentials.

References

1. ESIS Team of Contractors Regulatory Developments Master report on Slovenia, 02(2002, (ESIS2002a)
2. ESIS Team of Contractors Regulatory Developments Master report on Cyprus, 02(2002, (ESIS2002b)
3. Regular Report On Romania's Progress Towards Accession {COM(2002) 700 final}.
4. Law No. 8287, "On the Regulatory Office of Telecommunications", February 1998.
5. Law No. 8618 "The Law for Telecommunications", June 2000.
6. C. Evcı et al. (2004) "Wireless Networks in Turkey," Alcatel Telecommunications review 3rd Quarter.
7. Turkish Telecommunication Authority, Turkish Telecommunication Authority Annual Report 2001, (Turkish 2001).
8. ESIS Team of Contractors Regulatory Developments Master report on Albania, 2 (2002, (ESIS2002c).
9. ESIS Team of Contractors Regulatory Developments Master report on FYROM, 02 (2002, (ESIS2002d)
10. ITU World Telecommunications Indicators Autumn 2005, (ITU2005)