

Telecommunication Sector in Bosnia and Herzegovina: An Overview Telecommunication, Regulation & Sustainable Development

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Abstract: The aim of the study is to investigate the telecommunication sector in Bosnia and Herzegovina with respect to the liberalisation process mentioned by the Public Governance Committee of the OECD and the sustainable development goals introduced by the World Bank. It is analyzed that how telecommunication sector has been regulated in the post-war period, the sectoral structure, legal infrastructure and regulatory agency characteristics are represented and finally a SWOT analysis is made for the telecommunication sector in Bosnia and Herzegovina and the Communication Regulatory Agency.

Keywords: Regulation, telecommunication sector, sustainable development, Bosnia and Herzegovina

Introduction

Current discourse is the importance of competition in any sector. It is expected from nation-states that they replace their competition policies with more liberal ones. In other words, the role of the states is expected to be 'mediator state'. States will delegate their regulatory and supervisory authorities to autonomous administrative authorities. In this way, the wealth of the citizens will foster.

In order to experience such a wealth increase monopolistic sectors should be transformed into oligopolistic markets. Then, these oligopolistic markets shall approach to perfect competition.

It is the case also for the telecommunication sector. The sector is generally under governmental monopoly or has oligopolistic features. Therefore, the regulation and supervision shall be performed by autonomous administrative authorities.

Telecommunication and Regulation in Bosnia and Herzegovina

a. A Historical Overview

During the first phase of postwar reconstruction in BiH, broadcasting regulation was split between two agencies: the Independent Media Commission (IMC), responsible for licensing radio and television stations, program monitoring and establishing codes of practice, and the Telecommunications Regulatory Agency (TRA), responsible for telecommunications and frequency management. The High Representative merged the two agencies in March 2001, creating the Communications Regulatory Agency (Regulatorna Agencija za Komunikacije-RAK), that has responsibility for both broadcasting and telecommunications areas (CARDS, 2006).

Currently there are three telecom enterprises in Bosnia and Herzegovina. These are BH Telecom, Telekom Srpske and HT Mostar.

BH telecom, headquartered in Sarajevo, is a "joint-stock" company, principally divided into four primary service units: (FIPA, 2005)

- Fixed telephony BH Telecom;
- Mobile telephony GSM BIH;

- Internet service BIHNET;
- Data transmission BIHPAK.

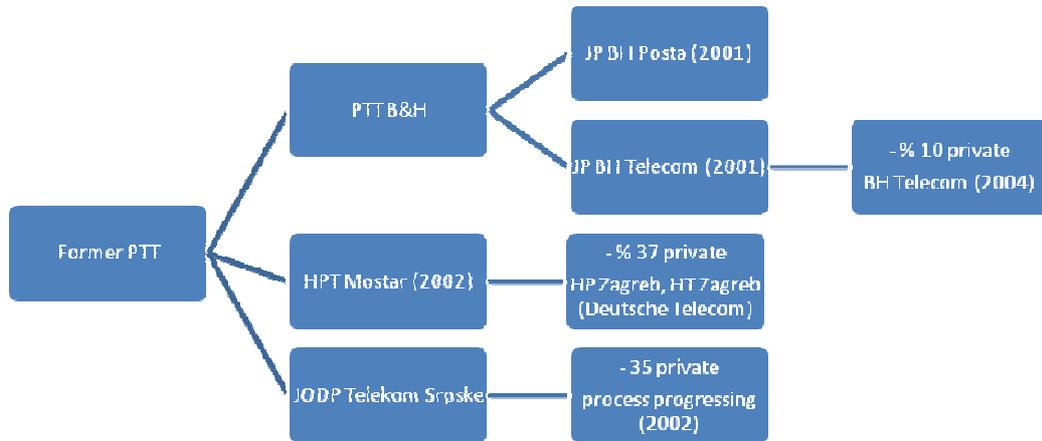


Figure 1: Historical Progress of Former PTT in Bosnia and Herzegovina
Source: CARDS, 2006.

The company employs about 3,000 personnel at the total and provides 22 direct connections with foreign operators, providing a total capacity of 3,471 channels and also direct connections with Bosnia's other two incumbents, Telekom Srpske (494 voice channels) and HT Mostar (214 voice channels). BH Telecom has commercial roaming contracts with 127 world GSM operators, in 59 countries on all five continents. BH Telecom continues to expand its BIHNET Internet service with subscriber access to broadband capacity via leased lines and ADSL access (FIPA, 2005).

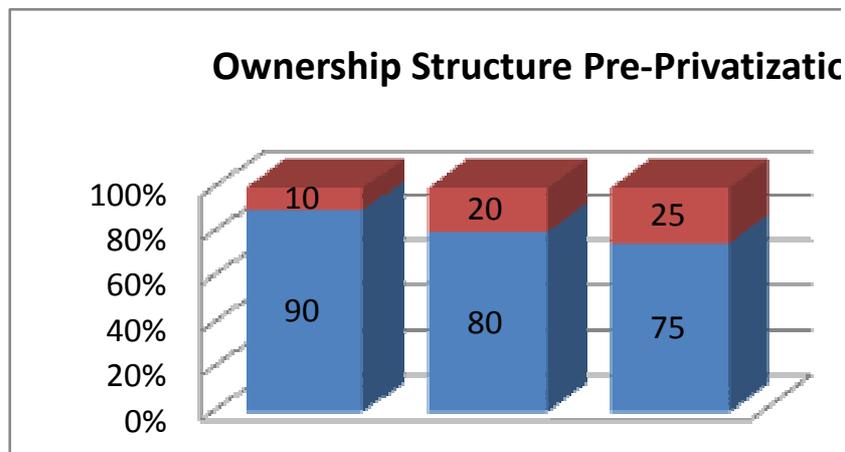


Figure 2: Ownership Structure of Dominant Telecommunication Companies before Privatization
Source: Cullen International, Country Comparative Report, 2005.

Telekom Srpske, headquartered in Banja Luka, employs about 2,400 personnel, and provides its present subscriber base of 275,000 with direct switch links to Serbia-Montenegro, Germany, Slovenia, Croatia, Austria, Italy, and Switzerland.

HT Mostar is the second of two telecoms operating in the Federation BiH. HT Mostar was legally established as a limited liability company, with the Federation government owning about 80% of the company capital, the remaining 20% is privately owned capital (currently 37% of the company is private). At present, HT Mostar provides only fixed line telephony and Internet connectivity services. The company possesses about 130,000 fixed line subscribers and Internet subscribers (dial-up and broadband). In 2002, HT Mostar's GSM operations were spun-off into a separate operating entity, ERONET, but there are now attempts underway to re-merge together the two corporate entities (FIPA, 2005).

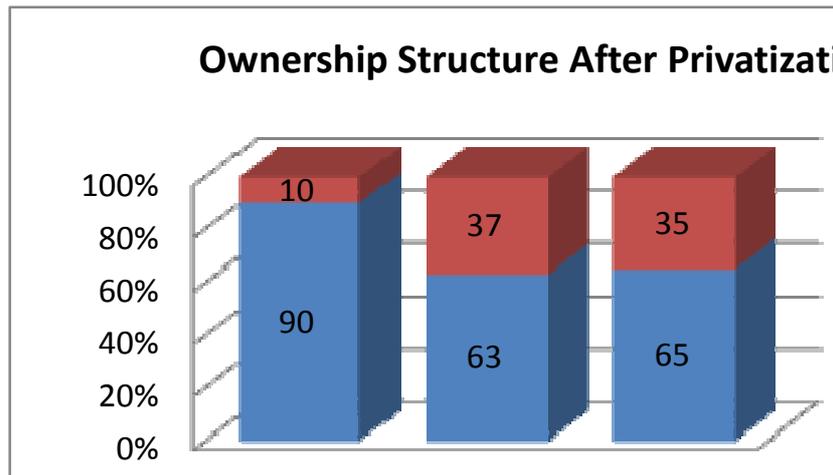


Figure 3: Ownership Structure of Dominant Telecommunication Companies after Privatization
Source: CARDS, 2006.

Elektroprivreda is Bosnia-Herzegovina's largest power utility incumbent, which possesses a substantial, and growing telecommunications infrastructure primarily to support the power utility's generation, transmission, and distribution operations. About 2,000 kilometres of fibre optic cable capacity has been thus far installed by Elektroprivreda, and the company is now installing an additional 2,000 kilometres of fibre optic capacity. In late 2004, Elektroprivreda was awarded an independent telecommunications operator license, which allows the company to develop commercial applications of its excess capacity (FIPA, 2005).

As the number of issued licences for fixed operators (13 licences) are much higher than the number of operators operating currently (3 operators), it may be claimed that the telecommunication market in BiH is going to liberalize in 2007, marking the entrance of new players, and therefore disturbing the position of the dominant operators.

The fixed operators also operate as mobile operators and they are the only companies. BH Telecom whose network covers 87,89% of the population and 96% of the roads specified in the licence annex has been operating since 1996. Telekom Srpske whose services reach 95,2% of the population and 95,6% of the roads has been operating since 1999. HT Mostar was launched in 2000 and covers 98,6% of the population and 96% of the overall networks of roads (CARDS, 2006).

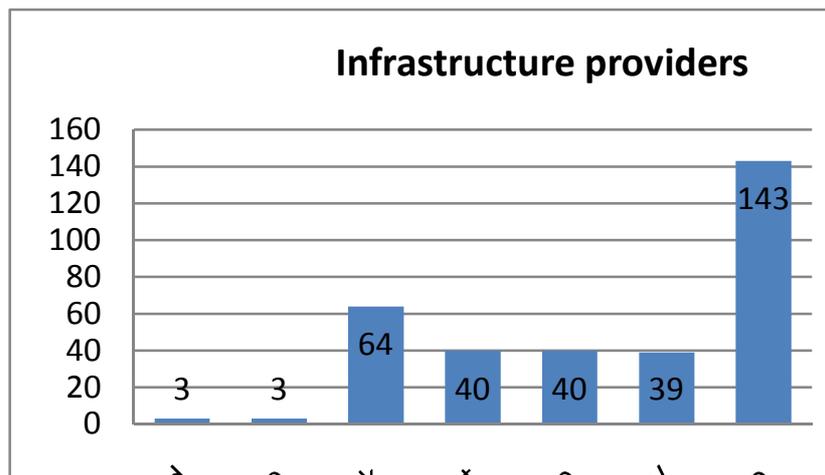


Figure 4: Quantities of Infrastructure Providers in Bosnia and Herzegovina
Source: Cullen International, Country Comparative Report, 2005.

Although the licenses are nationwide licences, they operate mainly on geographic basis. Telekom Srpske serves Republic Srpska and BH Telecom serves the north-east part of the Federation of Bosnia and Herzegovina.

As of the end of 2007, there were 60 licenced Internet providers in BiH (CARDS, 2006).

b. Statistics

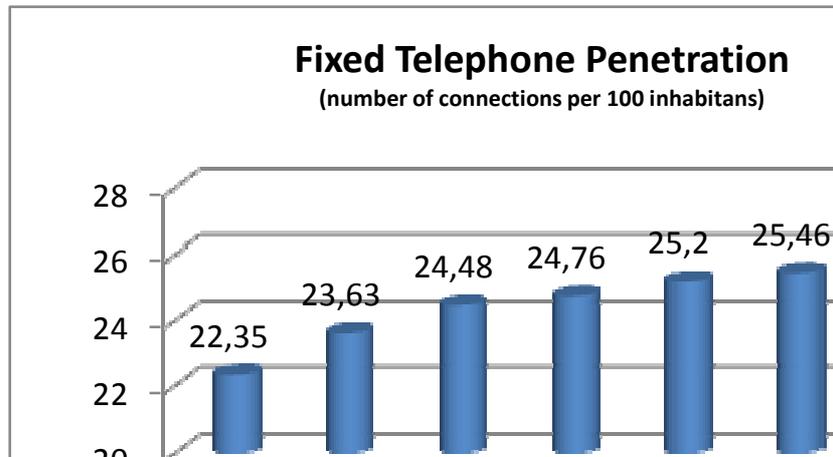


Figure 5: Fixed Telephone Penetration in Bosnia and Herzegovina
Source: CARDS, 2006.

The population of BiH is 4,672,165 as of 2007 and the per capita national income adjusted by purchasing power is about USD 6,600. The number of Internet users is about 950,000 at the end of 2007, with a penetration rate of 27.25%. The rate for fixed telephone lines is 26.41%. The broadband penetration rate is only 1.02% as of 2006. The average rate for broadband penetration is 18% for Europe. The number of XDSL lines in 21,664. The dominant technology in the country is XDSL and cable networks follows. There are 52 ISSs in BiH. Mobile penetration rate is 63.29% in the year 2007 (SAS, 2008).

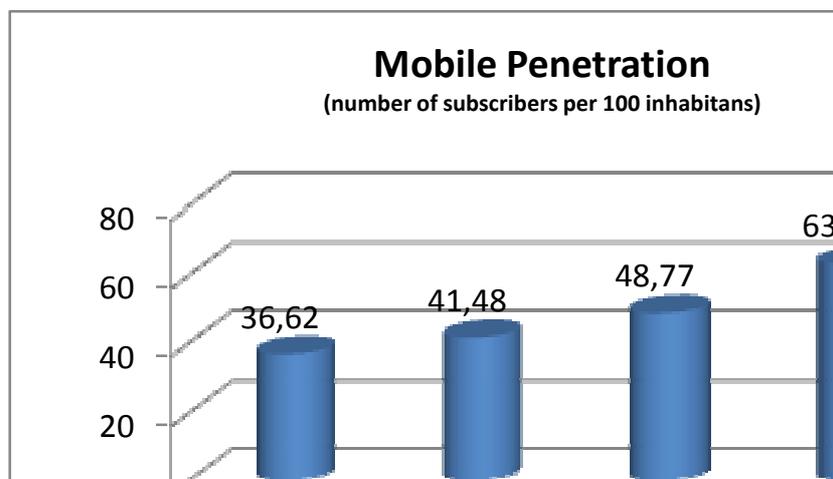


Figure 6: Mobile Penetration in Bosnia and Herzegovina
Source: CARDS, 2006.

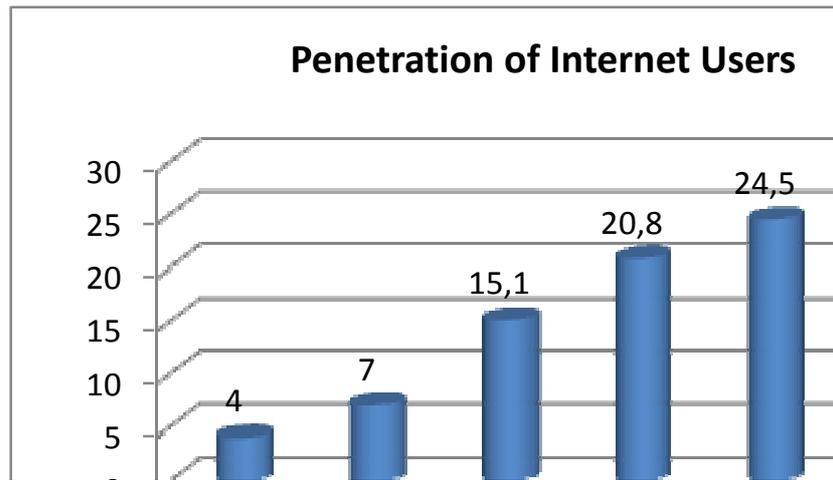


Figure 7: Penetration of Internet Users in Bosnia and Herzegovina
Source: CARDS, 2006.

c. Legal Structure

The frame of the legal structure in Bosnia and Herzegovina is constructed through the Law on Communications (Official Gazette, no. 31/2003). The law entered into force in 2002 and confirmed the authorization and responsibilities of the RAK. The Law adopts a convergent approach with a wide scope including telecommunications, radio, broadcasting (including cable television) and connected services and facilities. According to the Law the broadcasting segment of the communication sector is defined as “any point-to-multipoint emission of signs, signals, text, images, sounds or data by wire, optical fibre, radio, or any other electromagnetic means intended for general reception by the public by means of receivers adapted for the purpose” and “any legal or physical person providing broadcasting”.

The Law also defines a number of fundamental regulatory principles that in turn assign the scope of the actions of the RAK, such as:

- The protection of freedom of expression and diversity of opinion while respecting common standards of decency, non-discrimination, fairness, accuracy, and impartiality;
- The development of professional and viable commercial and public broadcasters with the intention of striking an appropriate balance within the two;
- The principle that broadcasters shall be separated from political control and manipulation;
- Licenses shall be awarded on the basis of a process by which appropriate professional standards of program content, technical operation and financing are ensured;
- Broadcast advertising shall be regulated so as to be consistent with the best European practice.

In accordance with the Bosnia and Herzegovina Law on Communications, and related to the regulatory work in the field of creating bylaws, the RAK has created a number of various codes, rules and guidelines so far. The Broadcasting Code of Practice and the Advertising and Sponsorship Code are of most important. During 2006, the process of matching the Advertising and Sponsorship Code with European regulation has been completed, as well as the harmonization of the Broadcasting Code of Practice with the EU principles.

The Law on Public Broadcasting System of Bosnia and Herzegovina was passed by the Bosnia and Herzegovina Parliamentary Assembly on October 5, 2005. It was adopted in January 2006.

As a member of the Council of Europe, Bosnia and Herzegovina ratified the European Convention on Trans-frontier Television in 2005, which establishes fundamental rules concerning the content of television transmission and specifically, among others, advertising and tele-shopping, protection of minors and right of reply (Marko, 2008).

d. Regulatory Institution

The institution in charge of regulating the communication sector in Bosnia and Herzegovina (BiH) is the Communication Regulatory Agency (RAK). It was established in March 2001 by the decision of the High Representative that merges the competencies of two regulatory authorities, namely the Independent Media Commission and the Telecommunications Regulatory Agency. This was the first step for a unique regulator in the region that would regulate the whole communication sector, including the radio frequency spectrum (Marko, 2008).

The main duties of the RAK:

- to spread rules on broadcasting and telecommunications, and ensure obedience thereto;
- to license broadcasters and telecommunications operators pursuant to the provisions of the Law, and monitor their compliance with license conditions;
- to plan, manage, allocate and assign the frequency spectrum and monitor the use of it as well as to maintain and publish a frequency usage plan for the entire territory of Bosnia and Herzegovina;
- to require the disclosure of such information as is necessary for the due performance of its regulatory obligations;
- to apply technical and quality standards, for instance, to ensure interconnection and functionality of public telecommunications networks and services;
- to establish and maintain a technical license-fee-system for both broadcasting and telecommunications;
- such other duties that are assigned to it under the Law.

In order to assure the efficiency of the actions of the RAK the Law attributes an enforcement power including the competence to impose sanctions in case of breaches of the Law or RAK decisions. Also, if a telecommunications or broadcasting network or service is being operated without a license, the Agency has the power to take all necessary steps to stop the activity of such operations. In case of different violations, oral and written warnings; inspection of licensed facilities; demands for action or cessation; financial penalty up to €75,000; order the interruption of broadcasting or the provision of telecommunications services for a period not exceeding three months; revocation of a license are the measures that the RAK may apply (Marko, 2008).

Telecommunication-Regulation and Sustainable Development

Providing access to the Internet may help to overcome at least some of the problems faced in the development of rural areas. ICT offer the possibility of a very inexpensive access to government information, a simple tool for marketing of agricultural produce, exchange of the market information, better financial support of the agricultural sector, distance education etc. In addition, a better quality of life and improved living standards for the poorest sections of the society would in part result from the expected lowering of the costs of administrative services (fees, access to information, the dissemination of and the increase in the number of services accessible to this social strata, through universally accessible service) (World Bank, 2004).

Macroeconomic data is beginning to demonstrate that the expansion and increased sophistication of the ICT sector is vital for the self-sustainability and growth of the country's overall economy.

Government fiscal and FDI policies are beginning to address the issues of encouraging long-term investments in both technology and knowledge. In particular, the government has recently approved a wide-ranging Information Society Strategy and Action Plan, and established a state-level agency to coordinate the Information Society agenda.

One of the most profound influences to the overall economic landscape and to the ICT sector in particular, is Bosnia's commitment to obtain EU Integration status by 2014. Substantial policy reforms and essential market standards are expected to dramatically expand the economic opportunities for both domestic and foreign investors.

A number of the country's larger economic producers, including the telecommunications incumbents, are scheduled to undergo privatization within 2006-08. Further, Bosnia's Communications Regulatory Agency (www.rak.ba) whose mission is to facilitate a proper and effective policy environment for the sector, has established a reputation for independence (FIPA, 2005).

Recently, the telecoms and energy incumbents have undertaken the responsibility to join together with other leading companies, university programs, and the SME sector to stimulate economic growth, particularly in the fields of R&D and ICT.

On a more commercial level, ICT is beginning to experience convergence throughout multiple economic and social sectors. Particularly in the e-banking, e-education, and e-government sectors, ICT goods and value-added services possess substantial growth potential.

FDI specifically targeting the ICT sector is already developing, and the success stories clearly demonstrate that the ICT sector is shaping up to be a priority sector for FDI (FIPA, 2005).

SWOT Analysis of Telecommunication and Regulation in Bosnia and Herzegovina

Strengths:

- The independent status of the RAK is well established, in particular the legal arrangements regarding their financial independence and the appointment of its Director General.

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- Progress has been made regarding information society services. Bosnia and Herzegovina has ratified the Council of Europe Convention on Cybercrime. Legislation on electronic commerce has also been passed. The e-signature law was adopted in November 2006.
- Some progress has been made as regards audiovisual policy and media, in particular in approximating Bosnia and Herzegovina's legislation to the European Convention on Transfrontier Television. The Advertising and Sponsorship Code has been revised in accordance with the Convention. The RAK has also started the revision of the Broadcasting Code of Practice (Commission of the European Communities, 2007: 46).
- With regard to foreign direct investments, the legal framework gives guarantees to foreign investors willing to entry in the BiH markets (CARDS, 2006).

Weaknesses:

- However, the three incumbent telecom operators (Telekom Srpske, BH Telecom and HT Mostar) still enjoy de facto monopolies of fixed network operations in their respective operating areas (CARDS, 2006).
- The outdated infrastructure, the monopolistic character of the market, the lack of a clear legislative framework, and the inexperience of the operations of a free market are all shared obstacles (Verikoukis et al., 2004).
- The RAK needs to be better equipped in terms of human resources to be able to promote competition in the market, in particular by improving the market conditions for alternative operators and by ensuring the introduction and implementation of the necessary competitive safeguards. The capacity of the relevant sections in the Ministry of Transport and Communications also need to be strengthened.
- No progress has been made to transform the Citizens Identity Protection System Directorate into a State-level Agency for Information Society in charge of implementing the Strategy for Information Society and its Action Plan, as well as of coordinating related activities throughout the country.
- The implementing of e-signature law through by-laws still needs to be adopted. Legislation for conditional access services has not yet been adopted.
- The Federation of Bosnia and Herzegovina has been unable to adopt the necessary public broadcasting legislation and the implementation public broadcasting reform continues to be delayed. Bosnia and Herzegovina is not a party to the UNESCO Convention on Cultural Diversity. Ratifying this Convention is necessary for Bosnia and Herzegovina's participation in media related Community Programmes (Commission of the European Communities, 2007).

Opportunities:

- In the light of BH strategies, it's also expected to have a crucial impact in providing to foreign investors the picture of open and attractive market (CARDS, 2006).
- The high probability of becoming a member of EU.
- Rich cultural diversity.

Threats:

- Although the Feasibility Study has identified significant progress that was made by BiH in terms of the telecommunication sector reform, the EU still sees a need for a more intensive cooperation, primarily in the area of continued harmonization with the "Acquis Communautaire". One area of special importance is the continued improvement of legislative, regulative and institutional solutions in the area of ICT and postal services, gradual liberalization, development of an investment friendly environment, and implementation of European standards. The cooperation in the domain of strengthening the ICT infrastructure would assist the development of informatic society in BiH. The Stability and Association Agreement (SAA) is only the starting point in resolving some specific problems and it may serve as a channel for expansion of cooperation in the ICT field (World Bank, 2004).
- The possible adoption of the draft Law on Wages and Allowances, which would bring the RAK within the civil service, could hinder RAK's independence (Commission of the European Communities, 2007).
- A major issue is the difficulty in finding a right balance between the levels of wholesale prices (which need to be cost oriented) with correspondent retail prices not yet fully rebalanced.
- Although a smooth path towards LLU regulation can be agreed, nevertheless, it's important to provide a clear and reliable timescale of future development of the regulatory framework (CARDS, 2006).

Conclusion and Policy Recommendations

Only in late 2000 Bosnia and Herzegovina as a country had really started to consider aspects and ramifications of ICT, a field where it still lags behind, not only in comparison with the developed countries of Europe and the rest of the world, but also with most transition countries. There are neither strategic guidelines nor policies aimed at strengthening the awareness of the Bosnian society with regards to the necessity of the broadest application of ICT and their possibilities. The existing legislation is not up to date with the job market, nor does it address the new challenges created by it.

The sector of telecommunication infrastructure has been reduced to the telecom operators and their technical and technological development. Liberalization of this market has become a much politicized issue, although liberalization is already present in many segments, for instance, in provision of mobile telephone services. On the other hand, due to significant omissions and lack of regulation in the communication sector, the behaviour of telecom operators in some segments of the business has been unprecedented (World Bank, 2004).

Ensuring the independence of the Agency (including maintaining their financial independence and the respect of the procedures in the appointment of the Director General) is of crucial importance to the development of the broadcasting and (tele)communications market (Commission of the European Communities, 2007).

As aforementioned, the penetration rates for fixed telephone lines, mobile telephones and Internet have been linearly increasing. However, the private sector ownership of the operators does not increase with the same pace. For instance, as can be seen from Figures 2 and 3, the private sector ownership of BH Telecom remains the same but in the cases of Telekom Srpske and HT Mostar private sector ownerships increase. Yet, the state of BiH still has an ownership of more than 50% at all three companies. This, in turn, reveals that telecommunication sector in BiH has an image of oligopolistic character but operates under the conditions of monopolistic market. As a result, despite the dominant discourse in favour of private sector ownership, the dominance of state ownership in BiH still lasts and therefore liberalisation process has a lot to do. On the other hand, only 2 decades after the fall of real socialism in the territory, the degree of liberalisation so far may be perceived as a success.

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